

**BUSINESS RULES**

**OF**

**HINDUSTAN POWER**

**EXCHANGE LIMITED**

HINDUSTAN POWER EXCHANGE LIMITED

REGISTERED OFFICE: 25<sup>TH</sup> FLOOR, PJ TOWERS, DALAL STREET, MUMBAI – 400001 (INDIA)

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# **PART I**

# CHAPTER 1

## INTRODUCTION

### 1.1. Introduction

- 1.1.1. This document contains the Rules of Business for trading on Hindustan Power Exchange Limited (hereinafter 'HPX' or 'Exchange'). The Business Rules contained herein shall be termed as 'the Business Rules of Hindustan Power Exchange Limited' or for the sake of brevity as 'HPX Business Rules' or 'these Business Rules'.
- 1.1.2. These Business Rules shall be subject to and read consistent with the provisions of the Electricity Act, 2003, the Rules made thereunder by the Central Government and Regulations, Codes, and directives issued thereunder by the Central Electricity Regulatory Commission (hereinafter referred as the 'Commission') including the Central Electricity Regulatory Commission (Power Market) Regulations, 2021, Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and Central Electricity Regulatory Commission (Terms and Conditions for Dealing in Energy Savings Certificates ) Regulations, 2016 as amended from time to time.
- 1.1.3. In case of any inconsistency between these Business Rules and clarifications, circulars, directives issued under these Business Rules of the one part and any of the provisions of the Electricity Act, 2003, the Rules made thereunder by the Central Government and Regulations, Codes, and directives issued thereunder by the Commission including the Central Electricity Regulatory Commission (Power Market) Regulations, 2021, Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and Central Electricity Regulatory Commission (Terms and Conditions for Dealing in Energy Savings Certificates) Regulations, 2016 of the other part, the latter shall prevail to the exclusion of the former.
- 1.1.4. These Business Rules may be amended or changed from time to time by the Exchange as per requirement with the approval of the Commission and shall further be subject to such changes or modifications as may be directed by the Commission from time to time.
- 1.1.5. The Exchange may issue clarifications, circulars or directives, as may be required from time to time, to remove any difficulty or ambiguity in implementing the provisions of any of Business Rules. Such clarifications, circulars or directions issued shall have binding force.

- 1.1.6. In the event of any conflict between Bye Laws, Rules and Business Rules, the content of Bye Laws shall supersede the other two and the contents of Rules shall supersede that of Business Rules. Without prejudice to the generality of the above, in case of any ambiguity or any confusion with regards to any of the provisions of Business Rules, the clarification given by Exchange shall be binding.
- 1.1.7. These Business Rules shall be applicable and enforceable on the Exchange Members, Clearing Banks, Clients, and all other participants operating on or through the Exchange in respect of their rights and obligations relating to Contracts admitted on the Exchange.

## CHAPTER 2

### MEMBERSHIP

#### 2.1. Eligibility Criteria for Trading on the Exchange

2.1.1. The persons who have been admitted by the Exchange as Exchange Members shall only be eligible to enter into Contracts and undertake transactions within the Exchange relating to such Contracts. Persons, who are not Exchange Members, can participate only as Clients through a registered Exchange Member. The Exchange shall have the sole discretion to allow the Clients direct access on the Exchange ATS, on an application made for the said purpose by the Member representing the Client.

#### 2.2. Membership of the Exchange

2.2.1. A person who desires to be a Member of the Exchange shall submit an application seeking such Membership through the Membership Portal in the format prescribed on such Portal including the Membership Undertaking as per Annexure – I and also deposit the fee and charges specified for the purpose.

2.2.2. The Exchange shall have the sole discretion regarding the admission to Membership. The Exchange may appoint a committee, if it considers appropriate, to review and consider the application and make recommendation to the Exchange on the application filed by the person.

2.2.3. As a necessary condition of being admitted as a Member of the Exchange the person applying for Membership shall pay the fees and charges, including all securities, deposits, and guarantees as may be decided by the Exchange from time to time.

2.2.4. Exchange may charge the following fees to the Member:

- a) Admission Fee (one time)
- b) Processing Fee (one time)
- c) Security Deposit (one-time, refundable on surrender subject to settlement/adjustment)
- d) Membership Subscription Fee (annual)
- e) Transaction Fee (Volume Based)
- f) Client/ Portfolio Subscription Fee (one time)
- g) Any other Fee as may be prescribed by Exchange from time to time

2.2.5. The Exchange may provide incentives to the Members in the above-mentioned fees based on criteria to be decided by the Exchange from time to time.

### **2.3. Membership Transfer**

Except as may be specifically permitted by the Exchange from time to time, no Member shall be entitled to transfer the Membership. The transfer of Membership if agreed to by the Exchange shall be subject to satisfactory settlement of all pending dues and claims against the Member and further subject to payment of such transfer fees to the Exchange as may be specified for the purpose.

### **2.4. Membership Surrender**

- 2.4.1. Any Member desirous of surrendering his Membership shall be required to make an application in this behalf. Member shall be eligible for return of margin and security deposits and the surrender shall be subject to final settlement and adjustment of all pending dues, outstanding contracts and charges, fees, and other payments to the satisfaction of the Exchange and subsequent acceptance of the surrender application by the Exchange.
- 2.4.2. Until the surrender of his membership is accepted by the Exchange, the Member shall continue to pay annual subscription and other charges. After the acceptance of surrender of Membership, all such recurring charges shall be discontinued. There shall be no processing fee applicable in case of surrender of membership.

### **2.5. Insurance by the Members**

- 2.5.1. The Members may obtain insurance cover at their own cost, so as to protect themselves from risks and hazards relating to their business operations at the Exchange. However, the Members themselves shall be responsible for any risks or hazards associated with uninsured business operations by the Members.

### **2.6. Mechanism for Redressal of Grievances**

- 2.6.1. If any complaint is received with regard to the disputes between Members, between Member (s) and Client (s) and between Exchange and Member (s) arising out of or in relation to trades, contracts and transactions executed on the Exchange or with reference to anything incidental thereto or in pursuance thereof or relating to their validity, construction, interpretation or fulfillment and/or the rights, obligations and liabilities of the parties thereto and including any question of whether such trades, contracts and transactions have been entered into or not, it shall be addressed by the Exchange through a grievance redressal mechanism on receipt of a written complaint from the aggrieved party by the Exchange. The Exchange shall make all endeavors to resolve such complaint through the mechanism specified by the

Grievance Redressal Forum within such days as may be fixed by the Exchange. In case of non-redressal of such grievances through the above process, the same shall be dealt as per the Arbitration and Conciliation procedure of the Exchange as specified under the Byelaws of the Exchange.



## **CHAPTER 3**

### **OPERATIONS ON THE EXCHANGE**

#### **3.1. Eligibility Criteria for Trading on the Exchange**

- 3.1.1. The description of market segments to be operated by the Exchange and the terms and conditions applicable to such market segments are given in the **Part II** of these Business Rules.
- 3.1.2. The Exchange shall operate such market segments as permitted in law and as it may from time to time decide subject to the provisions of the Act, Rules and Regulations framed thereunder or as directed by the Commission. The types and categories of market segments available for contracts and transactions on the Exchange shall be notified by the Exchange from time to time. The Exchange may from time to time amend or modify or introduce new market segments as the Exchange may consider appropriate and the amended market segments shall operate from the time notified for this purpose by the Exchange.
- 3.1.3. The Exchange shall, from time to time, decide on the trading session, trading segments, trading days, trading duration, security deposit, margin and collaterals to be maintained, order placement, matching, clearing and settlement, Delivery procedure and other parameters applicable for each trading or contract type in compliance with CERC (Power Market) Regulations, 2021 and as amended from time to time (hereinafter 'PMR 2021' or 'Power Market Regulations').
- 3.1.4. The Exchange has the right to introduce, continue or discontinue any market segment, including all the terms and conditions for transactions undertaken within each market segment subject to approval of the Commission, as applicable. The introduction of any market segment by the Exchange or the terms and condition specified therein will not vest or create in a Member any right whatsoever that will require the Exchange to continue with such market segments with or without any modification or change of the terms and conditions for transactions undertaken within each market segment.

#### **3.2. Executive Committee**

Executive Committee shall comprise of Heads of Business Development, Operations and Finance departments of the Exchange.

### 3.3. Trading Days and Hours

- 3.3.1. The Exchange shall operate on all days except on the days of Exchange declared holidays. The Exchange shall notify a list of holidays for each calendar year in advance.
- 3.3.2. The Exchange shall notify a Trading and Settlement Calendar (or 'Calendar') on quarterly basis.
- 3.3.3. The Exchange will have specified trading sessions for each market segment (detailed in Part II of these Business Rules).
- 3.3.4. The trading hours may be extended, advanced or reduced by the Exchange by giving notification to the Members as and when the Exchange deems fit and necessary. Trading hours for new products shall be notified as and when these are launched.

### 3.4. Margins

#### 3.4.1. Security Deposit as Initial Margin

The Exchange Members are required to pay security deposit in accordance with Chapter 2 of the Rules titled "Membership" at the time of admission. Subject to specifications stipulated for relevant contracts for various market segments traded on the Exchange, the security deposit paid by a Member or a Client, as applicable, shall be used as Initial Margin for IDAM segment and will be considered the minimum Margin required for submitting bids. Similarly, subject to contract specifications, exposure to the Members linked to the percentage of the Margin applicable for each Contract shall be provided considering the Security Deposit/Initial Margin as per the respective contract specification. This is payable by way of demand draft or RTGS or cheque drawn in favor of 'Hindustan Power Exchange Limited' or any other mode through banking transactions as may be decided by the Exchange. Security Deposit shall be invested as per the investment guidelines of Hon'ble Commission for Settlement Guarantee Fund (SGF) and 70% of the return earned on the Security Deposit so invested in a year shall be paid to the Members in proportion to the amount deposited by the Members as Security Deposit and duration for which deposit was held with the Exchange, within 45 days after the last date of the financial year.

### 3.4.2. Additional Margin

Any Margins over and above the Initial Margin will be considered as Additional Margin. The Members may remit Additional Margin in the form of combination of cash and other securities like bank guarantee or fixed deposits or letter of credit from any of the Exchange approved banks, in such ratio as specified by the Exchange from time to time.

The Security Deposit paid by the Member is refundable deposit, and interest on the same shall be paid as per above clause. Security Deposit paid by the Members shall constitute a part of the Settlement Guarantee Fund (SGF). In case of surrender or transfer of membership, the Security Deposit/Initial Margin and/or the Additional Margin is refundable subject to settlement of all pending dues, claims and charges.

#### 3.4.2.1. Forms of Additional Margins:

- a) The additional margin will be directly debited from the Members Settlement Account opened in any of the Clearing Banks. or in the form of bank guarantee, fixed deposits, letter of credit subject to conditions specified above.
- b) In case the Member opts to transfer funds from his settlement account, he will have to give written intimation to the Exchange for debiting its Settlement Account towards additional margin. The excess of additional margin shall be released to the Members every week as decided by the Exchange subject to clearance of Exchange dues. In case a Member intends to get his additional margin released to it on any day other than the one specified by the Exchange, the Member shall inform the Exchange, in writing, at least two days in advance. Any request for withdrawal of the additional margin will be considered by the Exchange subject to clearance of Exchange dues.
- c) Bank Guarantee: The Exchange shall accept irrevocable Guarantees issued by the approved Banks or FIs, PFIs only in formats prescribed by the Exchange. The list of approved banks, FIs, PFIs, format and other particulars of Guarantee and the process of submission shall be prescribed by the Exchange from time to time. The Member other than Facilitator member shall however be responsible for his own trades and/ or trades executed on behalf of his Clients on the Exchange.
- d) Fixed Deposit Receipts: Members may submit fixed deposit receipt (FDR) issued by the approved banks for the purpose of Additional margin. The FDR should be issued in the favor of 'Hindustan Power Exchange Limited - A/C Member name' by any of the approved bank(s). All such fixed deposits shall be under lien of the

Exchange and the bank must confirm that such lien has been recorded and that the Exchange has first charge on such fixed deposit receipts by issuing a letter along with the fixed deposit receipt.

- e) Letter of Credit: Members may submit Letter of Credit (LC) issued by the approved banks for the purpose of Additional margin.

### **3.5. Termination of contractual liabilities**

Members can extinguish their contractual liabilities only by delivery and pay-in or pay-out as the case may be but not by netting up of positions.

### **3.6. Matched contract invalidation**

If according to the Exchange, a Member has attempted to conclude the transaction in violation of the Bye-laws of the Exchange or with an intention of price manipulation, price rigging or price distortion, the Exchange may invalidate a matched Contract.

### **3.7. Settlement Guarantee of the Exchange**

The Exchange shall guarantee the settlement of the net settlement liability of the Clearing Members or the Clients, as applicable, for all the trades done on the Exchange in accordance with and subject to the Bye-laws of the Exchange. Subject to force majeure, the settlement guarantee of the Exchange is confined only to the extent of settlement liability in terms of daily funds pay-in and pay-out up to the extent of funds available in the Settlement Guarantee Fund.

### **3.8. Governing law and jurisdiction**

Every Contract executed as per Bye-laws of the Exchange shall take effect as a Contract made in New Delhi and shall be governed by the laws of India under the jurisdiction of the Courts of New Delhi.

### **3.9. Specifications of Contracts**

The contract specification for each contract shall be specified in relevant chapter of Part II of these Business Rules. The specifications shall specify details of the delivery procedure and other trading and settlement parameters relating to tick size, unit of trading, unit of delivery, delivery point, minimum and maximum order size, and other relevant matters. All such contract specifications will be notified to the Members, which will form an integral part of these Business Rules and shall be binding on all Members and, Clients trading on

the Exchange. Any Contract entered into in violation of these norms or not conforming to the specifications laid down by the Exchange shall be considered as void.

### **3.10. Clearing Banks**

#### **3.10.1. Functions**

Clearing Banks are appointed by the Exchange for electronic transfer of funds between Members or Clients, as applicable, and the Exchange. The Exchange reserves the right to include or exclude some of the Banks at its absolute discretion.

#### **3.10.2. Members required to have account with Clearing Bank**

Every Exchange Member shall have designated bank accounts known as Member Settlement Account with any of such branches of the designated Clearing Banks appointed by the Exchange. Members shall operate the Settlement Account only for the purpose of settlement of deals entered through the Exchange, for the payment of margin money and for any other purpose as may be specified by the Exchange. Every Exchange Member is required to open the following accounts with any of the Clearing Banks.

##### **3.10.2.1. Settlement Account or Clearing Account**

All Exchange Members or the Clients, as applicable, will have to open their Settlement Account with any the approved Clearing Banks. The Member or the Client, as applicable, will not have cheque book facility for issuing cheque to any third party or outsiders. The Trader Member can also provide option to its buyer clients to transfer money in Member's Settlement account directly. The Member will have to transfer the money from Settlement Account to its Client Account by giving instruction to the bank. Apart from such transfer, only the Exchange will have power to withdraw money from this account by way of direct debit instruction. In respect of all pay in, Margins, charges and other dues payable to the Exchange, the Exchange will send direct debit instructions to the bank advising them to debit Settlement Account of the respective Member or the Clients, as applicable, by such payable amount. Similarly, the Exchange will credit the pay out, refund of Margins to this account only. The Trader Member will not use the Clients' funds for meeting his own obligation.

#### 3.10.2.2. **Client Account**

In addition to the Settlement Account, Trader Member will have to open a Client Account. The Member may receive the client's funds in its Settlement or Client account. However, Member should make payments to its Clients towards their receivable amount from its Client account only.

#### 3.10.3. **Regulation of Clearing Bank by the Exchange**

The Exchange shall specify the processes, procedures, and operations that every Clearing Member shall be required to follow for participation in the clearing and settlement activities and operating their bank accounts with the Clearing Banks appointed by the Exchange.

#### 3.10.4. **Clearing bank to act as per instructions of the Exchange**

The Exchange shall instruct the Clearing Bank regarding the debits and credits to be carried out for the funds settlement between the Members or the Clients, as applicable. For this purpose, the Members or the Clients, as applicable, will submit an authority letter to the bank, authorizing the Exchange to issue such debit and credit based on the Exchange's instructions. The Clearing Bank shall act as per the instructions received from the Exchange for the funds movement. Instructions of the Exchange as to debits and credits to a Member's accounts or the accounts of the Clients, as applicable, shall be deemed to be irrevocable, confirmed and binding. In order to enable the Exchange to issue such instructions for debiting their account and also to authorize the Exchange in respect of freezing the account or to hold further debits or to block the funds, every Member or the Clients, as applicable, will be required to submit a written undertaking addressed to the bank to such effect. This undertaking will also authorize the bank to sweep the Client account of the Trader Member for any shortfall in the Settlement Account. Besides, the Exchange will also have the power to freeze various accounts of the Member or the Client, as applicable, maintained with the Clearing Bank, in case of any default or shortfall in pay in or Margin account.

#### 3.10.5. **Information regarding default in funds settlement**

The Clearing Bank shall inform the Exchange immediately in case there is any funds default arising out of the instructions received from the Exchange.

### **3.10.6. Clearing Account (s) of Exchange**

The Exchange will maintain its Settlement Account with the Clearing Bank and all money received from the Members or the Clients, as applicable, towards pay in or Margin, shall be used appropriately for settlement.

## **3.11. Clearing House**

### **3.11.1. Functions of Clearing House**

The Clearing House will collect Margins from the Members or the Clients, as applicable, effect payin and payout and monitor delivery and settlement process. For carrying out such activities, it may appoint various agencies as its agents and may delegate such activities and responsibilities to such agencies, as it may desire. Pay-in and pay-out shall take place as per the trading and settlement calendar published by the Exchange from time to time.

### **3.11.2. Regulation of Clearing House**

The Exchange and Clearing House will monitor and perform all activities relating to funds settlement, margining, managing the settlement guarantee fund, and other relevant matters.

### **3.11.3. Lien on Member's deposits and assets**

A Member or the Clients, as applicable is/are liable to clear all the dues against its trading liability irrespective of whether such liability is generated on its own account or on behalf of its Client Account. When a Member or the Client, as applicable defaults in making such payment to the Clearing House all deposits, Margins, funds payout and other assets of such defaulter Member or the Client, as applicable lying with the Exchange shall be under lien and first charge of the Exchange, irrespective of the fact whether such assets or deposits belong to the Trader Member or its Clients. No Client or any other person shall have any claim any charge or right on any such deposit, margin or delivery documents under any circumstances.

### **3.11.4. Clearing code and clearing forms**

The Members shall be allotted a unique member specific clearing code which must appear on all forms used by the Member connected with the operation of the Clearing House. All clearing forms shall be signed by the Member or its authorized signatory.

**3.11.5. Specimen signatures**

The Members shall be required to file with the Clearing House specimens of their own signatures and of the signatures of their authorized signatory.

**3.11.6. Notices and directions**

All Clearing Members shall comply with the instructions, resolutions, orders, notices, directions and decisions of the Executive Committee in all matters connected with the operations of the Clearing House.

**3.11.7. Liability of the Clearing House**

The only obligation of the Clearing House in this matter shall be to facilitate payment in respect of the Contracts for purchase /and sale of electricity units.

**3.11.8. Liability of the Exchange**

Notwithstanding to the provisions of the Bye-Laws, no liability shall attach either to the Exchange, its officials, or to the Executive Committee or any member of the Executive Committee by reason of anything done or omitted to be done by the Clearing House in the course of its operations nor shall the Exchange, its officials, or the Executive Committee or any member of the Executive Committee be liable to answer in any way for the title, ownership, quantity or validity of any delivery or any documents passing through the Clearing House nor shall any liability attach to the Exchange, its officials, the Executive Committee or any member of the Executive Committee in any way in respect of such delivery and any other documents.

**3.11.9. Class of Contracts covered**

The Clearing House shall be responsible in the manner stated above only in respect of Contracts executed on the trading system of the Exchange as per the Rules, Bye-laws and these Business Rules.

**3.11.10. Procedure of effecting transactions on bank holidays**

In cases where the Exchange has to collect the funds pay in for trades done but there is a bank holiday, the Exchange, in consultation with the Clearing Bank, shall evolve a process where it will take a confirmation from the banks for the availability of funds and block such funds against the obligation of respective Members or the Clients, as



applicable. If the banking system is available, the Exchange will debit the funds pay in on such holidays after finalization of the trade.

#### 3.11.11. False or misleading statements

The Exchange may fine, suspend or expel a Clearing Member who makes any false or misleading statement in the clearing forms required to be submitted in conformity with these Business Rules or any resolutions, orders, notices, directions and decisions of the Clearing House.

### 3.12. Transaction Fee

The Exchange will charge a transaction fee as may be specified from time to time on the transactions carried out through the Exchange. Such transaction fee will be computed on value basis or volume basis, as may be decided from time to time, which will be computed on both purchases and sales separately. This will be billed separately on periodic basis and will be recovered from the settlement account of the Member or the Clients, as applicable. Any changes in the transaction fees shall be effected by Exchange with prior approval of the Commission. The Exchange may provide incentives in the transaction fees to various Members based on criteria to be decided by the Exchange from time to time.

### 3.13. Risk management system

A Member or the Clients, as applicable, is allowed to transact only when it maintains the requisite Margin, including any additional Margin as specified for the respective trading segment or the type of contracts or the directions issued by the Exchange. The Exchange may allow, at its sole discretion, the Bank balance lien marked in favor of Exchange towards margin required for facilitation of intraday and day ahead contingency products.

### 3.14. Relationship with Clients

3.14.1. There are two categories of Clients for various products of the Exchange:

#### 3.14.1.1. Grid-connected Client

A Client who is connected to the grid and is eligible to buy or sell electricity. The entities including but not limited to, Distribution Licensees, Generators, Consumers and Open Access Users can become Grid-connected Clients.

#### 3.14.1.2. Trader Client

A Client who is eligible to trade in electricity under the Electricity Act, 2003 and has a legally valid power purchase/sale agreement, which gives the Client the

right to purchase and sell electricity. A Trader Client will register each power purchase/sale agreement with the Member who will be registering the same with the Exchange. The entities such as trading licensees can become Trader Clients.

**3.14.2. Direct Access Clients**

Clients who have been provided direct access to the Exchange ATS shall be referred to Direct Access clients.

**3.14.3. REC Client**

In the REC Market segment, the Member transacting on behalf of others can have Eligible entity, obligated entity or entity willing to purchase RECs as Client. Such Client will be known as REC Client.

**3.14.4. ESCert Client**

In the ESCert Market segment, the Member transacting on behalf of others can have Eligible Entity (a Designated Consumer) as Client. Such Client will be known as ESCert Client.

3.14.5. The Exchange may introduce new category of Clients consistent with the Act and regulations issued by commission.

3.14.6. Every Trader Member shall enter into an agreement with each of its Clients as per Annexure – II, and as amended by the Exchange from time to time before accepting or placing orders on the Client's behalf. Similarly, every Facilitator Member shall enter into an agreement with each of its Clients as per Annexure – III, and as amended by the Exchange from time to time before accepting or placing orders on the Client's behalf. In addition, the Clients of the Facilitator Members shall execute an undertaking in favour of the Exchange as Annexure – IV as amended by the Exchange from time to time before he is permitted to transact any contract on the Exchange. A Member intending to trade on its own account as Client need not sign such agreement, however, the Client Registration and other documents required to be submitted by the Member will be submitted to the Exchange.

3.14.7. When establishing a relationship with a Client, the Exchange Members must take reasonable steps to assess the background, genuineness, beneficial identity, financial soundness of such person, and its trading objectives by registering the Client with them in the format as per Annexure – V (Client to Member & Member to Exchange Forms). The Exchange may prescribe changes in such formats through circulars from, time to time with prior intimation to the Commission. The Member shall also obtain:

- 3.14.7.1. An approved copy of the board resolution permitting the transactions in contracts allowed on the Exchange.
  - 3.14.7.2. A copy of Power Purchase or Sale Agreement(s) with a grid connected entity from Trader Clients.
  - 3.14.7.3. Other relevant documents
- 3.14.8. The Exchange Member shall make the Client aware of particulars of Member's registration number allocated by the Exchange, an employee primarily responsible for the business of dealing in Contracts permitted by the Exchange including any limitations or liability attached thereto and the capacity in which the Member acts and the Client's liability thereon by issuing to the Client a copy of the Risk Disclosure Document as per Annexure – VI. The Exchange Member shall furnish a copy of the Risk Disclosure Document to all its Clients and to get and maintain their acknowledgement on second copy of the same document.
- 3.14.9. The Exchange Member shall provide extracts of relevant provisions governing the rights and obligations of Clients as Clients of Exchange Members, relevant manuals, notifications, circulars any additions or amendments thereto of the Exchange, or of any regulatory authority, to the extent it governs the relationship between Members and Clients, to the Clients at no extra cost.
- 3.14.10. The Exchange Member shall also bring to the notice of its Clients, any indictments, structures or disciplinary actions taken against the Member by the Exchange or any other regulatory authority. The obligations of the Exchange Member in this context shall, inter alia, include the following.
- 3.14.10.1. An Exchange Member shall make adequate disclosures of relevant material information in the dealings with its/ his Clients.
  - 3.14.10.2. No Exchange Member or person associated with the Member shall guarantee a Client against a loss in any transactions affected by the Exchange Member for such Client.
  - 3.14.10.3. The Exchange Member shall not recommend to the Client a sale or purchase of Contracts available on the Exchange, unless it has reasonable grounds to believe that such recommendation is suitable for the Client on the basis of facts, if any, disclosed by the Client, whether in writing or orally, regarding the objectives; Client's capacity of dealing with the specific Contracts and

investment. The Member shall take all possible measures to keep confidentiality of information related to its Client(s) including bids, trades.

- 3.14.10.4. The Exchange Member shall make adequate disclosures of relevant material information in its dealing with its Client including the latest MCP and ACPs along with cleared quantities, proprietary orders (buy/sell), any relevant announcement from the Exchange relating to Margin, trading restrictions as to price, or quantity.
- 3.14.10.5. The Exchange Member shall not furnish any false or misleading information or advice with a view to inducing the Client to do business in particular Contract or Contracts and which shall enable the Exchange Member to profit thereby.
- 3.14.10.6. The Exchange Member shall explain the trading system and order matching process to the Client before accepting any orders from it and to a direct access client before giving consent.
- 3.14.10.7. Where the Client requires an order to be placed or any of its order to be modified after the order has entered the system but has not been traded, the Exchange Member shall ensure that it obtains order placement/modification details in writing from such Client on whose behalf such orders are placed by them. The Exchange Member shall accordingly provide the Client with the relevant order confirmation/modification slip or copy thereof, forthwith.
- 3.14.10.8. Where the Client requires any of its order to be cancelled after the order has been entered in the system within trading hours, the Exchange Member shall obtain the order cancellation details in writing from the Client on whose behalf such orders are placed by them. The Exchange Member shall accordingly provide the Client with the relevant order cancellation details, forthwith.
- 3.14.10.9. The Exchange Member shall not accumulate or withhold Client's order for Contracts permitted by the Exchange, if it has adequate margin of such Client with it. The Exchange Member shall place all orders forthwith.
- 3.14.10.10. The Exchange Member shall act promptly in accordance with the instructions provided by the Client unless it has discretion as to the timing relating to entering and/or execution of the order, in which case it must exercise prudently its judgment as to the best moment for entering that order in the system.
- 3.14.10.11. The Exchange Member shall provide the Client with a copy of the trade confirmation slip as generated on the ATS, forthwith on execution of the trade

along with transaction details including quantity and price transacted on behalf of the client.

- 3.14.10.12. Exchange Member shall at all time keep the money of the Client in the Member's Clients Account maintained with the Clearing Bank. The Member shall not use this money for its own transactions or for transactions of such other Client or for any purpose other than Margin and pay in relating to transactions entered into by such Client paying the margin. In case, Member is Client of its own, it does not need to maintain a separate account.
- 3.14.10.13. The Member shall collect adequate Margin from its Client before entertaining any order from it. In case of a direct access client, the Member should take sufficient margin and also should specify trading/ obligation limits, which such direct access clients can commit on the Exchange.
- 3.14.10.14. It will be responsibility of the Members to inform their Clients about the successful trades and their physical and financial obligations, based on the Exchange's reports received by them.
- 3.14.11. Clients can have their own trading terminal through which they can put their orders electronically. A Member may allow his clients to enter bids on his own. Any trade undertaken by a Client via direct access will be done in the name of the Member, and the Trader Member shall be fully responsible for all orders entered by the Client and for the conduct of all such trades as principal.
- 3.14.12. Member should collect/pay money from/to its clients through banking transaction only like cheque/demand draft, NEFT/RTGS, Online fund transfer etc.

### **3.15. Trading Margin and Service Charge**

Subject to the provisions of these Business Rules and the provisions of the Act, Rules and Regulations made thereunder the Trading Margin and Service Charges (also 'Member Service Charge') that a Member can charge to its Clients, for providing services may be mutually agreed to between them.

Provided that Service Charge for providing services to their clients by Facilitator Members shall not be more than the ceiling specified in the CERC (Power Market) Regulations, 2021 and its amendments thereof. This ceiling would be an overall ceiling including the service charges of any subordinate service providers, if any.

Provided however the Facilitator Member who is not trading licensee shall not provide any credit or financing or working capital facility to their Clients. Provided that Trading Margin or Service Charge for providing services to their clients by Trader Members shall be in accordance with the Trading License Regulations 2020 as amended from time to time.

Provided further that the Commission may, by order, review the Trading Margin and Service Charge criteria from time to time.

### **3.16. Guidelines for dealings with sub-ordinate service providers**

If any intermediary(s) is appointed /involved directly or indirectly between the Facilitator Member and the Client and service provided by the intermediary has a direct or indirect nexus with the Exchange trading facility, such an intermediary would have the status of sub-ordinate service provider. Facilitator Member shall inform the Exchange of such subordinate service provider(s) in writing within a week of such appointment /involvement.

Exchange shall conduct the inspection of books of accounts of the subordinate service provider as and when required, the Facilitator Member has to ensure that the detail sought by the Exchange are provided by the subordinate service provider to the Exchange.

If services given by the intermediary to the client are in a bundled form (providing other service also along with trading facility), the rate of Member Service Charges for Exchange trades will be ascertained separately in writing.

The ceiling on Member Service Charges, as defined by CERC, would be an overall ceiling in totality including the service charges of any subordinate service providers.

## CHAPTER 4

### TRADING SYSTEM AND CONNECTIVITY

#### 4.1. Trading System

- 4.1.1. The entire Trading Operation from members' perspective mainly consists of three main systems such as:
- 4.1.1.1. Automated Screen-based Trading System, also called as Trading Work Station or 'TWS', which is an exe-based Trading system wherein Members can place bids and execute trades for themselves as well as for their clients. Further, even Clients can login, place bids and execute trades for themselves.
  - 4.1.1.2. Risk Management System, which is Automated web-based system wherein Members can check their own available and blocked margins on real-time basis based on the collateral deposited with the Exchange. Further, in case of Facilitator Members, clients can login and check their own available and blocked Margins on real-time basis based on the collateral deposited with the Exchange.
  - 4.1.1.3. Collateral Management System, which is Automated web-based system wherein Members can submit, assign, transfer, withdraw collateral as well as check the availability of funds in their collateral along with bifurcation of cash and non-cash collateral. Further, in case of Facilitator Members, clients can submit, assign, transfer, withdraw collateral as well as check the availability of funds in their collateral.
- 4.1.2. Each Member will be provided a unique identification number which shall be provided by Exchange for the purpose of login into the systems. (This will be in addition to the Participant ID assigned to each member).
- 4.1.3. A Member shall have non-exclusive permission to use the TWS as provided by the Exchange in the ordinary course of business as an Exchange Member.
- 4.1.4. Members shall not have any title, rights, or interest with respect to TWS, its facilities, software and the information provided by the Exchange. The permission to use the TWS shall be subject to payment of such charges as the Exchange may from time to time prescribe in this regard.
- 4.1.5. A Member shall not, permit itself or any other person(s) to:

- 4.1.5.1. use the software provided by the Exchange for any purpose and manner other than the purpose and manner as approved and specified by the Exchange,
  - 4.1.5.2. copy, alter, modify or make available to any other person the software provided by the Exchange,
  - 4.1.5.3. attempt directly or indirectly to decompile, disassemble or reverse engineer the same.
- 4.1.6. A Member shall not, by itself or through any other persons on its behalf, publish, supply, show or make available to any other person or reprocess, retransmit, store or use the facilities of the TWS or the information provided by the TWS except with the written approval of the Exchange.
- 4.1.7. The Exchange will provide the application software for installation of TWS. However, the Member has to arrange at its own cost the system software personnel required for installation of trading application. Besides, it has to arrange for installation of trading application software at his TWS at its own cost.
- 4.1.8. The Exchange Member shall maintain confidentiality of bid information of Clients during and after the trade sessions.

## **4.2. Approved User and Workstation**

- 4.2.1. **Approved User**  
“Approved User” means an individual appointed by a member in accordance with these Business Rules.
- 4.2.2. **Approved Workstation**  
“Approved workstation” refers to such trading workstation of a member comprising of computer terminal(s) and all associated equipment installed and connected to the Trading Systems and used by the member for the purpose of market inquiry, execution of bids/trades and settlement of its trades on the Trading System, and all other actions associated with the trading and settlement on the Trading Systems.
- 4.2.3. In case of lease line connection, the Exchange shall notify the number of free User IDs and the charges for additional User IDs from time to time



### **4.3. Connectivity**

In order to connect the TWS of the Members with the HPX server, the Members will have option to connect with HPX using any of the connectivity options as provided by the exchange through any service provider authorized by the exchange.

#### **4.3.1. Network Connectivity with HPX**

HPX is committed to provide secure connectivity channel with all the members. For the same HPX will review the latest available technology and provide recommendation to all the members via suitable communication mode. Members are requested to make best use of suggested technological solution for communication with HPX or they can use other available technology at their own risk.

#### **4.3.2. Application Procedure**

All applications to Service provider and co-ordination with Service provider will be taken care by the HPX Systems Department. Interested Members may send the necessary details in the specified format.

#### **4.3.3. Equipment requirement**

A Member has to procure one router, dedicated for the HPX connectivity. The details of the router are as under:

4.3.3.1. The router should have one serial interface, one ISDN (optional) and one Ethernet Interface.

4.3.3.2. Leased line modems: Members have to procure one pair of leased line modem separately, if not provided by the leased line service provider.

#### **4.3.4. Back-up link**

Members having Leased Line connectivity are required to obtain ISDN BRI line from their local telecom service provider. For automatic switch over, in case of leased line failure, ISDN backup line is required to be terminated on the same router on which leased line is connected. In order to avoid usage during non-trading hours because of automatic dialing, Members are advised to disconnect the ISDN line after trading hours and re-connect before the next trading session.

All Members having leased line are requested to avail the ISDN backup facility to avoid disruption in trading due to problems in leased line connectivity.

Members should note that installation/ STD/ usage charges/ any other charges related to the ISDN link is to be paid by Members to their respective telecom service provider.

**4.3.5. Router configuration**

The Exchange will provide the necessary step-by-step router configuration to the Member once the leased line is commissioned. However, the configuration and testing of the router at the Member end will be the responsibility of the respective users. All Members are obliged to co-ordinate with the HPX System Department for any assistance.

**4.3.6. Payment**

Members have to pay all applicable charges (with applicable taxes) for network connectivity to relevant agency as per guidelines issued by HPX from time to time.

**4.3.7. Number of terminals**

In case a Member wants to install more terminals, they may request for additional leased lines. As such there is no limitation on number of leased lines that one Member can opt for. Separate user IDs would be allocated for LL connectivity, which cannot be used for Internet, VSAT or other media. For ensuring additional security, the User IDs will be tagged with IP addresses

**4.3.8. Crisis management**

In the event of network failure, Members are requested to escalate the same to respective service provider, contact details of the same shall be published on our website and also through circulars of the Exchange from time to time. Also, members shall inform HPX to expedite the process of resolving the issue.

**4.3.9. Undertaking**

All Members are obliged to provide the Exchange with an undertaking on company's letterhead in the enclosed format given in Annexure – VII.

On receipt of the application along with the undertaking and payment, the application will be forwarded immediately to Service provider for further processing. It may take four (4) to six (6) weeks for Service provider to complete the process of providing Network connectivity to the Member.

#### **4.4. Terms relating to expansion of terminals**

A Member shall be entitled to expand its trading terminals by virtue of opening-up branches, tying up with Approved Users. For setting up such terminals, it will be required to apply to the Exchange in the prescribed format specifying name of the Approved User in charge of such terminal, giving details of the location where the additional terminal is to be installed and also to undertake responsibility relating to all trades done through such terminal. The Exchange will not charge any additional fee or deposit for setting up such additional terminals except the cost of Lease line installation and deposit, software installation and out of pocket expenses relating thereto. There can be various models of expansion of terminals, such as:

##### **4.4.1. Direct connectivity to HPX system**

The Member can install terminals at various places, which can be linked to the HPX system through Lease line directly. In such cases also, the Member will be able to set trading limits for all such terminals from his office using the Member administrator terminal.

##### **4.4.2. Private network of a Member**

If a member is already having a private network or proposes to put in place a private network of leased line or ISDN connectivity for expanding his terminals, such private networks could be connected to HPX system by way of installing one lease line at Member's central office. However, if the number of terminals is large, the Member may be required to get a leased line (which would be decided by the Exchange on case-to-case basis) with adequate bandwidth between its central office and the Exchange office so as to support the interactive traffic of all such terminals. In respect of performance and maintenance of such private network, the Member has to bear all costs and assume all responsibilities and the Exchange will not be responsible in any manner. This is subject to the Member obtaining relevant approvals from the relevant statutory agency.

#### **4.5. Force Majeure**

4.5.1. Notwithstanding the provisions of the Bye-laws on force majeure, in case of the settlement of power contracts, the injection and drawal by the power generators and consumers depend upon the transmission corridors available with regional grids. In case of non-availability of transmission corridors because of system constraints notified by System Operator on the day of delivery, the outstanding Contracts will be settled. As per following mechanism:

- 4.5.1.1. All the buyers and sellers at the import and export sides will be arranged in descending order.
- 4.5.1.2. Exchange will identify the Buyers and sellers up to double of the quantity required to be curtailed on buy and sell sides respectively.
- 4.5.1.3. Curtailment on pro rata basis will be carried on from such identified buyers and sellers.
- 4.5.1.4. In case if the proportion of curtailment is 50% or more of the total quantity, exchange will curtail the quantity on pro rata basis across all impacted portfolios. During rainy seasons in case of any real time curtailment, exchange will curtail hydro power plants only as a last resort.
- 4.5.1.5. In case of any natural calamity like flood, earthquake, strikes, etc. or events like grid failure, the Exchange will have the power to settle the Contract independently and/or in consultation with the Commission.
- 4.5.2. In case of trading system related problems, while the Exchange will attempt to rectify the problem at the earliest, however, it will not be responsible for the consequential losses, if any.
- 4.5.3. In the event of disruption in the office or administrative services of the Exchange or the designated Clearing Bank due to technical reasons including Computer System break- down or due to absence, non-attendance and/or strike by the employees or due to any unforeseen circumstances or due to natural or other calamities such as earthquake, out- break of war, general strike or any such circumstance of a force majeure nature, the daily clearing shall be suspended for such days and period till normalcy is restored. The Exchange shall immediately notify all the Members about the suspension and/or postponement of daily clearing settlement as also about the restoration or return of normalcy and resumption of daily clearing and settlement work. If the circumstances so demand, the Exchange may order closure of the market in accordance with relevant Bye- laws and call an emergency meeting of the Board of the Exchange to deal with the abnormal situation.
- 4.5.4. Any restriction imposed by NLDC/RLDCs on account of transmission bottlenecks or restriction/failure of REC Registry System or restriction/failure of ESCerts Registry System(D-CRM) and otherwise will be treated as force majeure without any liability on the Exchange.

#### **4.6. Contingency management**

In the event of failure of a Member's workstation and/or the loss of access to the trading system, the Exchange may assist the Member for identification, rectification/restoration of trading systems. .

No request of any member/client for manual entry/modifications/cancellation of orders by the power exchanges shall be entertained within or after the trading hours. The exchange can only cancel the order in case of any direction received from NLDC/RLDC or Regulatory Commission/ Statutory Authority.

- 4.6.1. In case of any mismatch between scheduling request issued by the Exchange and final schedule issued by NLDC, the final schedule issued by the NLDC shall be considered for adjustments in the obligations and the trades shall be reversed to the extent of such mismatch. Similarly, in case of subsequent changes on account of curtailment of transmission capacity by the Load Dispatch Centre(s), the trades shall be reversed to the extent of such curtailment as mentioned in clause no. 4.5. Reversal of trade shall be done at the respective Area Clearing Prices. The difference in the amount payable and recoverable due to such reversal shall be adjusted from the Congestion Revenue Account.

#### **4.7. Major breakdown of the system or failure of communication link**

- 4.7.1. In the event of a major breakdown of the system or failure of communication link, the Exchange may extend the trading hours or to operate a separate trading session on the same day after end of usual trading session on receiving communication from system operator.

## CHAPTER 5

### INSPECTION

#### 5.1. Inspection Authority

- 5.1.1. Where it appears to the Exchange so to do, it may appoint one or more persons as inspecting authority to undertake inspection of books of accounts, other records and all such relevant documents of the Members for any of the purposes:
- 5.1.1.1. The Inspecting authority appointed by the Exchange may be either its own officials or outside professionals.
  - 5.1.1.2. When the Exchange appoints outside professionals as an inspecting authority, it shall notify the Member the names and addresses of the professionals or firms so appointed as an inspecting authority at the time of inspection.
  - 5.1.1.3. When outside professionals are appointed as an inspecting authority in respect of a Member and such professionals are already related in any other capacity with the Member then such Member shall forthwith inform the Exchange of such relationship.
  - 5.1.1.4. Where after appointment of any outside professional as an inspecting authority in respect of a Member, the Member or any of its associates engages the inspecting authority for its services in any other capacity, the inspecting authority shall not engage itself in such other professional capacity with the Member or any of its associates without prior consent of the Exchange.
- 5.1.2. Without in any manner affecting the scope and extent of the powers of the Exchange, the purposes of the inspection could be, namely:
- 5.1.2.1. to ensure that the books of accounts and other books are being maintained in the manner required;
  - 5.1.2.2. to ensure that the provisions of Applicable law thereunder are being complied with;
  - 5.1.2.3. to ensure that various provisions of Rules, Bye Laws, Business Rules and any other Circulars of the Exchange issued thereunder are being complied with;

- 5.1.2.4. to investigate into the complaints received from Clients, other Members of the Exchange or any other person on any matter having a bearing on the activities of the Member and also the matters which may affect the efficient and transparent operations of the markets;
- 5.1.2.5. to investigate suo-motu, for any reason where circumstances so warrant an inspection into the affairs of the Member in public interest;
- 5.1.2.6. to examine whether any notices, circulars, instructions or orders issued by the Exchange from time to time relating to Trading and other activities of Members are being complied with;
- 5.1.2.7. to comply with any of the directives issued in this behalf by any regulating authority including Government of India.

Provided that, in case of any conflict between the above scope and the scope of the inspection specified by the CERC in the order dated 09th May 2018 pertaining to Petition No 12/SM/2016, the latter will prevail. The procedure for annual inspection of Facilitator/Trader Member's as per CERC petition no 12/SM/2016 will be intimated to such member/client through separate circular by HPX.

## **5.2. Notice**

- 5.2.1. Before undertaking any inspection, the Exchange shall give notice to the Member for that purpose.
- 5.2.2. Notwithstanding anything contained herein, where the Exchange is of the opinion that no such notice should be given, it may direct in writing that the inspection of the affairs of the Member be taken up without such notice.
- 5.2.3. Exchange officials or the inspecting authority who is directed by the Exchange to undertake the inspection, shall undertake the inspection and the Member against whom an inspection is being carried out shall be bound to discharge his obligations as provided by the Exchange from time to time.

## **5.3. Obligations of a Member on Inspection**

- 5.3.1. It shall be the duty of every director, officer and employee of the Member, who is being inspected, to produce to the inspecting authority such books, accounts and other documents in his custody or control or arrange to produce where such books,

accounts and other documents when they are in any other person's custody or control and furnish him such statements and information within such time as the said inspection authority may require.

- 5.3.2. The Member shall allow the inspecting authority to have reasonable access to the premises occupied by him or by any other person on his behalf and also extend reasonable facilities for examining any books, records, documents and computerized data in his possession or any other person and also provide copies of documents or other materials which in the opinion of the inspecting authority are relevant.
- 5.3.3. The inspecting authority, in the course of inspection shall be entitled to examine or record statements of any Member, director, officer and employee of the Member or of any associate of such Member.
- 5.3.4. It shall be the duty of every director, officer and employee of the Member or where an associate is examined, such associate to give to the inspecting authority all assistance in connection with the inspection which the Member may be reasonably expected to give.
- 5.3.5. The inspecting authority shall be entitled to examine the records relating to the Member's financial affairs held with its bankers or any other agency which the inspecting authority may find it relevant.
- 5.3.6. The inspecting authority shall have access to accounts and other records relating to the Member or such access as authorized by the Exchange to accounts and other records relating to any associate of the Member as are within the power of the Member to provide.

#### **5.4. Submission of Report**

- 5.4.1. The inspecting authority shall, as soon as possible submit an inspection report to the Exchange.
- 5.4.2. All documents, papers, returns or their copies submitted to the inspecting authority may be retained by it on behalf of the Exchange. It shall maintain complete confidentiality thereof and no disclosure of any information contained therein shall be made to any person, firm, company or authority unless required by any law for the time being in force and without approval of the Exchange in this regard:
  - 5.4.2.1. The Exchange shall after consideration of the inspection report communicate the findings to the Member to give him an opportunity of being heard before any action is taken by the Exchange on the findings of the inspecting authority.



- 5.4.2.2. On receipt of the explanation, if any, from the Member the Exchange may call upon Member to take such measures as the Exchange may deem fit in public interest.
- 5.4.2.3. Notwithstanding anything contained herein, where the Exchange is of the opinion that no such hearing should be provided in certain circumstances, it may take action forthwith without giving an opportunity of being heard.

## **5.5. Collection and Dissemination of Information**

- 5.5.1. The Exchange may call upon the Members to furnish such information and /or explanation with regards to any constitution, dealings, Settlement, account and/or other related matters.
- 5.5.2. The Exchange shall maintain the details of the clients of the Members in confidence and that it shall not disclose to any person/ entity such details of the client as mentioned in the client registration form or any other information pertaining to the client except as required under the law or by any authority.
- 5.5.3. Notwithstanding anything contained in any of the regulations, the Exchange may at its discretion disseminate to other Exchanges or regulatory authorities or to the general public, any information including information relating to any trades, dealings, Settlement of dealings, accounting, disciplinary action initiated/taken against Members and/or other matters relevant for enforcement or regulatory purposes.

## **Annexure - I**

### **INSTRUCTIONS TO FILL MEMBERSHIP UNDERTAKING**

1. The MEMBERSHIP UNDERTAKING is required to be executed on a Non-Judicial Stamp Paper of the value of Rs. 300/- or the value prevailing in the State of residence or business of the person seeking Membership, whichever is more.
2. No portion of the Undertaking is to be left blank i.e., each and every blank in the Undertaking shall be duly filled.
3. The signatures the authorized signatory and rubber stamp shall be affixed on each and every page of the Undertaking.
4. Two persons shall sign as witnesses against each authorized signatory on the last page of the Undertaking.
5. In case of a corporate entity the common seal of the Company and in case of a firm the rubber stamp of the firm shall be affixed on each page of the Undertaking.
6. The person(s) signing the Undertaking must attach the authorization/Board Resolution from competent Authority of the Company or firm as the case may be.
7. The Undertaking shall be Notarized.

## **Membership Undertaking**

(To be executed on a Rs.300/- stamp and duly notarized)

This undertaking is executed at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_, 202\_

To:

Hindustan Power Exchange Ltd.  
8th Floor, World Trade Tower,  
Plot No. 1, Sector 16, Noida,  
Uttar Pradesh - 201301

hereinafter referred to as "HPX" (which expression shall unless it be repugnant to the context or meaning thereof be deemed to mean and include their successors and assigns)

BY

\_\_\_\_\_, having its registered office at \_\_\_\_\_ through its authorized representative Mr/Mrs/Ms \_\_\_\_\_ aged \_\_\_\_\_ years, hereinafter referred to as "The Undersigned" (which expression shall unless repugnant to the context or meaning thereof be deemed to include its successors and permitted assigns).

WHEREAS the Undersigned is desirous to be admitted as the \_\_\_\_\_ Member of HPX hereinafter referred to as Member and has made an application dated \_\_\_\_\_ for same.

AND WHEREAS HPX has agreed to admit the Undersigned as a \_\_\_\_\_ Member on HPX in accordance with the Rules, Bye-laws, and Business Rules of HPX, in force from time to time. subject to the Undersigned furnishing the Undertaking in the manner and on the terms specified herein below:

NOW THEREFORE in consideration of HPX admitting the Undersigned as a \_\_\_\_\_ Member of the Power Exchange operated by HPX, the Undersigned hereby undertakes and agrees that :

1. The Undersigned is aware that HPX has agreed to admit the Undersigned as a Member inter alia, on the condition and basis that no person other than the Undersigned has or would have any beneficial interest in my Membership and therefore undertake not to give any beneficial interest in my membership to any other person and undertake to hold the Membership in the name of the Undersigned and not as a representative or as a trustee or in any other fiduciary capacity for any other person.

2. The Undersigned shall comply with all such requirements, existing and future, with regards to and in connection with admission and continuance of the Undersigned as a Member.
3. On being admitted as a Member, the Undersigned shall be active participant of HPX.
4. The Undersigned shall abide by, comply with and be bound by the Rules, Bye- Laws, and Business Rules of HPX, as in force from time to time and any clarification, directive, circular, order, notice, instruction issued by the HPX and in force from time to time.
5. The Undersigned agrees that HPX shall be entitled to amend its Rules, Bye-laws, and Business Rules unilaterally and the Undersigned shall be deemed to have consented to any or all such amendment made to the Rules, Bye-laws, and Business Rules of HPX, and accordingly shall be bound by the Rules, Bye-laws, and Business Rules prevailing from time to time and HPX shall be entitled to exercise all powers vested in it under its Rules, Bye–Laws Business Rules and Circulars by which the Undersigned unconditionally agrees to be bound. Accordingly, the Undersigned shall abide by the Bye-laws, Rules and Business Rules introduced/ modified from time to time with/without prior notice;
6. The Undersigned shall abide by the code of conduct as laid down from time to time by HPX and also any Rules, Regulations, circulars, guidelines etc. framed by Central Electricity Regulatory Commission (CERC) or other regulatory authorities from time to time;
7. The Undersigned shall maintain and preserve such information, records, books and documents pertaining to the working of the Undersigned as a Member for such period as may be specified by HPX from time to time;
8. The Undersigned shall permit HPX or any person authorized by it for inspection, access to all records, books, information, documents and its offices as may be required.
9. The Undersigned shall submit periodic reports, statements, certificates and such other documents as may be required by HPX, and shall comply with such audit requirements as may be framed specially by HPX from time to time;
10. The Undersigned shall follow and comply with such orders or instructions including any such order or instruction, whether being in the nature of a penalty or otherwise, as may be issued by HPX or any committee of HPX duly constituted for the purpose, in the event of the Undersigned committing any violation of any Bye-laws, Rules, Business Rules or practice or code of conduct prescribed by HPX in respect of the conduct of the business in HPX;

11. The Undersigned shall conduct business at the Exchange of HPX prudently and shall ensure that it will not be prejudicial or detrimental to public interest in general, and to HPX in particular;
12. The Undersigned shall abide by and adopt the Rules, Bye-laws, and Business Rules of the clearing and settlement systems of HPX and any other agencies appointed by HPX for this purpose and any amendments made thereto from time to time.
13. The Undersigned shall pay the costs and expenses including fees prescribed by HPX from time to time, as communicated by HPX within due date as indicated in Invoice/Demand Note from HPX and in case of nonpayment by due date HPX may deduct from the settlement account.
14. The Undersigned shall use HPX infrastructure facilities and equipment only for the purpose for which they are permitted to be used so and for no other purpose.
15. The Undersigned shall furnish initial margin, pledge securities, hypothecate movables, create lien on bank accounts or furnish such other security as may be required by HPX from time to time and to do all acts, deeds and things to enable HPX to exercise all or part of the above mentioned securities to secure recovery of default in payment and other incidental charges relating to default and other dues of the HPX and Clearing house, if any;
16. The Undersigned shall bring in additional margins and funds as and when required to maintain the level of capital adequacy norms as decided from time to time to operate on the HPX;
17. The undersigned shall be an active participant on the Exchange of HPX on being admitted as a Member.
18. The Undersigned is aware that the Undersigned would be/is admitted as a Member of HPX on paying the prescribed membership fee and security deposit and that the Undersigned do unequivocally undertake that it shall not be entitled to make any claim for refund of the security deposit, except when it surrenders its membership to HPX, that too for the amount lying after appropriation of amounts due from it towards its liabilities or obligation towards HPX;
19. The Undersigned is aware that the Undersigned would be/is admitted as a Member of HPX on paying the prescribed membership fee and security deposit and that the membership is not transferable for a minimum period of 3 (three) years. or such other minimum period as may be stipulated from time to time by HPX.
20. Without prejudice to the foregoing, HPX shall be entitled to forfeit any property, funds, amounts, deposits or other sums due to the Undersigned or to the credit of the

Undersigned in such events or contingencies as may be stipulated in the Rules, Regulations and Bye-laws of HPX in force from time to time;

21. The Undersigned agrees that HPX shall not be held responsible or liable for any failure of computer systems, telecommunication network and other equipment installed at the offices of the Undersigned and HPX shall also not be held responsible for any misuse, mishandling, damage, loss, defect etc. and HPX has the right to inspect and supervise all computer systems, software programs, tele-communications equipment, VSAT etc. which are provided by HPX at the office of the Undersigned and the Undersigned shall not make any alterations, modifications and changes without prior written consent of HPX;
22. The Undersigned shall not disclose, reveal, publish and advertise any material information relating to operations, membership, software, hardware, and the like of HPX without prior written consent of HPX except and to the extent as may be required in the normal course of its business. Similarly, the Undersigned shall not use without prior written approval of HPX, the name of HPX to directly or indirectly promote the business of the undersigned.
23. The Undersigned shall execute, sign, subscribe to such other documents, papers, agreement, covenants, bonds, and/or undertakings as may be prescribed or required by HPX from time to time.
24. The Undersigned shall from time to time and of its own notify to HPX any change in the composition/legal status of the Undersigned including but not limited to change of the Board of Directors of the Undersigned and where in the opinion of HPX any change in the composition of the Board of Directors of the Undersigned has resulted or is likely to result due to such change any direct or indirect transfer of shares or securities in the share capital of the Undersigned, HPX will be entitled to review continuation of the Undersigned as a Member of HPX and, the Undersigned shall be bound by any decision taken by HPX in this regard which shall be final.
25. The Undersigned hereby confirms and undertakes that it is competent in all respects to become a Member of HPX and participate in contracts transacted at HPX. The Undersigned further confirms that in case of any doubt or reference in future regarding validity of its candidature to become a Member, the onus to prove the same shall lie on the Undersigned itself and HPX shall not be liable for any matter in case of such eventuality
26. The Undersigned undertakes to make such contributions to Settlement Guarantee Fund or any other fund pertaining to HPX as and when required by HPX and also comply with all requirements of HPX in respect thereof;

27. The Undersigned shall arrange to get itself registered with respective relevant authorities as may be required from time to time under any law of the land for the purpose of participating in the operations of HPX;
28. The Undersigned has received and/or will obtain required consent from respective DISCOM/STU/SLDC/RLDC, as applicable, to carry out its business as Member on the platform of HPX.
29. The Undersigned agrees and undertakes that the fees, initial margin, other monies and any additional margins paid, whether in the form of cash, bank guarantee, securities or otherwise, with HPX, by the Undersigned from time to time, shall be subject to a first and paramount lien for any sum due to HPX and all other claims against the Undersigned for due fulfillment of engagements, obligations and liabilities of the Undersigned arising out of or incidental to any dealings made subject to the Byelaws, Rules and Business Rules of HPX. HPX shall be entitled to adjust or appropriate such fees, deposits and other monies for such dues and claims, to the exclusion of the other claims against the Undersigned, without any reference to the undersigned;
30. The Undersigned shall abide by provisions of the Electricity Act, 2003, or any rules or regulations made there under or Grid Code or any other applicable Act or law or any rules or regulations made there under.
31. The Undersigned shall not have any objection to create a default reserve fund by transferring a specified amount out of the Settlement Guarantee Fund, as may be decided by the Exchange from time to time, every year to meet the liability of the Undersigned defaulting in paying dues of the Exchange.
32. The Undersigned shall forthwith notify HPX in writing as and when any notice is received by the Undersigned in connection with any institution of insolvency proceedings against the Undersigned and that the Undersigned shall also inform HPX in writing before the Undersigned initiates any insolvency proceedings to be declared to be insolvent The Undersigned further shall forthwith inform HPX in writing on the onset of any circumstance which is likely to or may render the Undersigned to be declared to be insolvent(s) or which is likely to or may render the Undersigned liable to be subject to insolvency proceedings.
33. The Undersigned shall immediately notify HPX in writing about any restriction imposed by a law enforcement authority on the working/operations of the operations of the Undersigned's entity and/or any restriction is imposed on the operation of the bank account(s) of the Undersigned's entity.
34. Without prejudice to the rights, remedies whether legal or otherwise available to HPX upon the Undersigned's non-compliance with this Undertaking, the Undersigned shall

indemnify and keep indemnified HPX, its Directors and officials against any loss, injury or damage suffered by HPX whether legal or otherwise arising due to its non-compliance with the provisions of this Undertaking.

- 35. The Undersigned further agrees that HPX reserves the right to terminate the membership of the applicant, at its absolute discretion and at any time, for any reason whatsoever and without communicating those reasons to the Undersigned.
- 36. The Undersigned agree that in case of any dispute in connection with including any interpretation of this Undertaking, Courts in Delhi shall have the exclusive jurisdiction and all such disputes shall be referred to a Sole Arbitrator under Arbitration and Conciliation Act, 1996. The Arbitration shall be held under Rules of Indian Council of Arbitration, New Delhi and the seat of Arbitration shall be Delhi.
- 37. The Undersigned do hereby confirm that the information provided in its application form for the Membership of HPX is true and correct to the best of the knowledge and belief of the Undersigned and that the above undertakings will be binding on our successors and permitted assigns of the Undersigned.

Signed and delivered by the hereunder named Member

**Name of the Member :**.....

**Signature:** .....

**Name of the Authorized Signatory Rubber Stamp**

**Witnesses**

**Name:** ..... **Signature:** .....

**Address :**.....

**Name:** ..... **Signature:** .....

**Address:**

.....

.....



The common seal of \_\_\_\_\_

\_\_\_\_\_ has been hereunto affixed pursuant to a resolution passed at a meeting of the Board of Directors of the Company or Partners of the Firm, as the case may be, held on \_\_\_\_ day of \_\_\_\_\_ 20 \_\_ in the presence of \_\_\_\_\_

**Common Seal:-----**

**Signature :-----**

**Rubber Stamp**

**Rubber Stamp:**

**Common seal:**

\* As required by the Articles of Association of the Company

**Notary (Stamp & Seal)**

## Annexure - II

### Model Client Agreement (between a Trader Member and a Client)

(To be executed on **Non-Judicial Stamp Paper**)

This agreement is made at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_ between \_\_\_\_\_ (Trader Member of Hindustan Power Exchange Ltd), having his /her / its office / registered office at \_\_\_\_\_, hereinafter referred to as "**MEMBER**" (which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include his/her heirs, executors and administrators / the partners of the said firm for the time being, the survivor or survivors of them and the heirs, executors and administrators of such last survivor / its successors and legal representatives, as the case may be) of the **One Part**.

**And**

Mr./Ms./M/s. \_\_\_\_\_, an individual / a proprietary concern / a partnership firm / a body corporate, registered / incorporated under the provisions of the Indian Partnership Act, 1932 / Companies Act, 1956, having his /her / its Permanent Account Number \_\_\_\_\_ ("PAN") and his / her / its residence / registered office at \_\_\_\_\_, hereinafter referred to as "**CLIENT**" (which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include his /her heirs, executors and administrators /the partners for the time being of the said firm, the survivor or survivors of them and the heirs, executors and administrators of such last survivor / its successors and legal representatives, as the case may be) of the **Other Part**.

**WITNESSTH:**

WHEREAS the MEMBER is registered with the HINDUSTAN POWER EXCHANGE LIMITED (hereinafter called HPX) as Trader Member,

AND WHEREAS the CLIENT being of desirous availing services of the Member for executing contracts (hereinafter referred to as "Services" transacted on the Exchange of the HPX as defined in the Rules, Bye – laws and Business Rules of the HPX through the MEMBER

Whereas the CLIENT has satisfied itself of the capability of the MEMBER offering facility and wishes to execute his orders through him and the CLIENT shall continue to satisfy itself of such capability of the MEMBER before executing orders through him.

Whereas the MEMBER has satisfied and shall continuously satisfy himself about the genuineness and financial soundness of the CLIENT and investment objectives relevant to the services to be provided as specified by HPX or other relevant authority from time to time.

AND WHEREAS the MEMBER has taken steps and shall continue to take steps to make the CLIENT aware of the precise of the liability of the HPX and the MEMBER for the contracts to be transacted on the platform of HPX, including the limitations on that liability and the capacity in which the MEMBER acts and the MEMBER has accordingly brought the contents of the Risk Disclosure Document to the notice of the CLIENT and has explained to the CLIENT the significance of the said document.

**NOW THEREFORE**, in consideration of the foregoing mutual undertakings and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

#### **Obligations of MEMBER**

1. The MEMBER shall keep money deposited by the CLIENT in a separate account, distinct from its own account or account of any other person and shall not use such money for any purpose other than the purpose of settlement of the contracts transacted by the CLIENT.
2. The MEMBER shall not charge Trading Margin more than the limit, as specified in the Regulation(s) of the Central Electricity Regulatory Commission.
3. The MEMBER shall not, without the prior consent of the CLIENT, disclose to any person or authority, except as specifically required under any law for the time being in force or to meet any regulatory requirement, or to HPX as required under normal course of business any information pertaining to the CLIENT contained in the client registration form or any other information furnished/disclosed by the CLIENT to the MEMBER in confidence from time to time.

#### **Obligations of CLIENT**

4. The CLIENT shall abide by the provisions of the Electricity Act, 2003, Grid Code, Rules and Regulations of Central Regulatory Commission made thereunder or any other applicable Act or Rules or Regulations made under such Act/Codes/Regulations.
5. The CLIENT shall be bound by the Rules, Bye-laws, Business Rules, and Circulars of the HPX.
6. The failure, if any, of the CLIENT to understand the risks involved in the contracts transacted on the platform of the HPX as contained in the Risk Disclosure Document or otherwise, shall not render a contract transacted as void or voidable at the option of

the CLIENT and the CLIENT is and shall continue to be liable for all the risks and consequences for transacting such contracts, whether transacted by it or its duly authorized representative.

7. The CLIENT shall pay to the MEMBER Trading Margin and statutory levies as applicable from time to time for the contracts transacted through the MEMBER and for the services rendered by the MEMBER to the CLIENT.
8. The CLIENT shall deposit with the MEMBER such money as may be required to open and/or maintain account or maintain any position and/or the Client shall maintain security mechanism like L/C as required by the MEMBER.
9. The CLIENT shall always notify to the MEMBER in writing any change in the information disclosed in the 'client registration form' or any other document submitted at the time of opening of the account or any time thereafter.

#### **General**

10. This agreement may be terminated at any time by mutual consent of the parties or by giving notice of at least one month by one party to the other party of its intention to terminate this agreement:

Provided that termination shall not have any effect on the contracts transacted before the date of termination and the parties shall be subject to same rights and obligations in respect of such contracts as in force on the date of their transaction.

11. In the event of the death or insolvency of the CLIENT or its otherwise becoming incapable of receiving and paying for the contracts which the CLIENT has transacted or delivering or transferring the contracts transacted, the MEMBER may, with the prior approval of the HPX, close out the transactions of the CLIENT and the CLIENT or its legal representative shall be liable for any losses, costs and be entitled to any surplus resulting from such closing out.
12. All contracts transacted shall be subject to the Rules, Bye-laws, Business Rules and Circulars of the HPX and shall be deemed to have taken effect as wholly made, entered into and to be performed in the city of New Delhi.
13. Unless otherwise agreed to by the parties, the courts at New Delhi shall have the jurisdiction over all matters arising under this agreement.

Provided further that where the Exchange is party to any proceeding, the courts at New Delhi shall have the exclusive jurisdiction.

14. All claims, differences and disputes arising between the parties to this agreement arising out of or under this agreement shall be settled through arbitration conducted under the Rules, Bye-laws, Business Rules and Circulars of the HPX.

In WITNESS THEREOF, the parties to agreement have caused these presents to be executed as of the day and year first above written.

SIGNED for and on behalf of

THE Member

THE Client

By .....

By .....

Signature .....

Signature .....

Title .....

Title .....

Witness .....

Witness .....

.....

.....

## Annexure - III

### Member - Client Agreement (Between a Facilitator Member and the Client)

This agreement is made at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_ between \_\_\_\_\_ ( Member of Hindustan Power Exchange Ltd), having his /her / its office / registered office at \_\_\_\_\_, hereinafter referred to as "**MEMBER**" (which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include his/her heirs, executors and administrators / the partners of the said firm for the time being, the survivor or survivors of them and the heirs, executors and administrators of such last survivor / its successors and legal representatives, as the case may be) of the **One Part**.

**And**

Mr./Ms./M/s. \_\_\_\_\_, an individual / a proprietary concern / a partnership firm / a body corporate, registered / incorporated under the provisions of the Indian Partnership Act, 1932 / Companies Act, 1956, having his /her / its Permanent Account Number \_\_\_\_\_ ("PAN") and his / her / its residence / registered office at \_\_\_\_\_, hereinafter referred to as "**CLIENT**" (which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include his /her heirs, executors and administrators /the partners for the time being of the said firm, the survivor or survivors of them and the heirs, executors and administrators of such last survivor / its successors and legal representatives, as the case may be) of the **Other Part**.

**WITNESSTH:**

WHEREAS the MEMBER is registered with the HINDUSTAN POWER EXCHANGE LIMITED (hereinafter called HPX) as Trader Member,

AND WHEREAS the CLIENT being desirous of executing contracts transacted on the platform of the HPX as defined in the Rules, Bye-laws and Business Rules of the HPX through the MEMBER has accordingly made an application with the MEMBER for registration,

AND WHEREAS the MEMBER has satisfied and shall continue to satisfy himself about the genuineness and financial soundness of the CLIENT for transacting the Contracts and achieving objectives relevant to the services to be provided.

AND WHEREAS the CLIENT has satisfied and shall continue to satisfy himself of the capability of the MEMBER to deal in the Contracts transacted on the HPX through the MEMBER.

AND WHEREAS the MEMBER has taken steps and shall continue to take steps to make the CLIENT aware of the precise nature of the liability of the HPX and the MEMBER for the

Contracts to be transacted, including the limitations on that liability and the capacity in which the MEMBER acts and the MEMBER has accordingly brought the contents of the Risk Disclosure Document to the notice of the CLIENT and has explained to the CLIENT the significance of the said document.

**NOW THEREFORE**, in consideration of the foregoing mutual undertakings and other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

#### **Obligations of MEMBER**

1. The MEMBER shall not collect any money deposited from the CLIENT in respect of the Contracts transacted on the Exchange:

Provided that wherever the MEMBER collects any money from the CLIENT, the MEMBER shall keep the money collected from the CLIENT in a separate account, distinct from his own account or account of any other person and shall not use such money for any purpose other than the purpose of settlement of the Contracts transacted by the CLIENT.

2. The MEMBER shall not charge Member Service Charge more than the limit as specified under Regulation(s) of the Central Electricity Regulatory Commission
3. The MEMBER shall not, without the prior consent of the CLIENT, disclose to any person or authority, except as specifically required under any law for the time being in force or to meet any regulatory requirement or to HPX in normal course of business, any information pertaining to the CLIENT contained in the client registration form or any other information furnished by the CLIENT to the MEMBER in confidence from time to time.

#### **Obligations of CLIENT**

4. The CLIENT shall abide by the provisions of the Electricity Act, 2003, Grid Code, Rules and Regulations made thereunder or Regulations of Central Electricity Regulatory Commission (CERC) or any other applicable Act or Rules or Regulations made under such Act.
  - a. The CLIENT shall abide by the Rules, Bye-laws, Business Rules, and Circulars of the HPX.
  - b. The failure, if any, of the CLIENT to understand the risks involved in the Contracts transacted on the HPX as contained in the Risk Disclosure Document or otherwise, shall not render any Contract transacted as void or voidable at the option of the CLIENT and the CLIENT is and shall continue to be responsible for all the risks and consequences for

transacting such Contracts, whether transacted by him or his duly authorized representative.

- c. The CLIENT shall pay to the MEMBER Service Charge and statutory levies as applicable from time to time for the Contracts transacted through the MEMBER and for the services rendered by the MEMBER to the CLIENT.
- d. The CLIENT shall deposit with the MEMBER such money as may be required to open and/or maintain account or maintain any position in accordance with the Power Market Regulations.
- e. The CLIENT shall notify to the MEMBER in writing any change in the information disclosed in the 'client registration form' submitted at the time of opening of the account or any time thereafter.

### **General**

5. This agreement may be terminated at any time by mutual consent of the parties or by giving notice of at least one month by one party to the other party of its intention to terminate this agreement:

Provided that termination shall not have any effect on the Contracts transacted before the date of termination and the parties shall be subject to same rights and obligations in respect of such Contracts as in force on the date of their transaction.

6. In the event of the death or insolvency of the CLIENT or its otherwise becoming incapable of receiving and paying for the Contracts which the CLIENT has transacted or delivering or transferring the Contracts transacted, the MEMBER may, with the prior approval of the HPX, close out the transactions of the CLIENT and the CLIENT or its legal representative shall be liable for any losses, costs and be entitled to any surplus resulting from such closing out.
7. All Contracts transacted on the Exchange shall be subject to the Rules, Bye-laws, Business Rules and Circulars of the HPX and shall be deemed to have taken effect as wholly made, entered into and to be performed in the city of New Delhi.
8. Unless otherwise agreed to by the parties, the courts at Delhi/New Delhi shall have the jurisdiction over all matters arising under this agreement:

Provided that where the Exchange is party to any proceeding, the courts at Delhi/New Delhi shall have the exclusive jurisdiction.



9. All claims, differences and disputes arising between the parties to this agreement arising out of or under this agreement shall be settled through arbitration conducted under the Rules, Bye-laws, Business Rules and Circulars of the HPX.

In WITNESS THEREOF, the parties to agreement have caused these presents to be executed as of the day and year first above written.

SIGNED for and on behalf of

THE Member

THE Client

By .....

By .....

Signature .....

Signature .....

Title .....

Title .....

Witness .....

Witness .....

.....

.....

\*Details to be given include Name of Member, Membership Registration No and Address

**Annexure – IV**

**Undertaking by and on behalf of the Client of a Facilitator Member**

(To be executed on a stamp and duly notarized)

This undertaking is executed at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_, 202\_

To:

Hindustan Power Exchange Ltd

8th Floor, World Trade Tower,

Plot No. 1, Sector 16, Noida,

Uttar Pradesh - 201301

hereinafter referred to as “HPX” (which expression shall unless it be repugnant to the context or meaning thereof be deemed to mean and include their successors and assigns)

BY

.....,having its registered office at -----  
----- through its authorized representative Mr/Mrs/Ms -----  
---- aged ..... years,

WHEREAS the CLIENT being desirous of transacting the Contracts on the platform of the Hindustan Power Exchange Ltd, hereinafter called the EXCHANGE as defined in the Rules, Bye-laws and Business Rules of the EXCHANGE through, admitted as the Facilitator Member of the EXCHANGE, hereinafter called FACILITATOR MEMBER and made an application with the FACILITATOR MEMBER for registration as the CLIENT.

AND WHEREAS the ----- based on the application made by him has been registered with the FACILITATOR MEMBER.

AND WHEREAS the CLIENT is aware that the Central Electricity Regulatory Commission has decided that the Facilitator Members shall not provide any credit or financing or working capital facility to their Clients.

AND WHEREAS In view of the above decision of the Central Electricity Regulatory Commission, the CLIENT has approached the EXCHANGE to permit it to transact the Contracts admitted on the EXCHANGE in compliance with the decision.

AND WHEREAS the FACILITATOR MEMBER has taken steps to make the CLIENT aware of the precise nature of the liability of the EXCHANGE for the Contracts to be transacted, and the MEMBER has accordingly brought the contents of the Risk Disclosure Document to the notice of the CLIENT and has explained to the CLIENT the significance of the said document.

AND WHEREAS the EXCHANGE has permitted the CLIENT to transact the Contracts admitted on the EXCHANGE on the condition that the CLIENT opens the Settlement Account and other accounts as required under the Bye-laws, Rules and Business Rules of the EXCHANGE individually in its own name and make all payments directly to the EXCHANGE.

NOW THEREFORE, the CLIENT undertakes and agrees to abide the following terms and conditions, namely:

1. The CLIENT shall transact the Contracts admitted on the EXCHANGE on opening the Settlement Account and other accounts as required under the Bye-laws, Rules and Business Rules of the EXCHANGE individually in its own name and make all payments directly to the EXCHANGE.
2. The CLIENT shall open and/or maintain Settlement Account and any other account as may be required under the Bye-laws, Rules and Business Rules of the EXCHANGE and deposit such margin or money as may be required to maintain any position to be able to transact the Contracts admitted on the Exchange.
3. The CLIENT shall indemnify the Exchange, HPX its Directors and Employees and keep the Exchange, HPX its Directors and Employees indemnified against loss caused to the Exchange on account of default of the CLIENT under the Bye-laws, Rules, Business Rules, clarification, directive, circular or notice of the Exchange.
4. The CLIENT shall pay all costs and expenses including taxes, levies, fees prescribed by the EXCHANGE from time to time, within due date as indicated by the EXCHANGE and in case of non-payment by due date the EXCHANGE shall be at liberty to recover the dues in any manner as it considers appropriate and without demur or objection from the CLIENT. The CLIENT undertakes to indemnify the EXCHANGE against any loss arising in account of non-payment or delay in payment of the dues of the EXCHANGE by the CLIENT.
5. The failure, if any, of the CLIENT to understand the risks involved in the Contracts transacted on the EXCHANGE as contained in the Risk Disclosure Document explained to him by the FACILITATOR MEMBER or otherwise, shall not render any Contract

transacted by him as void or voidable at the option of the CLIENT and the CLIENT is and shall continue to be responsible for all the risks and consequences for transacting such Contracts.

6. The CLIENT shall notify to the EXCHANGE and the FACILITATOR MEMBER in writing any change in the information submitted at the time of opening of the account or any time thereafter.
7. This agreement shall stand terminated on the CLIENT ceasing to be the Client of the FACILITATOR MEMBER.
8. In the event of the death or insolvency of the CLIENT or its otherwise becoming incapable of receiving and paying for the Contracts which the CLIENT has transacted or delivering or transferring the Contracts transacted, the EXCHANGE may close out the transactions of the CLIENT and the CLIENT or its legal representative shall be liable for any losses, costs and be entitled to any surplus resulting from such closing out.
9. All Contracts transacted on the Exchange shall be subject to the Rules, Bye-laws, Business Rules and Circulars of the HPX and shall be deemed to have taken effect as wholly made, entered into and to be performed in the city of New Delhi.

SIGNED for and on behalf of The Client

By .....

Signature .....

Designation/Title

Witness .....

Witness .....

**Annexure – V****CLIENT REGISTRATION FORM****(Member to Exchange & Client to Member)**

To,

From:-

**Hindustan Power Exchange Limited**

Member: \_\_

8th Floor, World Trade Tower,

Membership Code: \_\_\_\_\_

Plot No. 1, Sector 16, Noida,

Membership Category: Prof./Prop./Trader

Uttar Pradesh - 201301

Dear Sir,

We request you to register the following entity as our Client. The details of Registration are as under:

Segment: (Tick the applicable)

**Electricity/Renewable Energy****REC****ESCERTS**

Grid Connected Client

Eligible Entity

Buyer

Trader Client

Obligated Entity

Seller

Solar

Voluntary Entity

Non-Solar

Hydro Entity (&gt;25 MW)

1.	Name of the Client:		
2.	Registered Office Address:		
	City:	State:	Pin Code:
	Country:		
	Telephone (with STD Code):		Fax (with STD Code):

	Email:		
3.	Address for Correspondence: Same as above		
	City:	State:	Pin Code: Country:
	Telephone (with STD Code):		Fax (with STD Code):
	Email:		
	Name of the contact person(s):		
	Designation:		Mobile:
4.	Unit Address: Same as Registered Office Address		Same as Correspondence Address
	City:	State:	Pin Code: Country:
	Telephone (with STD Code):		Fax (with STD Code):
	Unit Head Name:		Mobile:
5.	Nationality		
6.	Constitution	Please tick the appropriate option :  Individual / Registered Partnership Firm / Limited Liability Partnership / Private Limited Company / HUF / Public Limited Company/ Institution / PSU / Others (Please Specify):_____	
7.	If, Already Registered with HPX	a) Name of Member:  b) Client Registration Code:	
8.	GSTIN:		
	GST Registration Address		
9.	Date of Incorporation / Registration:		
10.	Permanent Account No.:		
11.	TAN No.:		
12.	Bank Account Details:		

12.1	Bank Account Number: <i>(Please provide details of only operational bank account)</i>	
	Bank Name and Branch Address:	
	IFSC Code:	Account Operational since:
12.2	Client Settlement Account Number: <i>(if applicable)</i>	
	Bank Name and Branch Address:	
	Beneficiary Name:	
<b>13.</b>	<b>ELECTRICITY/RENEWABLE ENERGY SEGMENT</b>	
13.1	If Trader Client, Trader Name:	
13.2	Grid Connection Details	
	Type of Entity	Regional                      Intra State <input type="checkbox"/>
13.3	DISCOM / RLDC / STU :	State:
13.4	Substation:	Connected Voltage Level:
13.5	Maximum Drawl Capacity:	Maximum Injection Capacity:
13.6	Consumer Category (as specified by Discom):	
13.7	Client Category: <i>(Please tick the appropriate option)</i>	
13.7.1	Distribution Licensee	Private                      Government

13.7.2	Open Access Consumer	<p>Full Open Access                      Partial Open Access Please tick the appropriate option :</p> <p><b>Industrial</b> : Metal / Textile /Food / Services or IT / Automobiles / Chemical / Cement / Ceramic / Electronics Products / Home Products  / Paper / Glass / Oil &amp; Gas / Jewelry / Polyester &amp; Yarn / Plastic /Others (Please Specify):_____</p> <p><b>Commercial</b>: Educational Institute / Housing / Hotels / Office Complex / Malls /Hospital / Metro / Airport / Others (Please Specify):_____</p>
13.7.3	Generator	<p>Please tick the appropriate option :</p> <p>CGS / SGS / IPP / CPP / Co-generation plant / Others (PleaseSpecify):_ __</p> <p>Coal / Gas / Hydro / Small Hydro / Solar / Wind / Other Renewable / Others(Please Specify):__</p>
13.7.4	Captive User	<p>Generator Type :_____</p> <p>Consumer Type __ _____</p>

*This form is only to be filled up by clients trading in electricity segment on HPX.*

<b>14.</b>	<b>REC Segment</b>								
14.1	Eligible Entity Details								
	S. No. *	Project Name & Unit No.	Solar/ Non Solar*** *	Unique project Identification Code	Location & Sub Station	Installe d Capacity	Date of Commissioning	Accreditati on Certificate No.**	Registratio n Certificate No.***



	<p>* if Registered units are more than five, provide details on a separate sheet in the format prescribed above.</p> <p>** Each registered entity will be given a unique portfolio number and treated as separate client.</p> <p>*** Enclose Copy of Accreditation &amp; Registration Certificate for each unit.</p> <p>**** Mention the appropriate option:</p> <p>Solar: Solar PV/ Solar Thermal.</p> <p>Non-Solar: Wind / Small Hydro / Biomass / Co generation /Others</p>								
14.2	Obligated Entity Client Details								
14.2.1	Category of Obligated Entity								
14.2.2	Distribution Licensee		Open Access Consumer			Captive User			
14.2.3	Facility Number:								
14.2.4	State of which RPO to be met:								
14.2.5	Registration No. (if issued by Central Agency):								
14.2.6	Maximum Demand / Contracted Demand:								
14.3	Voluntary Entity Client Details								
14.3.1	Category of Voluntary Entity								
14.3.2	Individual		Corporate			Other			
14.3.3	Registration No. (if issued by Central Agency):								
14.3.4	Maximum Demand / Contracted Demand:								
<i>This form is only to be filled up by clients trading in REC segment on HPX.</i>									
15.	<b>ESCerts Segment</b>								
15.1	Eligible Entity (EE) PAT Details:								
	S. No. *	Plant Name	Plant State	Plant Location	Year of Establishment	PAT Cycle	No. of ESCerts		DC Registration No.**
							Issued	To be Purchased	

<p>* If registered units are more than five, provide details on a separate sheet in the format prescribed above.</p> <p>** Enclose Copy of Registration Certificate for each unit.</p>								
15.2	Name of State Designated Agency:							
<p><i>This form is only to be filled up by clients trading in EScerts segment on HPX.</i></p>								

-This form is to be signed in duplicate.

- The original copy should be submitted to exchange within 7 days of registration.

- True copy (duplicate) to be submitted to the Member for their records.

The information furnished above is true to the best of my knowledge and belief. We undertake to inform changes in any of the above in writing immediately to the Exchange/Member and further undertake that to and for the benefit of the Exchange, we shall be bound by the Bye-Laws, Rules and Business Rules of the Exchange, as amended from time to time, and shall maintain with the Exchange details of an individual whom the Exchange may contact in connection with any matter whatsoever relating to my activities, and further understand and agree that my registration with the Exchange shall be terminated if Member/Client fail to comply with Electricity Act 2003, Rules and Regulations made thereunder and Rules any of these Bye-Laws, Rules and Business Rules, as amended from time to time.

Date: \_\_\_\_\_

Place: \_\_\_\_\_

Client Signature:

Member Signature:

Name of the Authorized Signatory:

Name of the Authorized Signatory:

Designation of the Authorized Signatory:

Designation of the Authorized Signatory:

Name of Client:

Name of Member:

Affix Rubber Stamp

Affix Rubber Stamp

**Enclosures:****For the Exchange**

1. Electricity/Renewable Energy Segment:

- Copy of Power Purchase/Sale Agreement. (for Trader Client only)

*On expiry of above Agreement, Member to submit revised agreement or request for deactivation of client.*

- NOC issued by SLDC/RLDC, if available. NOC to be submitted before trading.

*In case of Renewable Energy Generator, type of source shall be mentioned for participation in GTAM Contracts.*

- Member Client Agreement (MCA).

- Risk Disclosure Document

2. REC Segment

- Certificate of Accreditation & Registration for each registered unit.

- Member Client Agreement (MCA).

- Certified copy of GST Registration certificate of the applicant.

- Risk Disclosure Document

3. ESCerts Segment

- Certificate of Registration for each registered unit as Eligible Entity.

- Member Client Agreement (MCA).

- Certified copy of GST Registration certificate of the applicant.

- Risk Disclosure Document

**For the Member:**

1. Certified true copy of the Latest Annual Report/Auditors Report.

2. Certified true copy of PAN card of the Applicant.

3. Proof of Address.

## **Annexure - VI**

### **Risk Disclosure Document**

[THIS DOCUMENT SHOULD BE READ BY EACH AND EVERY PROSPECTIVE CLIENT BEFORE ENTERING INTO MEMBER-CLIENT AGREEMENT AND SHOULD BE READ IN CONJUNCTION WITH THE RULES, BYE\_LAWS AND BUSINESS RULES OF HINDUSTAN POWER EXCHANGE LIMITED (HPX)]

It is understood by the Client that HPX certifies the accuracy of this disclosure document and not about the merits of participating on the Exchange. This statement does not disclose all of the risks and other significant aspects of trading. In light of the risks, the CLIENT should undertake such transactions only if it fully understands the nature of the contracts (and contractual relationships) into which the CLIENT is entering and the extent of the CLIENT's exposure to risk. The CLIENT should carefully consider whether trading is appropriate for it in light of his experience, objectives, financial resources and other relevant circumstances. Trading requires not only the necessary financial resources but also adequate knowledge of Electricity Act 2003, Energy Conservation Act 2001, Rules and Regulations including but not limited to OA Regulations, Grid Code, Power Market Regulation, REC Regulation and ESCerts Regulations of CERC. In case of any adverse consequences or loss resulting from execution of contracts, the HPX or any regulatory authority shall not be responsible, and it will not be open for any CLIENT to take the plea that no adequate disclosure was made or it was not explained the full risk involved by the MEMBER. The CLIENT will be solely responsible for the consequences and no contract can be rescinded on that account. The CLIENT must ask the MEMBER of the HPX to provide full details of the contract i.e., the contract specifications and the associated obligations.

#### **Deposited cash and property**

The CLIENT should acquaint itself with the protections accorded to the money or other property it deposits particularly in the event of a firm insolvency or bankruptcy. The extent to which the CLIENT may recover its money or property may be governed by specific legislation or local rules. In some jurisdictions, property, which has been specifically identifiable as the CLIENT's own, will be pro-rated in the same manner as cash for purposes of distribution in the event of a shortfall. In case of any dispute with the MEMBER, the same shall be subject to arbitration as per the Rules, Bye-laws and Business Rules and Circulars of the HPX.

#### **Commission and other charges**

Before the CLIENT begins to trade, it should obtain a clear explanation of all commission, fees and other charges for which it will be liable. These charges will affect the CLIENT's net profit (if any) or will increase its loss.

**Trading facilities**

The HPX offers electronic trading facilities, which are computer-based systems for order-routing, execution, matching, registration or clearing of contracts. As with all facilities and systems, they are vulnerable to temporary disruption or failure. The CLIENT's ability to recover certain losses may be subject to limits on liability imposed by the system provider, the market, and/or the MEMBER of the HPX. Such limits may vary; the CLIENT should ask the MEMBER with which it deals for details in this respect.

This document does not disclose all of the risks and other significant aspects involved in participation on an electricity/REC market/ESCerts market at the platform of HPX. The CLIENT should therefore study all aspects of participation in electricity/REC contracts/ESCerts contracts carefully before becoming involved in it. The CLIENT hereby acknowledges that he has received and understood this risk disclosure statement.

Client's Signature (If Partner, Corporate, or other Signatory, then attest with company seal.)

Date..... ( DD-MM-YYYY)

## **Annexure VII**

### **Network Connectivity Undertaking**

*On Company's letterhead*

#### **Undertaking**

This undertaking is executed at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_, 202\_

To:

Hindustan Power Exchange Ltd

8th Floor, World Trade Tower,

Plot No. 1, Sector 16, Noida,

Uttar Pradesh – 201301

hereinafter referred to as "HPX" (which expression shall unless it be repugnant to the context or meaning thereof be deemed to mean and include their successors and assigns)

BY

I/we \_\_\_\_\_ do hereby undertake the following:

1. I/We agree that the circuit will be used purely for HPX trading purpose only.
2. I/We agree that this circuit will not be interconnected to any of the Leased Line/ Data Circuit/ Network/ PSTN/EPABX etc of SERVICE PROVIDER or any other service providers which is not permitted by the rules of Telegraph Authority/SERVICE PROVIDER. I/We further agree to extend facility to the Telegraph authority/SERVICE PROVIDER in order to enable monitoring of the purpose, performance and operation of the circuit, as and when required.
3. I/we hereby agree to abide by the provisions of Indian Telegraph Rules in force and as modified from time to time and such other terms and conditions prescribed by the telegraph Authority/SERVICE PROVIDER.

4. I/We agree that necessary charges for registration/installation/Advance annual rental/Arrears, if any will be paid to the controlling/billing authority of SERVICE PROVIDER & HPX, as and when we receive demand note/advice from SERVICE PROVIDER/HPX and when such charges become due.
5. I/We agree that I/We shall pay the cancellation charges and other expenses incurred to establish the circuit as requested by me/us that may become payable, in the event of cancellation of the application/closure of the circuit at a later date.
6. I/We do hereby agree to indemnify the Govt. of India/ DoT/ SERVICE PROVIDER and keep them indemnified against any loss damage claim, cost, charges, expenditure incurred by or made against them in respect of loss of rent/ call charges, violation of C.U.G. norms due to misuse of the circuit or otherwise whatsoever in the matter.
7. In case SERVICE PROVIDER provides us Network connecting mediums, it will be our responsibility to maintain the same safely. In case of any physical damage or theft we will bear the charges specified by SERVICE PROVIDER.
8. The signatory is duly authorized by -----

Stamp & Signature of the Authorized Signatory

Date:

Place:

# **PART II**

# **MARKET SEGMENTS**



## CHAPTER 6

### INTEGRATED DAY AHEAD MARKET (I-DAM)

In Integrated Day Ahead Market (I-DAM) segment, market participants can place buy & sell bids for delivery on the next day for 24 hours starting midnight, which will be matched through closed double-sided auction. It will be an integrated market for Green Day Ahead Market (GDAM), Day Ahead Market (DAM) and High Price Day Ahead Market (HPDAM), and congestion on transmission network will be managed through market splitting separately. The contracts concluded in this segment are scheduled in accordance with the procedures issued by NLDC for 'Scheduling of Collective Transactions' including any amendments or replacements thereof.

#### 6.1. Trading Days

The market shall remain open every day throughout the year except on the days of Exchange declared trading holidays.

#### 6.2. Trading hours

For GDAM, DAM and HPDAM Contracts, trading sessions shall be conducted for all trading days from 1000 hrs to 1100 hrs. No extension shall be allowed in the trading hours, except in case of any constraint identified by the system operator. Trading hours as stipulated under the IEGC 2023 shall be strictly complied with.

#### 6.3. Contract specifications

The contract specifications for DAM, GDAM and HPDAM shall be as per **Annexure 1 (A)**, **Annexure 1 (B)** & **Annexure 1 (C)** to this Chapter.

#### 6.4. Delivery Point

Delivery point shall be the ISTS interconnection point of the respective grid connected entity. The actual schedule at various interconnection point including that of grid connected entities shall be worked out after incorporation of transmission losses in kind. The trade schedules shall be used for the purpose of payment of transmission charges and wheeling charges (if applicable). For example, delivery point of an embedded entity in state 'A' will be the interconnection point of intra state entity, which will be the state periphery. For a trade schedule of 100 MW purchase by this entity, the schedule for this transaction at the ISTS periphery would be 100 MW, and at the periphery of the state it would be 96 MW (assuming 4% All India Transmission Loss) and at the intra state entity periphery would

be 91.20 MW (assuming 5% intra state losses). The transmission charges payable will be for 100 MW.

Similarly, in the above example, if the State embedded entity in state 'A' has a trade schedule of 100MW sell, then the schedule at the ISTS periphery and the state periphery will be 100MW, ISTS transmission losses for generator are not applicable. State and other losses will be applicable on the trade schedule. At intra state periphery, the quantity would be 105.26 (Assuming STU losses as 5%). However, charges as applicable as per the "Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020", shall be applicable on the sellers for trade quantum that is 100 MW.

Taxes, duties, cess and other levies: The price of all the Contracts shall be quoted on the basis of actual value of the electricity Contract excluding the transmission charges, losses, scheduling and system operation charges, taxes, duties, cess and other levies and the same shall be borne by the Buyers or Sellers as applicable.

## 6.5. Order Types

In GDAM segment, there would be possibility to submit sell bid under hydro, solar and non-solar segments separately and buy bid for green energy. Following types of orders shall be available in GDAM, DAM and HPDAM segments:

### 6.5.1.1. Single bid

Single bid will specify multiple sequences of price and quantity pairs in a portfolio manner. The quantity shall be assumed to vary linearly between two price pairs. All purchase bids can have only non-increasing quantity for every increase in the bid price, and every sale bid will have only non-decreasing quantity for every increase in the bid price.

### 6.5.1.2. Block bid

Block bids have an "All-or-nothing" condition i.e. either the bids will be accepted or rejected. It consists of a specified volume and price for continuous time blocks as selected by participant. For execution of block bids, the price is compared with the average of the area-clearing price of the clients bid area. Maximum number of block bids and maximum quantity per block bid shall be prescribed by the Exchange from time to time, with the prior approval of the commission.

### 6.5.1.3. Minimum Quantity Block Bid

Minimum Quantity Block Bids will specify one price and one quantity for a combination of continuous 15-minute time blocks along with a 'Minimum

Quantity percentage' and number of sub-bids. The Minimum quantity block bids are block bids wherein partial acceptance of Block Bid is possible. The minimum quantity percentage will specify the quantity up to which the block bid can be accepted whereas the number of sub-bids will specify the size in which the remaining quantity shall be divided into. The system will first consider 'Min Quantity' in selection criteria. If it is selected, the system would then consider remaining sub bids in selection criteria till it has reached to the equilibrium at which no further sub-bids can be selected. Maximum number of Minimum Quantity Block Bids, Minimum quantity percentage limit and maximum number of sub-bids per block bid shall be prescribed by the Exchange from time to time.

**6.5.1.4. Profile Block Bids**

Profile Block bid specifies one price and varying quantities for a combination of 15-minute time blocks. The volume weighted average price over the duration of the order is used to determine its acceptance. The price is compared with the block volume weighted average area clearing price of client's bid area for the periods for which the block is defined. It will be an 'All or None' type of order. Maximum number of profile block bids and maximum quantity per block bid shall be prescribed by the Exchange from time to time.

**6.5.1.5. Linked Bids**

Block bids can be paired in a mother child relationship wherein child would be considered for selection only if mother bid is selected. Exchange would notify if any surplus arising in mother/child bid can be considered for selection of corresponding child/mother bid in the pair.

**6.5.1.6. New Bids or modifications of existing Bids**

The Exchange may introduce other types of bids or modify existing bid types, in accordance with PMR 2021, as per the requirement of the market and the same will be notified by exchange in advance to the members.

**6.5.2. Transmission Corridor and funds availability**

The bids and offers submitted will be for delivery at the specified delivery point. Transmission charges and losses will be dealt as under:

**6.5.2.1. Transmission charges**

Buyers and Sellers shall be required to pay in cash for the transmission charges for their respective ISTS and State transmission systems and wheeling charges for distribution network (if applicable). These charges shall be payable as stipulated by

the appropriate commission. These charges shall be recovered by the Exchange and paid as per CERC (Open Access in inter State Transmission) Regulation 2008, as amended from time to time.

#### **6.5.2.2. Transmission losses**

Buyers and Sellers shall be required to pay in kind for the transmission losses for their respective ISTS and State transmission systems. These losses shall be as declared by the respective load dispatch centre and additional losses if any as declared by NLDC. The requisition submitted by the Exchange would be based on the trade schedule and would not reflect losses. The schedules issued by NLDC/RLDCs/SLDCs shall reflect the losses.

#### **6.5.2.3. Scheduling and System Operation Charges**

Scheduling and System operational charges for respective LDCs shall be payable by the Exchange in accordance with the Procedures issued by NLDC for 'Scheduling of Collective Transactions'. NLDC application fee shall be socialized amongst all Buyers and Sellers

The ISTS charges and losses for GDAM, DAM and HPDAM segments shall be governed by CERC (Sharing of Inter-State Transmission Charges & Losses) Regulations 2020 and amendments thereto.

#### **6.5.3. Modification and cancellation of orders**

A Member shall be permitted to modify or cancel his orders, during the trading hours. No request of any member/client for manual entry/modifications/cancellation of bids by the power exchanges shall be entertained within or after the trading hours. The exchange can only cancel the order in case of any direction received from NLDC/RLDC or Regulatory Commission/ Statutory Authority.

#### **6.5.4. Order validation**

Orders and bids entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.

### 6.5.5. Matching rules

- 6.5.5.1. The matching of bids shall be governed by the principle of Social Welfare Maximization.
- 6.5.5.2. All Clients shall be assigned unique client ID / Portfolio ID as per Rules.
- 6.5.5.3. The Exchange may launch more than one order book running either parallel or at different time spans. Subject to the approval of the CERC, the Exchange is also entitled to modify or change the matching rules relevant to any market or order books any time where it is necessary to do so. The Exchange however will not run any Day- Ahead Auction for delivery on same day.
- 6.5.5.4. Without prejudice to the generality of the above, the order matching rules will have the following features. Aggregation of all purchase bids and sale offers take place in the unconstrained scenario. Based on this, aggregate supply and demand curve is prepared on Price-Quantity axis. The intersection point of the two curves gives the market clearing price (MCP) and market clearing volume (MCV) corresponding to price and quantity of the intersection point.

The example below illustrates price calculation. Assume the price tick as below:

Price INR/MWH	0	5000	5500	6000	7000	7500	8000	8001	8500	9000	20000
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Portfolio 1, 2,3, and 4 for the specific price tick has quoted quantity in MW as shown below:

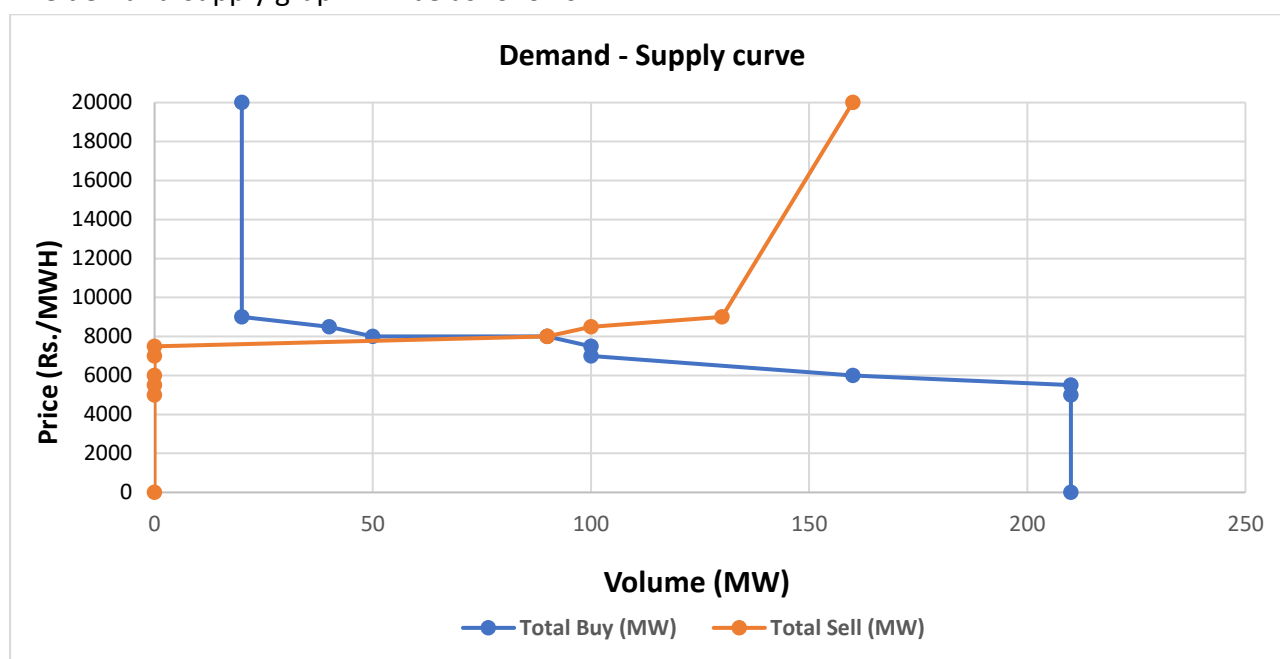
Price INR/MWH	0	5000	5500	6000	7000	7500	8000	8001	8500	9000	20000
Portfolio 1	100	100	100	50	50	50	40	0	0	0	0
Portfolio 2	50	50	50	50	50	50	50	50	40	20	20
Portfolio 3	60	60	60	60	0	0	-40	-40	-50	-50	-60
Portfolio 4	0	0	0	0	0	0	-50	-50	-50	-80	-100

*+ve indicates buy and -ve indicates sell*

System will look for a solution where the net transaction is zero i.e. buy quantum is equal to the sell quantum.

Price INR/MWH	0	5000	5500	6000	7000	7500	8000	8001	8500	9000	20000
Total Buy (MW)	210	210	210	160	100	100	90	50	40	20	20
Total Sell (MW)	0	0	0	0	0	0	-90	-90	-100	-130	-160
Net (Buy-Sell)	210	210	210	160	100	100	0	-40	-60	-110	-140

The demand-supply graph will be as follows:



Block Bid selection on time-priority: Priority of bid selection in case of similar place bids:

- a. Price: Most favorable price shall have priority (Economic Dispatch).
- b. Volume: Block bid, which maximizes the market volume, is favored.
- c. Time: Block bids submitted earlier attracts priority.

**Paradoxical rejection in Block Bid** : System may reject a Block bid even though it would appear to be a valid bid for selection. This happens in a situation when inclusion of such a Block bid may result in the change in MCP at which the bid cannot be accepted.

**Congestion management through Market splitting** : In case of transmission congestion, solution shall be worked out on the basis of market splitting. Decisions of the Exchange in this respect shall be binding on all parties concerned. The congestion revenue, which is the excess arising due to market splitting will be transferred to a separate account and shall be utilized as per PMR 2021 or as directed by the CERC.

#### 6.5.6. Margin requirements

##### 6.5.6.1. Initial Margin

The Security Deposit paid by a Member or a Client, as applicable, will be used as Initial Margin and will be considered the minimum Margin required for submitting bids.

##### 6.5.6.2. Additional Margin

Traders and proprietary Members would have option to choose any of the following margining system:

6.5.6.2.1. Option 1 (7 days average turnover): On a daily basis, the Exchange will compute the minimum margin that should be available with a Member or a Client, as applicable, for start of trade. Ordinarily, the minimum margin will be the average value of trades of respective Member for last seven (7) days (for new Members, it will be the total number of trading days (for less than seven (7) days) of trading or the initial margin deposited with the Exchange). In case if the average value is more than the available initial margins with the Exchange, the Member or the Clients, as applicable, has to bring in the difference in the form of additional margin. However, in case of abnormal increase in the expected obligations of a Member or a Client, as applicable, the Exchange can demand additional margin from that Member or the Client, as applicable. Decisions of the Exchange in this respect, shall be binding on the Member and other parties.

6.5.6.2.2. Option 2 (Advance Payment): For member choosing this option, member has to bring in advance payment before the commencement of the trading session. The Exchange would define a haircut factor from time to time and bids would be permitted to the extent of funds available in his settlement account net off haircut.

Hair Cut Factor: Haircut Factor means the deduction of certain percentage, as decided by the Exchange, on amount deposited by the member/client opting for advance payment in its settlement account, to provide exposure for trading. The haircut is deducted to take care of obligation of such clients/

members on account of charges applicable on them, other than the energy charges.

#### 6.5.6.3. **Refund of Additional Margin**

A Member or a Client, as applicable, may request in writing for refund of any surplus margin lying with the Exchange towards margin. The excess of additional margin shall be released to the Members every week as decided by the Exchange subject to clearance of Exchange dues.

6.5.6.4. In case the existing margins of a Member or a Client, as applicable, are less than the margins calculated as mentioned above, the Member and the Client, as applicable, will have to bring in additional funds. The Member or the Client, as applicable, will be able to get information regarding additional margin requirement, through file transfer protocol (FTP) at end of the trading session. Unless the Member or the Client, as applicable, brings in the additional margin required, he will not be allowed to submit his next order. The Exchange may levy more margin or across market for covering any enhanced risk.

#### 6.5.7. **Day-Ahead Market Operations**

6.5.7.1. The Day-Ahead market will operate as per the 'Procedures for scheduling of Collective Transactions' issued by NLDC and are subject to approval from the CERC for activities related to NLDC/RLDCs or SLDCs, Member shall adhere to the timeliness for bidding phase, pay in and pay out as follows:

6.5.7.1.1. Trading session (Bidding): Trading session (Bidding) will start from 10.00 am to 11.00 pm on all seven (7) days of a week except Exchange declared holidays for Green Day Ahead Market (G-DAM), Day Ahead Market (DAM) and High Price Day Ahead Market (HPDAM) with a functionality that member may transfer the uncleared bids of GDAM to DAM and DAM to HPDAM market for clearance. As per Business Rule , the Exchange will validate available Margins of the Members before the trading hours. Member has to ensure sufficient margin in exchange before placing the bid else, bidding will not be allowed. After the end of the bidding session, bid matching will take place sequentially, first GDAM, then DAM and then HPDAM market will be cleared.

6.5.7.1.2. Provisional bid matching process: At the end of the bidding session, matching of bids for each 15-minute time blocks contracts will be processed sequentially for GDAM, DAM and HPDAM. Once the trading session is over,



member cannot enter any new order and cannot cancelled or modify the already submitted orders. All bids and offers are aggregated and Provisional Market Clearing Price and market clearing volume is determined based on the unconstrained scenario separately for both the contracts. If member has selected to carry forward the uncleared bid in GDAM market to DAM market then that uncleared bid will also be included in the matching process of DAM market. Similarly, if a member has selected to carry forward the uncleared bid in DAM market to HP-DAM market then that uncleared bid will also be included in the matching process of HP-DAM market. Carry forward of bids from GDAM to DAM and from DAM to HPDAM shall be at the option of the participant wherein he can also opt to apply premium or discount for carry forward of the bid.

- 6.5.7.1.3. After the provisional market clearing price determination phase is concluded, the Members, whose orders have been partially or fully executed, will be provided all relevant trade information regarding each execution that has occurred by the trading platform.
- 6.5.7.1.4. Provisional obligation determination process: After end of the bid matching session, a provisional obligation report will be generated for each contract, which will provide the quantity and amount of provisional pay in / pay out and transaction fee payable etc. The information regarding Provisional Market Clearing Price shall be sent to all Members. All Buyers will have to keep funds ready as per the provisional obligation in their respective Settlement Account as per the prescribed timeline for each contract.
- 6.5.7.1.5. Requisition of transmission capacity process: Based on Provisional result, the Exchange will send the combined requisition for transmission capacity allocation to the NLDC for different inter regional/ sub regional flow every day. NLDC based on the margins available, shall indicate the combined ATC at different corridors for the successful trades of both the segments.
- 6.5.7.1.6. Final bid matching process: The Exchange shall verify funds available in the Settlement Accounts of all provisionally selected Exchange Members. It is the members responsibility to ensure sufficient funds and replenish the shortfall before final results.
- 6.5.7.1.7. Based on the ATC, the Exchange will re-run the bid matching process for all the contracts as per prescribed time limit.

- 6.5.7.1.8. On the basis of final bid matching process as above the Exchange will generate the final result for each segment allocating transmission capacity to GDAM first, then to DAM and then to HPDAM. In case of congestion, in various power transmission corridors, the solution shall be determined through market splitting process, which may result into different prices for different areas. These prices are Area Clearing Price (ACP) Final obligation of Members shall be worked out on the basis of such ACP. On the basis of the ACP, final obligation report will be generated. A period of half hour from the time of issue of the final obligation will be provided to Members for raising any dispute/s in relation to their final obligation. An automated bank file for debit and credit of Settlement Accounts of the respective Members by the amount payable / receivable will be generated and sent to the respective Clearing Banks. The funds pay in from the buyer Members will be done on the same day i.e. on "T" day where the "T" stands for trade. The funds pay out to the seller Members will be given on the T+2 day, where the second day is the bank working day. In case of trades confirmed on Sundays, the funds payout will be done on Tuesdays, subject to bank holidays. The Bank will run the pay in file at the scheduled time and report to the Exchange regarding successful debits. After final obligation is worked out, the Exchange shall work out margin or additional margin required from the Member. This margin or additional margin will have to be brought in by the Member before the opening of the market on the next day. The TWS of the Member shall not be activated till sufficient funds are brought in by the Member.
- 6.5.7.1.9. The market splitting methodology adopted by the Exchange is explained in the Annexure 2 of this Chapter.
- 6.5.7.1.10. Congestion amount is the amount by which total funds pay in may exceed total funds pay out, this arises because of the market splitting, and the said difference shall be transferred to the congestion revenue account and shall be utilized as directed by the CERC. The transfer of funds shall be as per the provisions of the CERC (Power Market) Regulations, 2021, as amended from time to time.
- 6.5.7.1.11. RPO Obligation: For the purpose of RPO credit to Buyer, detailed statement will be issued to buyers specifying the total quantity and proportion (Solar/Non-solar/Hydro).
- 6.5.7.2. The Exchange timelines are as under. They are subject to change as per 'Procedures for scheduling of Collective Transactions' issued by NLDC and

Central Electricity Regulatory Commission (Open Access in Inter-State Transmission) Regulations 2008, as amended from time to time.

<b>TIME</b>	<b>DETAILS</b>
10:00 AM to 11:00 AM	<ul style="list-style-type: none"> <li>Trading session for GDAM, DAM and HPDAM</li> </ul>
By 11:20 AM	<ul style="list-style-type: none"> <li>Determination of MCP/MCV of GDAM, DAM and HPDAM sequentially</li> <li>Provisional obligation calculation</li> </ul>
By 11:30 AM	<ul style="list-style-type: none"> <li>Request for confirmation for funds availability to Bank for GDAM, DAM and HPDAM</li> </ul>
By 11:45 AM	<ul style="list-style-type: none"> <li>Request for transmission capacity availability to NLDC for G-DAM, DAM &amp; HPDAM</li> </ul>
By 12:00 PM	<ul style="list-style-type: none"> <li>Confirmation from Bank for funds availability for GDAM, DAM and HPDAM</li> </ul>
By 12:15 PM	<ul style="list-style-type: none"> <li>NLDC communication to Exchange for ATC of GDAM, DAM and HPDAM</li> </ul>
By 12:20 PM	<ul style="list-style-type: none"> <li>Exchange to determine MCP/ACP of GDAM based on final funds status &amp; ATC</li> <li>Carry forward the uncleared bids of OCF of GDAM to DAM.</li> </ul>
By 12:25 PM	<ul style="list-style-type: none"> <li>Exchange to determine MCP/ACP of DAM along with GDAM OCF</li> <li>Carry forward the uncleared bids of OCF of GDAM &amp; DAM to HPDAM</li> </ul>
By :12:30 PM	<ul style="list-style-type: none"> <li>Exchange to determine MCP/ACP of HPDAM based on final funds status &amp; ATC</li> </ul>
By 12:45 PM	<ul style="list-style-type: none"> <li>Publish final result to NLDC for GDAM, DAM and HPDAM</li> </ul>
By 13:00 PM	<ul style="list-style-type: none"> <li>Publish final results for GDAM, DAM and HPDAM to market</li> </ul>

The Exchange may change the above timings depending on the experience gained during the operations. It may also revise the timeline in consultation with NLDC according to market feedback.

#### 6.5.8. Delivery procedure

The Scheduling and Delivery Procedure shall be in accordance with the Procedure for Scheduling of Collective Transactions specified in CERC (Open Access) Regulations 2008 and subsequent amendments thereof. With reference to these contracts, quantity traded shall be considered as delivered once it is scheduled under these procedures.

### 6.5.9. Risk management system

- 6.5.9.1. Fund availability and margins shall be as per the clause above.
- 6.5.9.2. After receiving the Available Transfer Capability (ATC) for the Exchange from the NLDC, the Exchange processes the final bid matching solution. The Exchange has the right to impose penalty on defaulting Member or the Client, as applicable, as decided from time to time.
- 6.5.9.3. An Exchange Member or the Client, as applicable, can pay Additional Margin by depositing funds in its Settlement Account and inform the Exchange through written communication or portal any time during the trading session. Thereafter, based on the funds received, the Exchange will increase the margin of the Member or the Client, as applicable. In case a Member or the Client, as applicable, fails to bring in any additional margin at beginning of the trading session, such Members or the Clients, as applicable, will not be allowed to put orders till Margins are brought in. The decisions of the Exchange shall be final and binding on the Members or the Clients, as applicable.
- 6.5.9.4. In case a Member or the Client, as applicable, fails to pay to the Exchange any amount towards its final pay in, the Exchange will be at liberty and has the power to impose penalty as decided by Exchange time to time. and initiate appropriate action against such Member or the Client, as applicable.

### 6.5.10. Surveillance

#### 6.5.10.1. Validation of orders

Members are required to ensure that their bids and offers are in conformity with the relevant regulatory provisions. In order to avoid any abnormal orders being submitted by the Exchange Members, the Exchange will validate such orders either through software on a daily basis, to the extent possible. The abnormalities include high bid or offer rate, bids quantity or offer quantity submitted higher than the declared capacity/demand by the Member, or the maximum quantity of purchase or sale as allowed in the Standing Clearance. Further, the order value of the Member will also be compared with the available limits of such Member for any over utilization.

**6.5.10.2. Price movement**

Price variation as compared to past data will be observed by the Exchange. Further, the price movement in the Exchange shall be correlated with that of the bilateral markets that is available with the Exchange.

**6.5.10.3. Market behavior**

The Exchange shall compare the trend and market behavior in other national or bilateral markets with that of the Exchange. Any unwarranted change in the price pattern or order trend in this will be brought under the notice of the Exchange management.

**6.5.10.4. Correlation with Deviation settlement Mechanism (DSM)**

The trend in DSM rate and the prices in the Exchange shall be compared for any major differences. In case of individual Members, their trend of trading on the Exchange shall also be compared with their DSM obligations.

**6.5.10.5. Price rigging, concentration, price manipulation and other market abuses**

The Exchange will monitor concentration, price rigging, price manipulation and other market abuses and take suitable actions whenever such practices are identified.

**Annexure 1 (A)****Day Ahead Contract Specifications**

<b>1.</b>	<b>Product definition</b>	96 separate fifteen-minute time blocks throughout the following delivery day (D).
<b>2.</b>	<b>Trading system</b>	HPX trading system
<b>3.</b>	<b>Auction timings</b>	10:00 AM to 11:00 AM of previous day (D-1)
<b>4.</b>	<b>Minimum volume</b>	0.1MW (Minimum allowable quantity for buy/ sell in the standing clearance, it should not be less than this quantity)
<b>5.</b>	<b>Minimum volume step</b>	0.1 MW
<b>6.</b>	<b>Minimum quotation step</b>	Rs. 1 per MWh
<b>7.</b>	<b>Quotation method</b>	Double sided close bid auction with uniform Market Clearing Price for all buyers and sellers.
<b>8.</b>	<b>Order wording</b>	Trader's ID, instrument, quantity/price combination
<b>9.</b>	<b>Delivery point</b>	ISTS Periphery in which the grid-connected entity is located.
<b>10.</b>	<b>Settlement</b>	Daily settlement at ACP x volume traded in MWh (by the Client or Member as the case may be). Final settlement adjusted for any force majeure deviations.
<b>11.</b>	<b>Transmission charges</b>	a) ISTS:  As Per Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008 and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.  b) State Transmission System:  As per the concerned State Electricity Regulatory Commission's

		Regulations/ CERC (Open access in ISTS) Regulations, 2008, as amended from time to time.
<b>12.</b>	<b>Transmission losses</b>	Payable in kind as per the (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.

**Annexure 1 (B)****Green Day Ahead Contract Specifications**

<b>1.</b>	<b>Product definition</b>	96 separate fifteen-minute time blocks throughout the following delivery day (D).
<b>2.</b>	<b>Trading system</b>	HPX trading system
<b>3.</b>	<b>Auction timings</b>	10:00 AM to 11:00 AM of previous day (D-1)
<b>4.</b>	<b>Minimum volume</b>	0.1MW (Minimum allowable quantity for buy/ sell in the standing clearance, it should not be less than this quantity)
<b>5.</b>	<b>Minimum volume step</b>	0.1 MW
<b>6.</b>	<b>Minimum quotation step</b>	Rs. 1 per MWh
<b>7.</b>	<b>Quotation method</b>	Double sided close bid auction with uniform Market Clearing Price for all buyers and sellers.
<b>8.</b>	<b>Order wording</b>	Trader's ID, instrument, quantity/price combination
<b>9.</b>	<b>Delivery point</b>	ISTS Periphery in which the grid-connected entity is located.
<b>10.</b>	<b>Settlement</b>	Daily settlement at ACP x volume traded in MWh (by the Client or Member as the case may be). Final settlement adjusted for any force majeure deviations.
<b>11.</b>	<b>Transmission charges</b>	<p>a) ISTS: As Per Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008 and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.</p> <p>b) State Transmission System: As per the concerned State Electricity Regulatory Commission's Regulations/ CERC (Open access in ISTS) Regulations, 2008, as amended from time to time.</p>



<b>12.</b>	<b>Transmission losses</b>	Payable in kind as per the CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
<b>13.</b>	<b>Eligibility</b>	Sellers: Seller shall submit NOC issued by respective LDC specifying maximum quantity and source of renewable energy generation (e.g. Solar, Non-solar, Hydro etc.)  Buyers: All eligible open access consumer

## Annexure 1 (C)

### High Price -Day-Ahead Market Contract Specifications

1.	Product definition	96 separate fifteen-minute time blocks throughout the following delivery day (D).
2.	Trading system	HPX trading system
3.	Auction timings	10:00 AM to 11:00 AM
4.	Minimum volume	0.1 MW (Minimum allowable quantity for buy/ sell in the standing clearance, it should not be less than this quantity)
5.	Minimum volume step	0.1 MW
6.	Minimum quotation step	Rs. 1 per MWh
7.	Quotation method	Double sided close bid auction with uniform Market Clearing Price for all buyers and sellers.
8.	Order wording	Trader's ID, instrument, quantity/price combination
9.	Delivery point	ISTS Periphery in which the grid-connected entity is located.
10.	Settlement	Daily settlement at ACP x volume traded in MWh (by the Client or Member as the case may be). Final settlement adjusted for any force majeure deviations.
11.	Transmission charges	<p>a) ISTS: As Per Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008 and Central Electricity Regulatory Commission (Sharing of Inter- State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.</p> <p>b) State Transmission System: As per the concerned State Electricity Regulatory Commission's Regulations/ CERC (Open access in ISTS) Regulations, 2008, as amended from time to time.</p>
12.	Transmission losses	Payable in kind as per the (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
13.	Eligibility	<p>Sellers: Valid NOC/Standing Clearance issued by respective Load Dispatch Centre specifying maximum quantum and verification of eligibility to participate in HP- DAM.</p> <p>Buyers: All eligible Open Access buyers with valid NOC/Standing clearance specifying maximum quantum issued by Load dispatch Centre.</p>

## Annexure 2

### Methodology of Market Splitting

The concept of market splitting is explained below along with suitable examples.

#### **Market Splitting:**

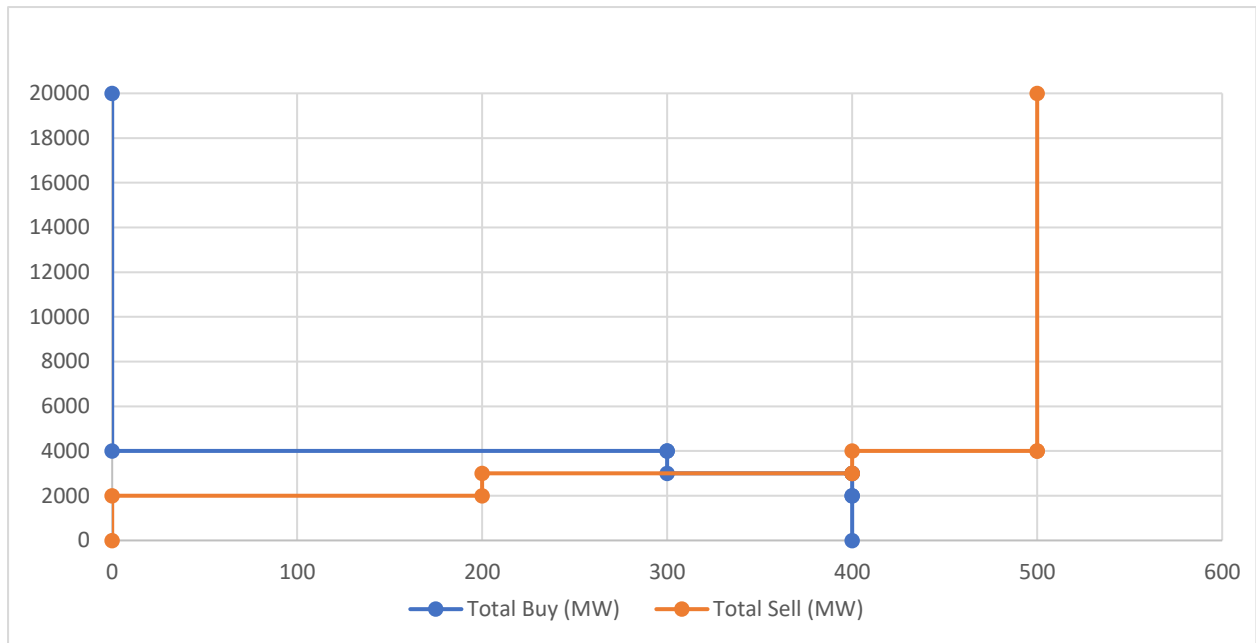
Market splitting is an evolved form of implicit auctioning wherein energy component and corresponding transmission capacity between bid areas are traded simultaneously. In the market splitting methodology areas on either side of congested corridor are identified separately and initially both are cleared as if there is no interconnection between the areas, and then the area which has highest price, draws electricity from the area with the lower price just as much as the capacity of the congested line will allow. Allowing this flow into higher price area will reduce prices in the higher price bid area and would increase prices in the lower price bid area depending upon the bid prices in the respective areas.

For a simple situation involving only two areas SR and ER is illustrated as under:

In the first step, all bids from both areas are aggregated together, and a demand-supply curve is plotted as shown below –

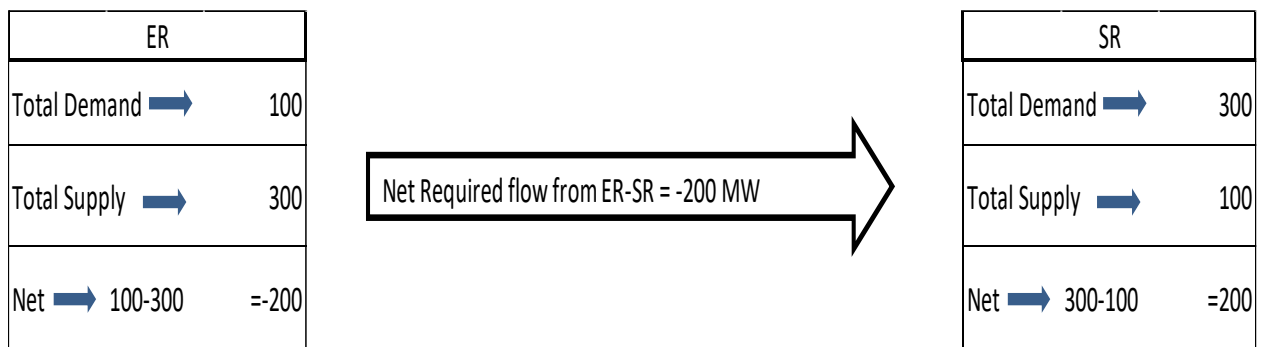
Price (Rs./MWh)	0	1999	2000	2999	3000	3001	3999	4000	4001	20000
ER Seller 1	0	0	-200	-200	-200	-200	-200	-200	-200	-200
ER Seller 2	0	0	0	0	-100	-100	-100	-100	-100	-100
SR Seller 1	0	0	0	0	-100	-100	-100	-100	-100	-100
SR Seller 2	0	0	0	0	0	0	0	-100	-100	-100
SR Buyer	300	300	300	300	300	300	300	300	0	0
ER Buyer	100	100	100	100	100	0	0	0	0	0
Total Buy (MW)	400	400	400	400	400	300	300	300	0	0
Total Sell (MW)	0	0	-200	-200	-400	-400	-400	-500	-500	-500
Net (Buy-Sell)	400	400	200	200	0	-100	-100	-200	-500	-500

Demand Supply curve for unconstrained solution will be as shown below:



<b>Result</b>	
<b>MCP</b>	<b>3000 Rs/Mwh</b>
<b>Volume cleared</b>	<b>400 MW</b>

Case 1: As per the above-unconstrained solution, System will demand net flow from ER-SR as 200 MW from NLDC.



Case 2: There is congestion in ER-SR corridor and flow is constrained to 100 MW:

System will split the market in two regions i.e. deficit (SR) and surplus region (ER) and will re-run the calculation for both the regions separately considering the flow constraint and will derive the ACP and ACV. It means system will bring the net sell/buy in ER region as 100 on surplus side (Outflow from ER) and accordingly at that point the prices discovered will be ACP

of ER. Similarly, system will bring the net sell/buy in SR as 100 on deficit (Inflow) side and accordingly at that point the prices discovered will be ACP of SR.

ER-Surplus Region	Price (Rs./MWh)	0	1999	2000	2999	3000	3001	3999	4000	4001	20000	
	ER Seller 1	0	0	-200	-200	-200	-200	-200	-200	-200	-200	-200
	ER Seller 2	0	0	0	0	-100	-100	-100	-100	-100	-100	
	ER Buyer	100	100	100	100	100	0	0	0	0	0	
	Net (Buy-Sell)	100	100	-100	-100	-200	-300	-300	-300	-300	-300	



SR-Deficit Region	Price (Rs./MWh)	0	1999	2000	2999	3000	3001	3999	4000	4001	20000
	SR Seller 1	0	0	0	0	-100	-100	-100	-100	-100	-100
	SR Seller 2	0	0	0	0	0	0	0	-100	-100	-100
	SR Buyer	300	300	300	300	300	300	300	300	0	0
	Net (Buy-Sell)	300	300	300	300	200	200	200	100	-200	-200

Result	ACP (Rs./MWh)	ACV sale (MW)	ACV (Buy)
ER	2000	200	100
SR	4000	200	300
Total		400	400

The main objective of the concept is fulfilled:

- All grid constraints are relieved
- The available capacities are fully utilized
- The sale-purchase balance requirement is satisfied in both areas (at different price levels).

## **CHAPTER 7**

### **DAY AHEAD CONTINGENCY AND INTRA DAY CONTRACTS**

This segment will cover market timeframes of Day ahead contingency and Intra Day contracts as allowed by the Commission. These contracts together constitute the Contingency Market/Contracts. The contingency market will operate in accordance with the procedures issued by CTU for 'Scheduling of Bilateral Transactions'. All terms and conditions of the contracts including trading sessions, matching rules, margin requirement and delivery procedure etc., will be as per specific rules mentioned herein.

#### **7.1. Contingency Contracts (Day Ahead and Intra Day)**

The Exchange shall make the 96-time blocks contracts available for trading on day-ahead and on intra-day basis as per the timelines specified by the Exchange in the Trading and Settlement Calendar to be notified from time to time. The Exchange will carry out trading in such contracts through 'Continuous Trade' sessions. The timeline for trade matching sessions will be specified in Contract Specifications. They will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by CTU as specified in the contract specifications. The Exchange holds the right to modify parameters as specified by CERC. The contract specifications are given at Annexure – 1 of this chapter. These two products can be launched as two separate contracts or an integrated contract.

#### **7.2. Trading Days and trading hours**

The Exchange shall operate this segment on all days except Exchange specified holidays. The Exchange shall declare trading and settlement calendar indicating trading sessions and trading days for each of Contracts from time to time. The Exchange may extend, advance or reduce trading hours by notifying the Members in advance.

#### **7.3. Matching Methodologies**

The matching principle in both the products i.e., Intra Day and Day Ahead Contingency will be governed by following methodology:

##### **Continuous Trade Session**

The order matching rules for this trade session will have the following features:

- a) In case of continuous market segment the order is immediately checked if it can be matched.

- b) The Orders are matched based on price and time priority. In case of more than one order having the same price, the order with the earlier time will get the priority in matching.
- c) The best buy order is matched with the best sell order when (buy price  $\geq$  Sell Price). For order matching, the best buy order is the one with the highest price and the best sell order is the one with the lowest price.
- d) An order may match partially with another order resulting in multiple trades. Any new methodology may be adopted by the Exchange at any point of time with prior approval of the Commission in accordance with PMR 2021.

#### **7.4. Margin Requirement**

The Members or the Clients, as applicable, participating in these segments will have to make available the following types of margins to the Exchange from time to time as described below:

##### **7.4.1. Initial Margin (Operational limit)**

A Member or a Client, as applicable, will be required to deposit an Initial Margin as stipulated in the Contract Specification, which will be considered the minimum Margin required for submitting bids. Initial Margin have to be submitted to the Exchange by the Member or the Client, as applicable, before start of their trading. Initial Margin will be computed on the total order value. The percentage of the order value required as initial margins shall be defined in the Contract Specification. The trading system will automatically reject orders in case the initial margin is not deposited. Initial Margins will be released only after such time as defined in the Contract Specification. The release of Margin Funds shall be based on the Members or the Clients, as applicable, request and after adhering to the risk management procedures of the exchange.

##### **7.4.2. Additional Margin**

###### **7.4.2.1. Option 1 (margin Collection in tranches)**

Additional Margin will be computed as a percentage of the traded value as per the risk curve defined and will be collected in different tranches as per the contract specifications. Only the buyer Members or the Client, as applicable, will have to pay the Additional Margin to the exchange based on their trade confirmation. The Member or the Client, as applicable, will have to make available the Additional Margin before the end of the trading day or as may be specified in respective Contract Specification. Unlike Initial

Margin which is a pre trade margining system, Additional Margins will be computed on the traded value at client level. This margin will be blocked from the available cash or non-cash collaterals and will be released progressively as per the risk curve defined by the exchange. In case if the Member or the Client, as applicable, fails to bring in the additional margin within the specified period then the trades will be cancelled and penalty will be levied to the member. All other forms of margin collected by the exchange till such time may also be impounded.

#### 7.4.2.2. **Option 2 (Advance Payment)**

Advance payment option will be available to the trader/proprietary member up to the bid value net off the haircut factor for whole contract period or partial as per the contract specification mentioned in each contract. Trader/Proprietary member opted for this option need not to furnish any additional margin to the Exchange.

Hair Cut Factor: Haircut Factor means the deduction of certain percentage, as decided by the Exchange, on amount deposited by the member/client opting for advance payment in its settlement account, to provide exposure for trading. The hair cut is deducted to take care of obligation of such clients/ members on account of charges applicable on them, other than the energy charges.

- 7.4.2.3. Each of the above namely initial margin and additional margins as the case shall be payable and be paid in cash or such non-cash security or collateral as the Exchange may notify from time to time.
- 7.4.2.4. Refund of Additional Margin: If there is a surplus amount lying with the Exchange towards margin, it will be refunded to the Member or the Client, as applicable, on receipt of a written request from the Member for refund.
- 7.4.2.5. The Member or the Client, as applicable, will get information regarding additional margin requirement, through file transfer protocol (FTP) at end of the trading session. In case the Member or the Client, as applicable, does not have adequate Cash / Non- cash collaterals, the Member or the Client, as applicable, at the entire discretion of the Exchange, can be barred from further trading on the Exchange.



- 7.4.2.6. The Exchange automatically on its own may adjust the unutilized additional margin in Term Ahead Market (TAM) segment against the margins applied in this segment and vice versa.

## 7.5. Risk Management System

7.5.1. At the time of submission of the order, exchange will verify the availability of Initial Margin and the order would be accepted only if sufficient funds were available under this head. Initial Margin shall be in form of cash. Further, the orders will not be accepted if earlier calls for additional, variation and extraordinary margins have not been fulfilled. The Members or the Clients, as applicable, will be allowed to take exposure on the initial margin as decided by the exchange. Thereby a member can put an order to buy or sell in a contract as per his available exposure with the Exchange. Exchange has the right to give exposure limits based on the bank balance or available margins of such Member, or Client as the case may be, or both for facilitation of intraday and day ahead contingency products.

7.5.2. Additional Margins in the form of cash / non-cash collaterals has to be paid by the buyer member or the Client, as applicable, to the exchange as per the Contract Specification and as per the Trading and Settlement Calendar. It is the members responsibility to ensure sufficient funds and replenish the shortfall. In case if the member or the Client, as applicable, fails to bring in the required Additional Margin as per the schedule mentioned, then the Exchange may impound the available Initial Margin and Additional Margin and also recover penalty from the member or the Client, as applicable. For those members who have opted for advance payment, after applying haircut factor, system will check the bid value against the exposure and whenever bid breaches the exposure limit system will reject the bid.

7.5.3. During the entire tenure of the contract, Exchange will monitor traded price of a contract with that of the price of the contract with same underlying traded earlier and in case of change in the Prices between two trading sessions, further Additional Margins will be worked out and recovered from the members. Exchange will have the right to collect from its members an ad hoc margin during the tenure of the contract to cover any additional risk arising out of Price Movement in the Market. Types of Financial and delivery defaults and penalties levied thereof:

7.5.4. Financial defaults can be of two types:

#### 7.5.4.1. **Margin default**

In case if the buyer/seller member fails to bring in the initial margin after the trade, the exchange will withhold the Security Deposit available with the exchange and impose penalty which shall be deducted from the other available margins of the member or the Client, as applicable. All the margins collected from such member or the Client, as applicable, will be withheld. The non-cash collateral will be liquidated and passed on to the counter party. Apart from the above, exchange will also collect difference between the higher of the traded price or the settlement price for that contract on its platform. Similarly in case if a member fails to pay any ad hoc additional margins demanded by the exchange, the exchange will have the right to take all the above mentioned actions against the member or the Client, as applicable.

#### 7.5.4.2. **Funds pay in default**

In case if the buyer member or the Client, as applicable, fails to make good the funds pay in on any of the pay in day, the Exchange will be at liberty and has the power and discretion to initiate appropriate action against such Member or the Client, as applicable. The total margins collected till that period will be withheld and sent for liquidation. Apart from the above, exchange will also collect difference between higher of the traded price or the settlement price for that contract on its platform.

#### 7.5.5. Delivery defaults can be of following types:

##### 7.5.5.1. **Failure to receive SLDC clearance**

In case, the exchange does not receive the SLDC clearance as per the scheduled time from the member, then 5% of the total trade value or the total settlement value (trade quantity \* settlement price), whichever is higher will be collected from the defaulting member. Penalty so collected shall be passed on to the counter party after deducting administrative charges for the exchange which will be 5% of the penalty amount, subject to maximum of Rs. 5,000 (including taxes). In case if the member fails to make good the penalty amount in his settlement account, the non-cash collateral available with the exchange shall be liquidated.

#### 7.5.5.2. **Failure in Seller's ability to deliver**

In case of failure in delivery by Seller, the difference between the traded quantity and actual delivery is settled under DSM.

Exchange will debit the amount corresponding to transmission charges borne by the buyer from member's settlement account and credit the same to the affected counter party.

Amount for everyday Pay-in and Pay-out shall be on net basis and the member will be responsible for settling funds obligation between its client's pay-in and pay-out.

### 7.6. **Surveillance**

1. In order to ensure market integrity and to avoid market abuses, the Exchange will use various on-line surveillance tools. The Exchange shall have the right to take appropriate actions in such cases, which are discussed as under.
2. Validation of orders: Members are required to ensure that bids and offers are in conformity with relevant regulatory provisions. In order to avoid any abnormal orders being put by the Exchange Members like high bid price or bid quantity, the Exchange will validate such orders through software on a daily basis, wherever possible. Further, the order value of the Member will also be compared with the available limits of such Member for any over utilization. Members are required to ensure that the bids are for the quantity registered with the Exchange for trading which shall be on the basis of their capacity to arrange open access from their respective SLDC.
3. Price movement: The Exchange will observe any variation in prices as compared to past data. Further, the price movement in the Exchange shall be correlated with that of the bilateral markets that is available with the Exchange.
4. Market behavior: The Exchange shall compare the trend in other national or bilateral markets with that of the Exchange. Any unwarranted change in the price pattern or order trend in this will be brought under the notice of the Exchange management.
5. Correlation with Deviation settlement mechanism (DSM): The trend in the DSM rate and the prices in the Exchange shall be compared for any major

differences. In case of individual Member its trend of trading on the Exchange shall also be compared with his DSM obligations.

6. Price rigging, concentration, price manipulation and other market abuses: The Exchange will monitor concentration, price rigging, price manipulation and other market abuses and take suitable actions whenever such practices are identified.

#### **7.7. Delivery procedure**

Delivery procedure will be different for National and Regional Contracts.

##### **National and Regional Contracts**

1. All Contracts (trades) shall be for delivery of power as per the requisition submitted by the Exchange and scheduled by NLDC / RLDCs / SLDCs.
2. Delivery Point: The delivery point of all the contracts shall be at the Seller's ISTS Periphery as per Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
3. After finalization of successful trades, the exchange will share details to both the counter parties and the participants would be required to submit the SLDC concurrences in the prescribed Format in accordance with the 'Procedure for Scheduling of Bilateral Transactions' and as specified in the Calendar. Exchange will make application for transmission capacity reservation and advance scheduling as per the schedule mentioned in the Calendar. In case if the "Concurrence from SLDC" received from both the parties does not match with each other, the Exchange will consider the minimum of the quantity mentioned for sending the application for scheduling. In all other cases where there is mismatch in hours and / or in quantity cleared in the SLDC concurrences, the contract will be liable to made void.
4. The Buyer shall accept the decision on routes that may be available to carry the power without any reservation. Buyer will be deemed to have consented for all possible routes for delivery of the power; however, they can give preference amongst the possible routes along with the concurrence. In absence of any preference from the buyer, the Exchange at its absolute discretion can decide the route through which application is to be made and also the alternate routes to be mentioned in such application.

5. Nodal RLDC's acceptance for scheduling will be binding on both buyers and sellers. In case of anticipated congestion in one or more transmission corridor, the Exchange will have the right to participate in the electronic bid on behalf of the Members as per the guidelines laid down in the 'Procedure for Scheduling of Bilateral Transactions'. Trade once executed shall not be revised except as provided in the Contract Specification and shall be sent for reservation of transmission capacity and advance scheduling as per the Trading and Settlement Calendar. The schedule shall not be revised during the delivery period except as provided in the Contract Specification.
6. Any shortage or excess delivery of electricity from the total schedule will be settled by the respective participants under DSM mechanism as per the procedure laid down by the CERC or any other settlement system as prescribed by concerned SERC.
7. Taxes, duties, cess and other levies: The price of all the Contracts shall be quoted at delivery point excluding the transmission charges, losses, scheduling and system operation charges, taxes, duties, cess, surcharge and other levies and the same shall be borne by the Buyers or Sellers as applicable.
8. Metering of electricity: Arrangement for metering shall be made by the Seller/Buyer as per the requirements of respective SLDC / RLDC. Members and the relevant authority shall be responsible to resolve the issues related to metering of electricity. Members shall indemnify and keep indemnified the Exchange from any disputes related to metering.
9. Transmission Losses: Seller shall bear in kind the transmission/ distribution losses from its own interface up to the delivery point. Buyer shall be required to bear in kind all the transmission/ distribution losses from the delivery point up to its own interface. Transmission loss percentage for the respective transmission system as applicable at the time of actual delivery shall be applied for deriving scheduled quantities at various points in the transmission route in accordance with the Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
10. Transmission Charges: All the transmission charges shall be calculated on the total quantum of power scheduled at seller's ISTS Periphery. Seller shall pay for the transmission charges and Wheeling Charges (wherever applicable) up-to the point of delivery and Buyer shall bear all the charges for enroute ISTS and also the transmission and wheeling charges (wherever applicable) for its respective State grid in accordance with the Procedure for Scheduling of Bilateral Transaction and

Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.

11. Scheduling and Operating charges: Seller will pay for the Scheduling and Operating charges up to delivery point i.e. for the concerned RLDCs /SLDCs /ALDCs involved in transaction. Buyer will bear all the Scheduling and Operating charges from its interface up to delivery point i.e. for the concerned RLDCs /SLDCs /ALDCs involved in transaction. Application fees for the Nodal RLDC will be paid by the buyer.
12. All Transmission, Wheeling charges, Scheduling, Operating charges and application fees will be paid to the Nodal RLDC as per advice received from them and the same will be recovered from the buyers and sellers.
13. The Application fee for processing the 'Concurrence from SLDC' shall be paid by Buyer and Seller for their respective SLDCs.

#### **7.8. Transaction Fees**

The Exchange will charge a transaction fee, as may be specified by the Exchange from time to time, on the transactions carried through the Exchange. Such transaction fee will be computed on value basis or volume basis, as may be decided from time to time, which will be computed on both purchases and sales separately. Any changes in the transaction fees shall be effected by Exchange with prior approval of the Commission.

#### **7.9. Reports**

After end of trading session, the Exchange will download the reports to the Members which consist of Trade file Report, Provisional Obligation Report, Final Obligation Report and other relevant matters. Based on the Exchange's Reports, the Members can inform their Clients about their successful trades along with their obligation.

## Annexure 1

### Contract Specification: National/Regional Contingency Contracts

Sr No.	Item	Details
1	<b>Contract Name*</b>	National/Region wise Contingency Contracts
2	<b>Regions</b>	One National contract and preference wise Regional contracts for each electrical region will be available for trading i.e. for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North-East Region (NER)
3	<b>Contract Code*</b>	“Type of Contract- Block No. – Region/National” (E.g.RCON-B21-NR, NCON-B21-NA) Where, N/RCON: National/Regional Contingency Contract Block: Block of delivery Region detail NR: Northern Region NA: National
4	<b>Contract Type</b>	Delivery Option - Firm Delivery
5	<b>Contract available for Trading</b>	15 minute time blocks contracts as per the trading and settlement calendar to be notified by the Exchange from time to time.
6	<b>Trading day*</b>	Same day or a day before delivery day or as per trading and settlement calendar declared in advance.
7	<b>Trading Session*</b>	One continuous trading session will be made available to the members for bidding.
8	<b>Bidding process</b>	Seller and buyer can bid in national contract and also, Seller can submit bid for the contract of that region to which he belongs. Whereas a buyer can buy any National/regional contract. Netting off (square off) of positions will not be allowed.
9	<b>Matching of Bids</b>	Continuous trade session. Details in clause 2. (A) of chapter 7 of Business Rules. Each trade will be sent for scheduling, on trade to trade basis.
10	<b>Trading Hours</b>	Continuous trade session as per trading and settlement calendar to be notified by the Exchange from time to time
11	<b>Minimum Volume quotation*</b>	1 MW

<b>12</b>	<b>Minimum Volume Step*</b>	0.1MW
<b>13</b>	<b>Lot size</b>	1 MW * 15 minutes
<b>14</b>	<b>Maximum bid size*</b>	Bids should not be more than the allowed MW in any of Concurrence/Clearance issued by its SLDC to the Members/Clients at any time. It will be the responsibility of the Member to adhere to this rule.
<b>15</b>	<b>Price Quote Basis</b>	Rs. per MWh (excluding all fees, charges, taxes, if applicable)
<b>16</b>	<b>Price Tick*</b>	Rs. 1 per MWh
<b>18</b>	<b>Quantity Variation</b>	Zero quantity variation allowed.
<b>19</b>	<b>Settlement</b>	Traded price * Quantity scheduled by RLDC at delivery point.
<b>20</b>	<b>Initial Margins (Operational Limit)*</b>	105% margin from buyers of the total order value should be available in cash with the exchange at the time of bidding for continuous trading sessions.
<b>21</b>	<b>Transaction Fees*</b>	Fees payable by buyer and seller to Exchange for the quantity approved by nodal RLDC at delivery point as specified by the exchange from time to time.

### Trading Cycle

	<b>Details</b>	<b>Time (Hrs)</b>
<b>22</b>	Continuous Trade Session (Daily)	As specified in TAM Trading and Settlement Calendar
<b>23</b>	SLDC Clearance and Declaration Form sent to Members	As specified in TAM Trading and Settlement Calendar
<b>24</b>	Submission of SLDC Clearance to the Exchange by the Member	As specified in TAM Trading and Settlement Calendar
<b>25</b>	Submission of Application to Nodal RLDC <sup>(1)</sup>	As per Procedure for scheduling of Bilateral transactions
<b>26</b>	Approval from nodal RLDC	As per the procedure for bilateral transactions.
	Pay in/ adjustment on T/T+1 basis where T is the trading day	Post receipt of nodal RLDC approval
	Payout on T+1/T+2 basis where T is the trading day	By 1200



<b>27</b>	Payment of charges to Nodal RLDC	As per Procedure for Scheduling of Bilateral Transaction
<p><sup>(1)</sup>Application for Scheduling will be sent only when the Exchange receives the SLDC Clearances from buyer and seller. In case, the SLDC approval is not received from SLDCs of buyer/ seller as specified in Trading and Settlement Calendar, then it will be considered as default by buyer/seller.</p>		

### **Delivery Procedure**

<b>28</b>	<b>Delivery</b>	Delivery shall commence 3 hours after expiry of the contract. Trade once executed shall not be revised and shall be sent for scheduling, and at no point of time during the contract period shall be allowed to be revised. The quantity shall be deliverable as per the schedule issued by the respective RLDC.
<b>29</b>	<b>Delivery period</b>	Delivery for each time block.
<b>30</b>	<b>Delivery point</b>	The delivery point shall be at Seller's ISTS Periphery as per Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
<b>31</b>	<b>Application for Scheduling</b>	Application for Scheduling will be Submitted to Nodal RLDC on Contingency basis as per the "Procedure for Scheduling of bilateral transactions"
<b>32</b>	<b>SLDC Clearance</b>	The buyer and seller will have to take concurrence from their respective SLDC for scheduling of Power. This concurrence has to be submitted as per the timelines specified in the Trading and Settlement Calendar. NOC / Prior Standing Clearance issued by the SLDC in format PX-I as per CERC (Interstate Open Access) Regulations, are also valid for these transactions.
<b>33</b>	<b>Application fees, Operating and Transmission Charges and Losses</b>	Seller will bear all the Transmission, Scheduling & Operating charges and Transmission Losses (in kind) up to the delivery point and Buyer shall bear all the Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at seller's Regional Periphery.

<b>34</b>	<b>Alternate route</b>	Not Applicable
<b>35</b>	<b>Force majeure</b>	In case of force majeure, the Exchange will settle the contract as per final schedule issued by RLDCs.
<b>36</b>	<b>Fines &amp; penalties*</b>	As decided by the Exchange from time to time and informed through circular.

### **Settlement procedure**

<b>37</b>	<b>Payment of Application fees, Transmission &amp; Operating Charges by Members</b>	Application fees, Transmission and Operating Charges as applicable on quantum scheduled at the delivery point and payable to the Nodal RLDC, will be recovered from the buyer and seller members on receipt of acceptance from the nodal RLDC.
<b>38</b>	<b>Funds pay in by Members</b>	Exchange will debit/adjust the funds pay-in on the same day/next day of trade from buyer's member's /clients, as applicable. Excess margins, if any due to partial concurrence received will be refunded back to the member on the settlement day.
<b>39</b>	<b>Funds pay out to Members</b>	Exchange will credit the funds pay out in seller's member's settlement account on T+1/T+2 basis at 12.00 noon for each delivery day subject to confirmation of delivery pay in by the seller.

\* Exchange may modify these parameters from time to time with prior intimation to its Members after taking approval of CERC

## **Chapter 8**

### **TERM AHEAD MARKET (TAM)**

This segment will cover market timeframes of daily, weekly etc. as allowed by the Commission. The Term Ahead Market will operate in accordance with the procedures issued by CTU for 'Scheduling of Bilateral Transactions'. All terms and conditions of the contracts including trading sessions, matching rules, margin requirement and delivery procedure etc., will be as per specific rules mentioned herein.

#### **8.1. Contracts**

The Exchange shall make the contracts as specified in this section available for trading as per the trading and settlement calendar which shall be issued by the Exchange from time to time. These contracts will be traded in accordance with provisions of trading as specified in the respective Contract Specification. The trade sessions, matching rules applied in each trade session for concluding the contracts, risk management and settlement for such contracts will be as per specific contract specifications provided herein. The delivery of such contracts will be in accordance with CERC (Open Access in Inter-State Transmission) Regulations, 2008, as amended from time to time and relevant procedures issued by CTU and by Open Access Regulations of concerned State. The Exchange holds the right to modify the parameters subject to CERC (Power Market) Regulation, 2021.

Following contracts shall be available for trading in Term Ahead Market:

##### **8.1.1. Daily Contracts**

The Exchange shall make the daily contracts available for trading up to a period specified by CERC for delivery of electricity for defined blocks of hours of the day. The Exchange will carry out trading in such contracts 'Uniform Price Step Auction' sessions. The timeline for trade matching sessions will be specified in Contract Specifications. They will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by CTU as specified in the contract specifications. The contracts may contain provisions allowing quantity variation in delivery. The Exchange holds the right to modify parameters as specified by CERC. The contract specifications are given at Annexure – 1 of this chapter.

### 8.1.2. **Weekly Contracts**

The Exchange shall make the weekly contracts available for trading maximum up to a period specified by CERC for delivery of electricity for defined blocks of hours on all defined week- days and/or weekends of the week. The Exchange will carry out trading in such contracts through 'Uniform Price Step Auction' sessions. The timeline for trade matching sessions will be specified in Contract Specifications. They will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by CTU as specified in the contract specifications. The contracts may contain provisions allowing quantity variation in delivery. The Exchange holds the right to modify parameters as specified by CERC. The contract specifications are given at Annexure – 2 of this chapter.

### 8.1.3. **Monthly Contracts**

The Exchange will make the monthly contracts available for trading maximum up to a period as may be specified by the CERC for delivery of electricity on all defined months provided in the trading and settlement calendar. The Exchange will carry out trading in such contracts through 'Uniform Price Step Auction'. The timeline for trade matching sessions is specified in Contract Specifications. Executed contracts will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by POSOCO/NLDC as specified in the contract specifications. The contract specifications are given at Annexure – 3 of this chapter.

### 8.1.4. **Any-Day(s) Single Sided Contracts**

The Exchange will make the Any-Day(s) Single Sided contracts available for trading maximum up to a period as may be specified by CERC for delivery of electricity as may be requisitioned by the buyer. The buyer may seek any time and day or combination thereof. The Exchange will carry out trading in such contracts through 'Reverse Auction' where Buyer will be the requisitioner. The timeline for trade matching sessions will be specified in contract specifications. Executed contracts will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by POSOCO/NLDC as specified in the contract specifications. The contract specifications are given at Annexure – 4 of this chapter.

## 8.2. Trading Days and trading hours

The Exchange shall operate this segment on all days except Exchange specified holidays. The Exchange shall declare trading and settlement calendar indicating trading sessions and trading days for each of Contracts from time to time. The Exchange may extend, advance or reduce trading hours by notifying the Members in advance.

## 8.3. Matching Methodologies

The matching principle in different segment/Product will be governed by following methodology:

### 8.3.1. Uniform Price Step Auction

Orders for buy and sale once submitted by market participants during call auction phase are stored in the order book. During the call auction phase, participants can edit/modify/delete their orders and can also enter new orders. Once the call auction phase is over, system determines an Equilibrium Price by executing all orders which have a price better than or equal to the Equilibrium Price according to a first in first out (FIFO) basis. Auction shall be an open auction wherein complete list of order prices and respective aggregated quantities of buy and sale bids shall be displayed to the market maintaining bidder's anonymity.

### 8.3.2. Open auction

In the open auction, the participants submit their order for sale and buy during the auction phase. Complete list of order prices and aggregated quantities of buy and sale bids will be displayed to market participants maintaining bidder's anonymity. The participants can modify, delete or enter new orders during call auction period.

### 8.3.3. Reverse auction

1. In Reverse Auction, buyer will create the requisitions (quantum, time period with minimum acceptable quantity from single seller) and sellers to submit their offers (quantum, minimum acceptable quantum and price) against each requisition. In each reverse auction there would be one buyer and multiple sellers. The sellers will compete amongst themselves for the requisition made by the buyer.
2. The auction shall be conducted in two stages namely Initial Price Offer (IPO) and Reverse Auction.
3. In the IPO stage, the sellers will submit their price and quantity (during IPO session seller can view, modify, and delete) against each requisition. The system will rank the Bidders according to their price bids. If two or more sellers quote the same price, the

ranking of the sellers shall be done based on time priority basis. The Bidder with the highest price bid in IPO stage will be called the H1 Bidder. The Highest Bidder(H1) will be eliminated provided that the total quoted quantity after elimination is not less than twice the requisitioned quantity. The elimination process will be carried out for each of the requisition separately. One event may have more than one requisition.

4. After completion of IPO stage, Reverse Auction will be conducted. During the auction session only the prevailing lowest quoted price (L1) will be displayed to the market. The Reverse Auction shall continue for a period of 120 minutes or as may be specified by the Exchange from time to time. The Exchange shall also from time to time specify the duration before the scheduled closure of Reverse Auction during which if there is a change in the lowest quoted price (L1) the Reverse Auction would get auto extended by that duration. For example, if during the last 10 (ten) minutes before the scheduled close time of Reverse Auction, if a price bid is received which is lower than the L1, the close time of Reverse Auction will be automatically extended by 10(ten) minutes from the time of the last price bid received. This process of auto extension will continue till there is a period of 10 (ten) minutes during which no price bid is received which is lower than the prevailing L1.
5. During the Reverse Auction the seller will have the option of reducing the price quoted by them in decrements of 1 Rs./MWh or multiples thereof and the option of increasing the quantum quoted by them by 1 MW or multiples thereof or as may be specified by the Exchange.
6. The seller after the Reverse Auction process will be ranked in accordance with the price offered in ascending order. The sellers, in order of their rankings, combinedly offering the quantum of power up to the requisitioned capacity would be the Successful Bidders.
7. In the event, of two or more sellers quoting the same price during Reverse Auction stage, the ranking of the seller shall be done based on a time priority basis.
8. Buyers shall communicate its acceptance/partial acceptance/rejection of trade to the Exchange within the timeline (after the closure of RA) as may be specified by the Exchange from time to time.
9. The buyer shall procure power from the Successful Bidders in the order of their rankings. until the accepted quantity is met.

#### 8.4. Order Management

The Exchange may launch more than one order book running either parallel or at different time spans. All Clients shall be assigned unique client ID / Portfolio ID. The types of order available in different trading sessions are mentioned below:

Uniform Price Step Auction Session

Following orders are available in the Uniform Price Step Auction

- a) Timing Constraints
- b) End of Session (EOS)

#### 8.5. Matching Rules

The matching rules for different trading sessions are mentioned below and HPX may bring new improved methodology in days to come with the prior approval from CERC.

##### 8.5.1. Uniform Price Step Auction

The matching algorithm shall run when price in some of the buy bids will be more than the price in some of the sell bids i.e. there is some overlap in prices on both the sides. The Equilibrium Price (EP) is determined with following conditions:

1. Maximum tradable volume: The Equilibrium Price will be the price at which maximum volume in the market can be traded.
2. Minimum unbalance: If there are multiple prices having maximum tradable volume, the price that leaves the least volume untraded at its level is chosen as Equilibrium Price.

Auction uniform price discovery will be guided by four principles to be applied in sequential manner. The principles will test different conditions. During the matching process, if the system justifies the price using one of the principles, then it will become the auction uniform price and system will not check further as per rest of the principles.

The Auction Uniform Price calculation logic is explained below with the help of an example.

The Order Book would be sorted on Best Buy and Best Sell basis for a product at the end of the Auction session as below:

BUY			SELL		
Order	Qty	Price	Price	Qty	Order
1	1,350	2030	2050	87	10
2	8,460	2024	2045	3,426	11
3	570	2022	2038	6,495	12
4	14,910	2020	2030	2,550	13
5	2,400	2019	2023	570	14
6	4,920	2015	2020	5,250	15
7	1,620	2013	2019	1,080	16
8	270	2010	2015	3,480	17
9	1,373	2008			

### 1) Principle 1: Determining the Maximum Tradable Volume

As per this principle, the system would shortlist the **price(s)** at which **maximum tradable volume** would be **executed**. There would be two steps involved in applying this principle.

- a. **STEP 1** – Determine the Cumulative Buy and Sell quantities at each eligible price. In the above example, the Cumulative Buy and Sell quantities at each price are as follows:

BUY		Price	SELL	
Cumulative Buy Quantity	Buy Quantity at Price		Sell Quantity at Price	Cumulative Sell Quantity
0	0	2050	87	22,938
0	0	2045	3,426	22,851
0	0	2038	6,495	19,425
1,350	1,350	2030	2,550	12,930
9,810	8,460	2024	0	10,380
9,810	0	2023	570	10,380
10,380	570	2022	0	9,810
25,290	14,910	2020	5,250	9,810
27,690	2,400	2019	1,080	4,560
32,610	4,920	2015	3,480	3,480
34,230	1,620	2013	0	0
34,500	270	2010	0	0
35,873	1,373	2008	0	0

- b. **STEP 2** – Establish the total tradable volume at each eligible price (i.e. Maximum Quantity which may be traded at that price). The total tradable volume at a price would be computed as ‘Minimum of Cumulative Buy and Cumulative Sell quantity’ at the respective price. The Maximum Executable Volume (MEV) for each eligible price is as below:



BUY		Price	SELL		Maximum Executable Volume
Cumulative Buy Quantity	Buy Quantity at Price		Sell Quantity at Price	Cumulative Sell Quantity	
0	0	2050	87	22,938	0
0	0	2045	3,426	22,851	0
0	0	2038	6,495	19,425	0
1,350	1,350	2030	2,550	12,930	1,350
9,810	8,460	2024	0	10,380	9,810
9,810	0	2023	570	10,380	9,810
10,380	570	2022	0	9,810	9,810
25,290	14,910	2020	5,250	9,810	9,810
27,690	2,400	2019	1,080	4,560	4,560
32,610	4,920	2015	3,480	3,480	3,480
34,230	1,620	2013	0	0	0
34,500	270	2010	0	0	0
35,873	1,373	2008	0	0	0

**Note:** The Maximum Tradable Volume (MTV) is the highest value amongst 'Maximum Executable Volume' derived for all price points.

In this example, tradable quantity may be 9,810 at prices 2024, 2023, 2022 and 2020. Therefore, as per Principle 1, the algorithm would eliminate all other price points as the potential Auction Uniform Price. To narrow down the price choices, system will establish minimum unbalance.

## 2) Principle 2: Establishing the Minimum Unbalance

The second principle would figure out the eligible price levels (from prices 2024, 2023, 2022 and 2020) at which the unmatched quantity is minimum.

The Minimum Unbalance at each price level is equal to 'Cumulative Buy Quantity – Cumulative Sell Quantity'

BUY		Price	SELL		Maximum Executable Volume	Minimum Unbalance (Cumulative buy qty- Cumulative sell qty)
Cumulative Buy Quantity	Buy Quantity at Price		Sell Quantity at Price	Cumulative Sell Quantity		
9,810	8,460	2024	0	10,380	9,810	-570
9,810	0	2023	570	10,380	9,810	-570
10,380	570	2022	0	9,810	9,810	570
25,290	14,910	2020	5,250	9,810	9,810	15,480

**Note:** The lowest Minimum Unbalance quantity possible is zero (0).

The Minimum Unbalance occurs at prices 2024, 2023, 2022. Therefore, as per Principle 2, the prices eligible for Auction Uniform Price calculation are 2024, 2023,

2022. In the above process, price 2020 is eliminated and for further refining the auction prices, 3<sup>rd</sup> principle will be applied for ascertaining the market pressure.

### 3) Principle 3: Ascertaining where the Market Pressure exists

3<sup>rd</sup> principle will check where the market pressure exists – on buy side or on sell side. Following conditions will be checked and accordingly market Uniform Auction Price will be determined:

- a. If minimum unbalance for all the price points established in 2<sup>nd</sup> principle is negative, then minimum of the prices will be the Uniform Auction Price.
- b. If minimum unbalance for all the price points established in 2<sup>nd</sup> principle is positive, then maximum of the prices will be the Uniform Auction Price.

If the minimum unbalance has both positive and negative values, then all the price points will be further refined using 4<sup>th</sup> principle. In the abovementioned example we are having both positive and negative minimum unbalance as shown below:

BUY		Price	SELL		Maximum Executable Volume	Minimum Unbalance (Cumulative buy qty- Cumulative sell qty)
Cumulative Buy Quantity	Buy Quantity at Price		Sell Quantity at Price	Cumulative Sell Quantity		
9,810	8,460	2024	0	10,380	9,810	-570
9,810	0	2023	570	10,380	9,810	-570
10,380	570	2022	0	9,810	9,810	570

All the prices i.e. 2024, 2023 and 2022 are still valid. Therefore, 4<sup>th</sup> principle will be checked and accordingly a Uniform Auction Price will be determined.

### 4) Principle 4: Marking of sign change and average of price points

The fourth and final principle determines Uniform Auction Price from the range of prices established in Principle 3 (from prices 2024, 2023, 2024).

There are two steps involved to apply this Principle. The first step is to narrow the options of potential Uniform Auction Prices within the derived price range.

#### a. STEP 1

If the result of Principle 3 is a combination of positive and negative market pressure, then the algorithm should mark the two prices where the sign changes.

BUY		Price	SELL		Maximum Executable Volume	Minimum Unbalance (Cumulative buy qty- Cumulative sell qty)
Cumulative Buy Quantity	Buy Quantity at Price		Sell Quantity at Price	Cumulative Sell Quantity		
9,810	0	2023	570	10,380	9,810	-570
10,380	570	2022	0	9,810	9,810	570

**b. STEP 2**

The Uniform Auction Price would be the average of the price where the minimum unbalance changes its sign i.e. average (2022, 2023) = 2022.5.

The discovered Uniform Auction Price would be '**2022.5**'.

**Note 1:** If the discovered Uniform Auction Price is not as per the specified price tick, then Uniform Auction Price would be rounded off to the nearest allowable price.

All the matching orders would get traded at the determined Uniform Auction Price regardless of the price actually stated when placing an order. The order priority for matching purpose would be determined on '**Price-Time**' priority basis. All the unmatched pending orders of the auction session would get cancelled.

**Note 2:** If the auction session has no overlapping buy and sell orders (i.e. no trade possible), then the abovementioned principles to determine 'Uniform Auction Price' would not be referred.

**Note 3:** In case of rounding-off difference at the time of pro rata allocation, the same will be adjusted in the following manner:

- (a) One unit each of the total rounding-off error would be adjusted to/from the highest selected quantum in the descending order.
- (b) However, total selected quantity along with rounding-off adjustment will not exceed the total bid quantity of individual order.

**8.6. Margin Requirement**

The Members or the Clients, as applicable, participating in Term Ahead Market segment will have to make available the following types of margins to the Exchange from time to time as described below:

### 8.6.1. Initial Margin (Operational limit)

A Member or a Client, as applicable, will be required to deposit an Initial Margin as stipulated in the Contract Specification, which will be considered the minimum Margin required for submitting bids. Exposure to the Members linked to the percentage of the Margin applicable shall be provided considering the Initial Margin. Initial Margin requirement will be computed on the total order value. The percentage of the order value required as initial margins shall be defined in the Contract Specification. The trading system will automatically reject orders in case the initial margin is not deposited.

### 8.6.2. Additional Margin (Basis Margin)

1. Option 1 (margin Collection in tranches): Additional Margin will be computed as a percentage of the traded value as per the risk curve defined and will be collected in different tranches as per the contract specifications. Only the buyer Members or the Client, as applicable, will have to pay the Additional Margin to the exchange based on their trade confirmation. The Member or the Client, as applicable, will have to make available the Additional Margin before the end of the trading day or as may be specified in respective Contract Specification. Unlike Initial Margin which is a pre trade margining system, Additional Margins will be computed on the traded value at client level. This margin will be blocked from the available cash or non-cash collaterals and will be released progressively as per the risk curve defined by the exchange. In case if the Member or the Client, as applicable, fails to bring in the additional margin within the specified period then the trades will be cancelled and penalty will be levied to the member. All other forms of margin collected by the exchange till such time may also be impounded.
2. Option 2 (Advance Payment): advance payment option will be available to the trader/proprietary member up to the bid value net off the haircut factor for whole contract period or partial as per the contract specification mentioned in each contract. Trader/Proprietary member opted for this option need not to furnish any additional margin to the Exchange. Exchange will notify the Haircut factor from time to time.

Hair Cut Factor: Haircut Factor means the deduction of certain percentage, as decided by the Exchange, on amount deposited by the member/client opting for advance payment in its settlement account, to provide exposure for trading. The hair cut is deducted to take care of obligation of such clients/ members on account of charges applicable on them, other than the energy charges.

3. The Additional Margin may also be charged in the following ways:
  - a) The Exchange on a pre-decided day will compute the margin of members based on their trades (open position). This Additional Margin is levied member wise and computed at client level. It is the difference (loss) between the Settlement price and the traded price where the Settlement price is the average price of the last 'N' number of trades on the trading day or the last traded price of the contract having the same underlying delivery period or as decided by the exchange from time to time. In case if there is a profit for a particular client then it will not be credited to the member, neither will it be adjusted against any other losses at client level or at member level. In case if the Member fails to bring in this additional margin till the next working day then the trades may be cancelled and the Exchange at its own discretion impose penalty on the member. All other forms of margin collected by the Exchange till such time, may also be impounded.
  - b) The Exchange may collect any ad-hoc margins from time to time in case if it feels that the available margins collected by the exchange are inadequate due to variation in the prices in the Market. Prior intimation of the same will be provided to the Members or the Clients, as applicable.
4. Additional margins as the case may be, shall be paid in cash or such non-cash security or collateral as the Exchange may notify from time to time.
5. Refund of Additional Margin: If there is a surplus deposit lying with the Exchange towards margin, it will be refunded to the Member or the Client, as applicable, on receipt of a written request from the Member for refund.
6. The Member or the Client, as applicable, will get information regarding additional margin requirement, through file transfer protocol (FTP) at end of the trading session. In case the Member or the Client, as applicable, does not have adequate Cash / Non- cash collaterals, the Member or the Client, as applicable, at the entire discretion of the Exchange, can be barred from further trading on the Exchange.
7. The Exchange automatically on its own may adjust the unutilized additional margin in the Day Ahead Contingency and Intra Day segment against the margins applied in TAM segment and vice versa.

## **8.7. Risk Management System**

- 8.7.1. At the time of submission of the order, exchange will verify the availability of Initial Margin and the order would be accepted only if sufficient funds were available under

this head. Initial Margin shall be in form of cash. Further, the orders will not be accepted if earlier calls for additional, variation and extra-ordinary margins have not been fulfilled. The Members or the Clients, as applicable, will be allowed to take exposure on the initial margin as decided by the exchange. Thereby a member can put an order to buy or sell in a contract as per his available exposure with the Exchange. Exchange has the right to give exposure limits based on the bank balance or available margins of such Member, or Client as the case may be, or both for facilitation of trade.

- 8.7.2. Additional Margins in the form of cash / non-cash collaterals has to be paid by the buyer member or the Client, as applicable, to the exchange as per the Contract Specification and as per the Trading and Settlement Calendar. It is the members responsibility to ensure sufficient funds and replenish the shortfall. In case if the member or the Client, as applicable, fails to bring in the required Additional Margin as per the schedule mentioned, then the Exchange can cancel the trade and may impound the available Initial Margin and Additional Margin and also recover penalty from the member or the Client, as applicable. For those members who have opted for advance payment, after applying haircut factor, system will check the bid value against the exposure and whenever bid breaches the exposure limit system will reject the bid.
- 8.7.3. During the entire tenure of the contract, Exchange will monitor traded price of a contract with that of the price of the contract with same underlying traded earlier and in case of change in the Prices between two trading sessions, Additional Margins will be worked out and recovered from the members. Exchange will have the right to collect from its members an ad hoc margin during the tenure of the contract to cover any additional risk arising out of Price Movement in the Market. Types of Financial and delivery defaults and penalties levied thereof:
1. Financial defaults can be of two types:
    - a) Margin default: In case if the buyer/seller member fails to bring in the additional margin after the trade, the exchange will withhold the Initial Margin/Security Deposit available with the exchange and impose penalty which shall be deducted from the other available margins of the member or the Client, as applicable. If the member/client fails to pay Basis margin or Additional margin within the specified timeframe, the Exchange will cancel the trade. All the margins collected from such member or the Client, as applicable, will be withheld. The non-cash collateral will be liquidated and passed on to the counter party. Apart from the above, exchange will also collect difference between the higher of the traded price or the settlement price for that contract on its platform. Similarly in case if a member fails to pay additional

margins demanded by the exchange, the exchange will have the right to take all the above mentioned actions against the member or the Client, as applicable.

- b) Funds pay in default: In case if the buyer member or the Client, as applicable, fails to make good the funds pay in on any of the pay in day, the Exchange will be at liberty and has the power and discretion to cancel the allocation of its trades and initiate appropriate action against such Member or the Client, as applicable. The total margins collected till that period will be withheld and sent for liquidation. Apart from the above, exchange will also collect difference between higher of the traded price or the settlement price for that contract on its platform.

2. Delivery defaults can be of following types:

- a) Failure to receive SLDC clearance: In case, the exchange does not receive the SLDC clearance as per the scheduled time from the member, then 5% of the total trade value or the total settlement value (trade quantity \* settlement price), whichever is higher will be collected from the defaulting member. Penalty so collected shall be passed on to the counter party after deducting administrative charges for the exchange which will be 5% of the penalty amount, subject to maximum of Rs. 5,000 (including taxes). In case if the member fails to make good the penalty amount in his settlement account, the non-cash collateral available with the exchange shall be liquidated.

- b) Failure in Seller's ability to deliver: In case of failure in delivery by Seller, the difference between the traded quantity and actual delivery is settled under DSM.

- c) Revision of Schedule:

Once the trade has taken place normally no revision of trade shall be allowed. However, if exchange is satisfied that the revision of schedule is necessary because of reasons beyond control, then the member has to deposit amount in cash to the exchange as per the following procedure which shall be sum of following elements:

- 8.7.3.2.c.1. 125% of the difference between the trade price and the last settlement price of the same underlying market segment where both buyer and seller are eligible to participate, subject to maximum capping of 20% of the trade price.

- 8.7.3.2.c.2. The transmission charges paid by the counter party for the quantum requested for revision.

- 8.7.3.2.c.3. Administrative charges for the exchange in the amount of Rs.10,000/- (including applicable taxes).

The affected counter party will be credited the difference and the transmission charges.

Exchange will debit the amount from member's settlement account: The effected counter party will be credited the difference and the transmission charges. The exchange, on receipt of amount based on above formula, shall send request for revision of schedule. In the next trading session when same underlying is traded again, the exchange will check the new settlement price with the amount worked out as at (i) above and make suitable adjustments as under.

In case there is no trading session remaining in that underlying before start of delivery then such working shall be based on the prices of daily contracts, which are corresponding to days of such weekly contract. Further, in case no daily contract is available for trading before start of delivery then the working shall be done on the basis of average of hourly prices in the integrated day ahead market (collective transactions). Similarly, for working out rescheduling charges for Daily Contracts reference would be taken from the same underlying and in absence of this; basis of working shall be hourly prices in the integrated day ahead market (collective transactions).

The Settlement Prices mentioned above shall be for the regions in which the requesting party is located.

- 8.7.4. Amount for everyday Pay-in and Pay-out shall be on net basis and the member will be responsible for settling funds obligation between its client's pay-in and pay-out.

### **8.8. Surveillance**

Surveillance as specified in Chapter 7 – Day Ahead Contingency and Intra Day Contracts of these Business Rules shall be mutatis-mutandis applicable for the TAM Contracts.

### **8.9. Delivery procedure**

Delivery procedure will be different for National and Regional Contracts.

#### **National and Regional Contracts**

- 8.9.1. All Contracts (trades) shall be for delivery of power as per the requisition submitted by the Exchange and scheduled by NLDC / RLDCs / SLDCs.
- 8.9.2. Delivery Point: The delivery point of all the contracts shall be at the Seller's ISTS Periphery as per Procedure for Scheduling of Bilateral Transaction and Central



Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.

- 8.9.3. After finalization of successful trades, the exchange will share details to both the counter parties and the participants would be required to submit the SLDC concurrences in the prescribed Format in accordance with the 'Procedure for Scheduling of Bilateral Transactions' and as specified in the Calendar. Exchange will make application for transmission capacity reservation and advance scheduling as per the schedule mentioned in the Calendar. In case if the "Concurrence from SLDC" received from both the parties does not match with each other, the Exchange will consider the minimum of the quantity mentioned for sending the application for scheduling. In all other cases where there is mismatch in hours and / or in quantity cleared in the SLDC concurrences, the contract will be liable to made void.
- 8.9.4. The Buyer shall accept the decision on routes that may be available to carry the power without any reservation. Buyer will be deemed to have consented for all possible routes for delivery of the power; however, they can give preference amongst the possible routes along with the concurrence. In absence of any preference from the buyer, the Exchange at its absolute discretion can decide the route through which application is to be made and also the alternate routes to be mentioned in such application.
- 8.9.5. Nodal RLDC's acceptance for scheduling will be binding on both buyers and sellers. In case of anticipated congestion in one or more transmission corridor, the Exchange will have the right to participate in the electronic bid on behalf of the Members as per the guidelines laid down in the 'Procedure for Scheduling of Bilateral Transactions'. Trade once executed shall not be revised except as provided in the Contract Specification and shall be sent for reservation of transmission capacity and advance scheduling as per the Trading and Settlement Calendar. The schedule shall not be revised during the delivery period except as provided in the Contract Specification.
- 8.9.6. Any shortage or excess delivery of electricity from the total schedule will be settled by the respective participants under DSM mechanism as per the procedure laid down by the CERC or any other settlement system as prescribed by concerned SERC.
- 8.9.7. Taxes, duties, cess and other levies: The price of all the Contracts shall be quoted at delivery point excluding the transmission charges, losses, scheduling and system operation charges, taxes, duties, cess, surcharge and other levies and the same shall be borne by the Buyers or Sellers as applicable.

- 8.9.8. Metering of electricity: Arrangement for metering shall be made by the Seller/Buyer as per the requirements of respective SLDC / RLDC. Members and the relevant authority shall be responsible to resolve the issues related to metering of electricity. Members shall indemnify and keep indemnified the Exchange from any disputes related to metering.
- 8.9.9. Transmission Losses: Seller shall bear in kind the transmission/ distribution losses from its own interface up to the delivery point. Buyer shall be required to bear in kind all the transmission/ distribution losses from the delivery point up to its own interface. Transmission loss percentage for the respective transmission system as applicable at the time of actual delivery shall be applied for deriving scheduled quantities at various points in the transmission route in accordance with the Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
- 8.9.10. Transmission Charges: All the transmission charges shall be calculated on the total quantum of power scheduled at seller's ISTS Periphery. Seller shall pay for the transmission charges and Wheeling Charges (wherever applicable) up-to the point of delivery and Buyer shall bear all the charges for enroute ISTS and also the transmission and wheeling charges (wherever applicable) for its respective State grid in accordance with the Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
- 8.9.11. Scheduling and Operating charges: Seller will pay for the Scheduling and Operating charges up to delivery point i.e. for the concerned RLDCs /SLDCs /ALDCs involved in transaction. Buyer will bear all the Scheduling and Operating charges from its interface up to delivery point i.e. for the concerned RLDCs /SLDCs /ALDCs involved in transaction. Application fees for the Nodal RLDC will be paid by the buyer.
- 8.9.12. All Transmission, Wheeling charges, Scheduling, Operating charges and application fees will be paid to the Nodal RLDC as per advice received from them and the same will be recovered from the buyers and sellers.
- 8.9.13. The Application fee for processing the 'Concurrence from SLDC' shall be paid by Buyer and Seller for their respective SLDCs.
- 8.9.14. E bidding consent: In the event, it is reiterated that the implementation of the contract finalized between the Buyer and the Seller through Power Exchange shall be subject to the availability of the transmission capacity and constraints in the

system. In the event of anticipated congestion in one or more transmission corridor and a need for participating in the e-bidding for securing transmission corridor as per the guidelines laid down in the procedure for scheduling of bilateral transaction, the following shall apply:

1. The Exchange will have the right to participate in the e-bidding on behalf of the Members as per the above guidelines for bilateral transactions;
2. In case of more than one transaction contracted through the Exchange, the Exchange will have the right to participate in the e-bidding for both the transactions;
3. Each of the Buyer participating in the transaction through the Exchange shall notify to the Exchange the maximum transmission charges for which the Exchange can bid on his behalf.
4. In case any of the Buyer participating in the Exchange is not willing to give consent for e-bidding, there will be an automatic reduction in the contracted quantity for such Buyer and the schedule for dispatch of the related quantum affected by the anticipated congestion may not be implemented, although the Exchange will forward to the concerned RLDC the request for scheduling subject to the availability of the transmission capacity;
5. In case the Buyer notifies the maximum transmission charges to which they are agreeing to pay, the Exchange will participate on behalf of the respective Buyer in the e-bidding up to the same limit;
6. The decision on the person entitled to the transmission corridor based on e-bidding taken by the concerned RLDC shall be binding on the parties

#### **8.10. Transaction Fees**

The Exchange will charge a transaction fee, as may be specified by the Exchange from time to time, on the transactions carried through the Exchange. Such transaction fee will be computed on value basis or volume basis, as may be decided from time to time, which will be computed on both purchases and sales separately. Any changes in the transaction fees shall be effected by Exchange with prior approval of the Commission.

#### **8.11. Reports**

After end of trading session, the Exchange will download the reports to the Members which consist of Trade file Report, Provisional Obligation Report, Final Obligation Report and other relevant matters. Based on the Exchange's Reports, the Members can inform their Clients about their successful trades along with their obligation.

## Annexure 1

### Contract Specification: National/Regional Daily Contracts

Sr. No.	Item	Details
1	<b>Contract Name*</b>	Daily Contracts
2	<b>Regions</b>	National or Electrical Region specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
3	<b>Contract Type</b>	Delivery Option - Firm Delivery
4	<b>Firm Daily Contract</b>	The daily contracts for trading will be available on a rolling basis i.e. everyday starting from T+2 day to maximum up to T+90 days on a rolling basis. (T-Trade Day).
5	<b>Trading day*</b>	Trading will be available on all days or as per trading and settlement calendar declared in advance
6	<b>Trading Session*</b>	On each trading day, one Uniform price step auction session will be made available to the members for bidding up to two days before delivery day.
7	<b>Order Management*</b>	The Exchange Members will be able to submit orders as specified in these Business Rules. A Member shall be permitted to modify or cancel his orders, during the trading hours. Orders and bids entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.
8	<b>Bidding process</b>	Sellers and Buyers to submit order for pre specified duration, quantum in MW and price in Rs./MWh. Seller and buyer can bid in national contract and also, Seller can submit bid for the contract of that region to which he belongs. Whereas a buyer

		can buy any National/regional contract. Netting off (square off) of positions will not be allowed.
<b>9</b>	<b>Matching of Bids</b>	Uniform price step auction session: Details as per clause no. 5 of chapter 7 of Business Rules. Each trade will be sent for scheduling, on trade-to-trade basis.
<b>10</b>	<b>Trading Hours*</b>	As per trading and settlement calendar.
<b>11</b>	<b>Minimum Volume Quotation*</b>	1 MW
<b>12</b>	<b>Minimum Volume Step*</b>	0.1 MW
<b>13</b>	<b>Lot size</b>	Base or RTC Contract (DYBDYB): 1 lot = 1 MW * 24 Hours Night Off-peak Contract (DYN) : 1 lot = 1MW * 8 Hours Day Contract (DYD) : 1 lot = 1MW * 11 Hours  Day Peak Contract (DYPDYP) : 1 lot = 1 MW * 5 Hours  User defined: 1 Lot = 1 MW*No. of hours/blocks selected
<b>14</b>	<b>Maximum bid size*</b>	Bids should not be more than the allowed MW in any of Concurrence/Clearance issued by concerned Load Dispatch Center to the members/clients at any time. It will be the responsibility of the member to adhere to this rule.
<b>15</b>	<b>Price Quote Basis</b>	Rs. per MWh (excluding all fees, charges and taxes, if applicable)
<b>16</b>	<b>Price Tick*</b>	Rs. 1 per MWh
<b>17</b>	<b>Quantity Variation</b>	Zero quantity variation allowed.
<b>18</b>	<b>Settlement</b>	Traded price * Quantity scheduled by RLDC at delivery point.
<b>19</b>	<b>Initial Margins (Operational Limit)*</b>	5% margin of the total order value or as may be specified by the Exchange from time to time, should be available in cash/non cash with the exchange at the time of bidding.

20	<b>Additional Margins *</b>	<p>50% of the total trade value will be collected from the member/client. The margins can be in the form of cash or noncash. Additional Margin will be based on a risk curve defined by the Exchange for each contract. Exchange will have the right to define and modify the risk curves from time to time. Additional Margin could be in the form of collaterals (Bank Guarantee or FDR or LC) or bank limit. For advance payment option member shall keep 50% of the total bid value before the trading session in settlement account.</p> <p>Additional Margin based on open positions may be collected from buyer Members only. This Additional Margin is the difference in the Value of the contract based on the Trade price and the Settlement price. In case the Settlement price is less than the trade price, the difference in the value is collected from the buyers however at any point the sum of Basis Margin collected up to that day and this Additional Margin will not exceed the trade value. this Additional Margin will be computed at the end of each available trading day for a specific contract and will be collected from the member on the same day in the form of collaterals. This Additional Margin will be applied at client level.</p> <p>Exchange can impose any ad hoc additional margin, which the exchange can apply any time during the life of the contract.</p>
21	<b>Transaction Fees*</b>	Fees payable by buyer and seller to Exchange for the quantity approved by nodal concerned LDC at delivery point as specified by the exchange from time to time.

**Trading Cycle.\***

Sr. No.	Time	Details
22	12:00 – 17:00	Uniform price step auction Session
	As and when the trade executed	Concerned LDC Clearance and Declaration Form sent to Members.
	After trade executed	Calculation of Additional Margin of the buyer's member

23	After 15 minutes of the trade executed	Blocking of the Additional Margin from the available cash/non-cash collateral of the buyer's Member provided to the exchange. In case if there is any deficit, call for the deficit additional margins.
24	As per the Trading & Settlement Calendar	Concerned LDC Clearance from Members and fulfillment of additional margin requirement call, if any.
On completion of formality and receipt of adequate additional margin, application on 'Advance', 'First Come First Serve' or 'Day-Ahead Bilateral' basis will be sent to Nodal RLDC as the case may be.		
Acceptance for Scheduling from Nodal RLDC.		
Receipt of Transmission/Operating Charges and Application Fees from the members.		
Payment of Charges to Nodal RLDC.		
Pay-in; equivalent to one day's obligation collected on D-1 basis , where D=Delivery day.		
Payout; Equivalent to one day's obligation credited on D+1 basis, till the contract delivery ends		

### **Delivery Procedure**

25	<b>Delivery</b>	Trade once executed shall not be revised and shall be sent for scheduling, The quantity shall be deliverable as per the schedule issued by the RLDC.
26	<b>Delivery period</b>	Delivery for each time block
27	<b>Delivery point</b>	The delivery point shall be at Seller's ISTS Periphery as per Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
28	<b>SLDC Clearance</b>	After trading on the exchange, in case of buyer/seller is connected to State transmission or distribution system, the buyer and seller will have to take a concurrence of their

		respective SLDCs. This concurrence has to be submitted to the exchange as per the timelines specified in the trading and settlement calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by SLDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
<b>29</b>	<b>Application for Scheduling</b>	Application for Scheduling will be submitted to Nodal RLDC as specified in the Trading and Settlement Calendar and as per the "Procedure for scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange.. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
<b>30</b>	<b>Delivery Process</b>	Application for Scheduling, as specified in the trading and settlement calendar, shall be sent to the Nodal RLDC, on FCFS basis as per the "Procedure for scheduling of bilateral transactions".
<b>31</b>	<b>Application fees, Operating and Transmission Charges and Losses</b>	Seller will bear all the Transmission, Scheduling & Operating charges and Transmission Losses (in kind) up to the delivery point and Buyer shall bear all the Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at seller's ISTS Periphery.
<b>32</b>	<b>Alternate route</b>	Unless preference is specified by the buyer, it will be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
<b>33</b>	<b>Force majeure</b>	In case of force majeure the Exchange will settle the contract as per final schedule issued by RLDCs.



<b>34</b>	<b>Fines &amp; penalties*</b>	As decided by the Exchange from time to time and informed through circular, with prior approval of CERC
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### **Settlement Procedure\***

<b>35</b>	<b>Payment of Application fees, Transmission &amp; Operating Charges by Members</b>	Application fees will be collected from buyer on date of application to Nodal RLDC. Transmission and Operating Charges as applicable on quantum scheduled at seller's periphery and payable to the Nodal RLDC, will be recovered from the buyer and seller members on the next day of receiving the acceptance from the nodal RLDC.
<b>36</b>	<b>Funds pay in by Members</b>	Exchange will debit the funds pay-in on each D-1 basis at 11.00 am from buyer's member's settlement account.
<b>37</b>	<b>Funds pay out to Members</b>	Exchange will credit the funds pay-out in seller's member's settlement account on D+1 basis at 12.00 noon subject to confirmation of delivery pay in by the seller.

\* Exchange may modify these parameters from time to time with prior intimation to its Members after taking approval of CERC

## Annexure 2

### Contract Specification: National/Regional Weekly Contracts

Sr.No.	Item	Details
1	<b>Contract Name*</b>	National/ Regional Weekly Contracts
2	<b>Regions</b>	One National contract and preference wise Regional contracts for each electrical region will be available for trading i.e. for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
3	<b>Contract Type</b>	Delivery Option – Firm Delivery
4	<b>Firm Weekly Contract</b>	The weekly contracts for trading will be available as per the trading and settlement calendar from Monday to Sunday from TW+1 week to maximum up to TW+12 weeks on a rolling basis. (TW-Trade Week).
5	<b>Trading day*</b>	Please refer to trading and settlement calendar for more details. Exchange can also hold multiple trading sessions on specified trading days or other days to minimize unmatched volume.
6	<b>Trading session*</b>	On each trading day, one uniform price step auction trading session will be made available to the members for bidding from Monday to Friday for next week onwards available weekly contracts.
7	<b>Order Management</b>	The Exchange Members will be able to submit orders as per these Business Rules. A Member shall be permitted to modify or cancel his orders, during the trading hours. Orders and bids entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify

		from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.
<b>8</b>	<b>Bidding process</b>	Sellers and Buyers to submit bid pre-specified duration, quantum (MW) and price in Rs/MWh for each 15-minute time block or combination thereof as the case may be. Seller and buyer will submit bid in the national contract and also Seller can submit bid for the contract of that region to which he belongs. Whereas a buyer can buy any regional contract. Netting off (square off) of positions will not be allowed.
<b>9</b>	<b>Matching of Bids</b>	Uniform Price Step Auction session: Details as per clause no. 5 of chapter 8 of Business Rules. Each trade will be sent for scheduling, on trade to trade basis.
<b>10</b>	<b>Trading Hours*</b>	As per trading and settlement calendar.
<b>11</b>	<b>Minimum Volume quotation*</b>	1 MW
<b>12</b>	<b>Minimum Volume Step*</b>	0.1 MW
<b>13</b>	<b>Lot size</b>	Base or RTC Contract (DYB): 1 lot = 1 MW*24*7 Hours Night Off-peak Contract (DYN): 1 lot = 1MW*8*7 Hours Day Contract (DYD): 1 lot = 1MW *11*7 Hours Day Peak Contract (DYP): 1 lot = 1 MW*5*7 Hours User defined: 1 Lot = 1 MW* No. of hours/Blocks
<b>14</b>	<b>Maximum bid size*</b>	Bids should not be more than the allowed MW in any of Concurrence/Clearance issued by its concerned load dispatch centre to the Members/clients at any time. It will be the responsibility of the member to adhere to this rule.
<b>15</b>	<b>Price Quote Basis</b>	Rs. per MWH (excluding all fees, charges, taxes etc.)
<b>16</b>	<b>Tick size*</b>	Rs. 1 per MWH
<b>17</b>	<b>Quantity Variation</b>	Zero quantity variation allowed.
<b>18</b>	<b>Settlement</b>	Traded price * Quantity scheduled by RLDC at delivery point.
<b>19</b>	<b>Initial Margins (Operational Limit)*</b>	5% margin of the total order value as may be specified by the Exchange from time to time, should be available in cash/non cash with the exchange at the time of bidding by buyer.

<b>20</b>	<b>Additional Margins *</b>	<p>50% of the total trade value will be collected from the member/client. The margins can be in the form of cash or non-cash. Another half day margins will be collected towards collection of various transmission related charges. Members opted for advance payment shall made the funds available up to the 50% of bid value netting of the haircut factor or as may be specified by the Exchange from time to time.</p> <p>Additional Margin based on open positions may be collected from buyer Members only. this Additional Margin is the difference in the Value of the contract based on the Trade price and the Settlement price. In case the Settlement price is less than the trade price, the difference in the value is collected from the buyers however at any point the sum of Basis Margin collected up to that day and this Additional Margin will not exceed the trade value. This Additional Margin will be computed at the end of each available trading day for a specific contract and will be collected from the member on the same day in the form of collaterals. This Additional Margin will be applied at client level.</p> <p>Exchange can impose any ad hoc additional margin, which the exchange can apply any time during the life of the contract.</p>
<b>21</b>	<b>Transaction Fees*</b>	Fees payable by buyer and seller to Exchange for the quantity approved by concerned nodal LDC at delivery point as specified by the exchange from time to time.

### **Trading Cycle\***

<b>Sr. No.</b>	<b>Time</b>	<b>Details</b>
<b>22</b>	12:00 – 17:00	Auction Trade Session
	17:00	Publish results.
	17.30	SLDC clearance and Declaration form sent to Members through FTP.
<b>23</b>	17:30	Blocking of the Additional Margin from the available cash/non-cash collateral of the Buyer Member provided to the exchange. In case if there is any deficit, call for the deficit additional margins.
<b>24</b>		Concerned LDC Clearance <sup>1</sup> from Members and fulfillment of additional margin requirement call, if any.

As per the Trading & Settlement Calendar	On completion of formality and receipt of adequate additional margin, application on 'Advance', 'First-Come-First-Serve' or 'Day-Ahead Bilateral' basis will be sent to Nodal RLDC or as case may be
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	Acceptance for Scheduling from Nodal RLDC.
	Receipt of Transmission/Operating Charges and Application Fees from the members.
	Payment of Charges to Nodal RLDC.
	Pay-in ; equivalent to one day's obligation collected on D-1 basis , till the contract delivery ends
Pay-out; Equivalent to one day's obligation credited on D+1 basis, till the contract delivery ends	
<p><sup>1)</sup> Application for Scheduling will be sent only when the SLDC Clearances from buyer and seller are received by the Exchange. In case, the SLDC approval is not received from SLDCs of buyer/ seller as per the timeline specified in the Trading and Settlement Calendar then it will be treated as default by concerned buyer or seller.</p>	

D = Delivery Day

### **Delivery Procedure**

<b>25</b>	<b>Delivery</b>	Trade once executed shall not be revised and shall be sent for scheduling. The quantity shall be deliverable as per the schedule issued by the RLDC.
<b>26</b>	<b>Delivery period</b>	Delivery for each time block.
<b>27</b>	<b>Delivery point</b>	The delivery point shall be at Seller's ISTS Periphery as per Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
<b>28</b>	<b>Application for Scheduling</b>	Application for Scheduling will be submitted to nodal RLDC as specified in the Trading and Settlement Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of

		Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
<b>29</b>	<b>SLDC Clearance</b>	After trading on the exchange, in case of buyer/seller is connected to State transmission or distribution system, the buyer/seller will have to take a concurrence of their respective SLDCs. This concurrence has to be submitted to the exchange as per the date and time specified in the trading and settlement calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by SLDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
<b>30</b>	<b>Delivery Process</b>	Application for Scheduling, as specified in the trading and settlement calendar, shall be sent to the Nodal RLDC, on the first available date after trading, as per the "Procedure for scheduling of bilateral transactions".
<b>31</b>	<b>Application fees, Operating and Transmission Charges and Losses</b>	Seller will bear all the Transmission, Scheduling & Operating charges and Transmission Losses (in kind) up to the delivery point and Buyer shall bear all the Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at seller's ISTS Periphery.
<b>32</b>	<b>Alternate route</b>	Unless preference is specified by the buyer, he will be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
<b>33</b>	<b>Force majeure</b>	In case of force majeure the Exchange will have the power to settle the contract independently and/or as deemed fit by the Exchange.
<b>34</b>	<b>Fines &amp; penalties*</b>	As decided by the Exchange from time to time and informed through circular.

**Settlement procedure\***

35	<b>Payment of Application Fees by Members</b>	Application fees will be collected from buyer on date of application to Nodal RLDC. Transmission and Operating Charges as applicable on quantum scheduled at the delivery point and payable to the Nodal RLDC, will be recovered from the buyer and seller members on the next day of receiving the acceptance from the nodal RLDC.
36	<b>Funds pay in by Members</b>	Exchange will debit the funds pay-in on D-1 basis at 11.00 am from buyer member settlement account.
37	<b>Funds pay out to Members</b>	Exchange will credit the funds pay out in seller's member's settlement account on D+1 basis at 12.00 noon for each delivery day subject to confirmation of delivery pay in by the seller.

\* Exchange may modify these parameters from time to time with prior intimation to its Members after taking approval of CERC.

### Annexure 3

## Contract Specification: National/Regional Monthly Contracts

Sr. No.	Item	Details
1	<b>Contract Name*</b>	National/ Regional Monthly Contracts
2	<b>Regions</b>	One National contract and preference wise Regional contracts for each electrical region will be available for trading i.e. for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
3	<b>Contract Type</b>	Delivery Option – Firm Delivery
4	<b>Firm Monthly Contract</b>	The Monthly contracts will be available for calendar Months from TM+1 Month to maximum up to TM+3 Months on a rolling basis. (TM-Trade Month)
5	<b>Trading day*</b>	Trading will be available on the days as per Trading & Settlement calendar declared in advance.
6	<b>Trading session*</b>	On each trading day, Uniform Price Step Auction trading session will be made available to the members for bidding session as follows:  For the first month (M1) contract – ten days prior to the close of zero month (M0);  For the second month (M2) contract – five days prior to the close of zero month (M0);  For the third month (M3) contract – last day of zero month (M0).
7	<b>Order Management</b>	The Exchange Members will be able to submit orders as per these Business Rules. A Member shall be permitted to modify or cancel his orders, during the trading hours. Orders and bids entered into the Trading System shall be subject to various



		validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.
<b>8</b>	<b>Bidding process</b>	Sellers and Buyers to submit order pre-specified duration, quantum in MW and price in Rs/MWh for each 15-minute time block or combination thereof as the case maybe. Seller and buyer will submit bid in the national contract and also Seller can submit bid for the contract of that region to which he belongs. Whereas a buyer can buy any regional contract. Netting off (square off) of positions will not be allowed.
<b>9</b>	<b>Matching of Bids</b>	Uniform Price Step Auction: Details as per clause no. 5 of chapter 8 of Business Rules. Each trade will be sent for scheduling, on trade to trade basis
<b>10</b>	<b>Trading Hours*</b>	As per trading and settlement calendar to be notified by the Exchange from time to time
<b>11</b>	<b>Minimum Volume quotation*</b>	1 MW
<b>12</b>	<b>Minimum Volume Step*</b>	0.1 MW
<b>13</b>	<b>Lot size</b>	Base or RTC Contract (DYB): 1 lot = 1 MW*24 Hours*days in the month Night Off-peak Contract (DYN): 1 lot= 1MW*8 Hours* days in the month Day Contract (DYD): 1 lot = 1MW *11 Hours* days in the month Day Peak Contract (DYP): 1 lot = 1 MW*5 Hours* days in the month User defined: 1 Lot = 1 MW* No. of hours in the month/Blocks
<b>14</b>	<b>Maximum bid size*</b>	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility of the Member or the Clients to adhere to this rule.
<b>15</b>	<b>Price Quote Basis</b>	Rs. Per MWh (excluding all fees, charges, taxes etc.)
<b>16</b>	<b>Tick size*</b>	Rs. 1 per MWh
<b>17</b>	<b>Quantity Variation</b>	Zero quantity variation allowed
<b>18</b>	<b>Settlement</b>	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of revision of schedule, the final

		price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed
<b>19</b>	<b>Initial Margins (Operational Limit)*</b>	Initial Margins equivalent to 1% of the order value or as may be specified by the Exchange from time to time will be collected from the Members/Clients (both from buyer & seller) at the time of bidding. The initial margins could be in the form of cash or non-cash or combination of both. In the absence of initial margins, the Members/Clients will not be allowed to place the bids.
<b>20</b>	<b>Additional Margins *</b>	<p>After the trade and prior to submitting Application before the concerned Load Dispatch Center for scheduling, Additional Margin equivalent to the 20% of the Trade Value or as may be specified by the Exchange based on risk assessment will be collected from the Member/Client (both from buyers &amp; sellers). Additional Margin can be in the form of cash or non-cash or combination thereof. Non receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default. This additional margin will be applied at client level</p> <p>Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract.</p>
<b>21</b>	<b>Transaction Fees*</b>	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point as specified by the exchange from time to time, as approved by the Commission.

### **Trading Cycle\***

<b>Sr. No.</b>	<b>Time</b>	<b>Details</b>
<b>22</b>	12:00 – 17:00	Auction Trade Session
	17:00	Publish Results
	17:30	Concerned LDC clearance and Declaration form sent to Members through FTP
<b>23</b>	17:30	Blocking of the Additional Margin from the available cash/non-cash collateral of the Buyer Member provided to the exchange. In case if there is any deficit, call for the deficit additional margins.
<b>24</b>		Concerned LDC Clearance <sup>1</sup> from Members and fulfillment of additional margin requirement call, if any.

As per the Trading & Settlement Calendar	On completion of formality and receipt of adequate additional margin, application on 'Advance', 'First-Come-First-Serve' or 'Day-Ahead Bilateral' basis will be sent to Nodal RLDC or as case may be.
	----
	Acceptance for Scheduling from Nodal RLDC.
	Receipt of Transmission/Operating Charges and Application Fees from the members.
	Payment of Charges to Nodal RLDC.
	Pay-in ; equivalent to one day's obligation collected on D-1 basis , till the contract delivery ends
	Pay-out; Equivalent to one day's obligation credited on D+1 basis, till the contract delivery ends

<sup>1)</sup> Application for Scheduling will be sent only when the SLDC Clearances from buyer and seller are received by the Exchange. In case, the SLDC approval is not received from SLDCs of buyer/seller as per the timeline specified in the Trading and Settlement Calendar then it will be treated as default by concerned buyer or seller.

D = Delivery Day

### **Delivery Procedure**

<b>26</b>	<b>Delivery</b>	Trade once executed shall not be revised and shall be sent for scheduling. The quantity shall be deliverable as per the schedule issued by the RLDC.
<b>27</b>	<b>Delivery period</b>	Delivery for each time block.
<b>28</b>	<b>Delivery point</b>	The delivery point shall be at Seller's ISTS Periphery as may be specified by requisitioner.
<b>29</b>	<b>Application for Scheduling</b>	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Delivery Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.

30	<b>SLDC Clearance</b>	Post trade, in case of buyer/seller is connected to State transmission or distribution system, the buyer/seller shall provide concurrence of LDC of their respective State to the Exchange for the traded quantity. The concurrence shall be submitted to the Exchange as per the timelines specified in the trading calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by LDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
31	<b>Delivery Process</b>	Application for Scheduling, as specified in the trading and settlement calendar, shall be sent to the Nodal RLDC, on the first available date after trading, as per the "Procedure for scheduling of bilateral transactions".
32	<b>Application fees, Operating and Transmission Charges and Losses</b>	Seller will bear the Transmission, Scheduling & Operating charges and Transmission Losses (in kind), as applicable, up to the delivery point and Buyer shall bear all the Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
33	<b>Alternate route</b>	The buyer shall be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
34	<b>Force majeure</b>	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
35	<b>Fines &amp; penalties*</b>	As decided by the Exchange from time to time and informed through circular.

**Settlement procedure\***

<b>36</b>	<b>Payment of Application Fees by Members</b>	Application fees will be collected from buyer on date of application to Nodal RLDC. Transmission and Operating Charges as applicable on quantum scheduled at the delivery point and payable to the Nodal RLDC, will be recovered from the buyer and seller members on the next day of receiving the acceptance from the nodal RLDC.
<b>37</b>	<b>Funds pay in by Members</b>	Exchange will debit the funds pay-in on D-1 basis at 11:00am from buyer member settlement account
<b>38</b>	<b>Funds pay out to Members</b>	Exchange will credit the funds pay out in seller's member's settlement account on D+1 basis at 12.00 noon for each delivery day subject to confirmation of delivery pay in by the seller.

\* Exchange may modify these parameters from time to time with prior intimation to its Members after taking approval of CERC.

## Annexure 4

### Contract Specification: National/Regional Any-Day (s) Contracts

Sr. No.	Item	Details
1	<b>Contract Name*</b>	Any-Day(s) Single Sided Contracts
2	<b>Regions</b>	One National contract and preference wise Regional contracts for each electrical region will be available for trading i.e. for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
3	<b>Contract Type</b>	Delivery Option – Firm Delivery
4	<b>Firm Any-Day Single Sided Contract</b>	Any-Day(s) Single Sided contracts will be available for user defined Day(s) and hour(s)/time block(s) from T+2 day to maximum upto T+90 days (T-Trade Day)
5	<b>Trading day*</b>	Trading will be available on the days as per Trading & Settlement calendar declared in advance.
6	<b>Trading session*</b>	Bidding sessions will be made available to the members/Clients for bidding on each Trading Day on Daily basis upto 2 days before delivery as per Trading & Settlement calendar.
7	<b>Order Management</b>	The Exchange Members will be able to submit orders as per these Business Rules. A Member shall be permitted to modify or cancel his orders, during the trading hours. Orders and bids entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.

<b>8</b>	<b>Bidding process</b>	Reverse Auction: Buyer to specify its requirement in terms of quantum in MW and duration. Sellers to bid their offers specifying quantum in MW and Price in Rs/MWh against the requirement of buyer during the auction window. Buyer and Seller may also specify minimum quantum. The bidding shall take place in 2 stages i.e., Initial Price Offering (IPO) and Reverse Auction.
<b>9</b>	<b>Matching of Bids</b>	Reverse Auction for buyer's requisition
<b>10</b>	<b>Trading Hours*</b>	As per trading and settlement calendar to be notified by the Exchange from time to time
<b>11</b>	<b>Minimum Volume quotation*</b>	1 MW
<b>12</b>	<b>Minimum Volume Step*</b>	0.1 MW
<b>13</b>	<b>Lot size</b>	1 MW * 15 minutes or combination thereof.
<b>14</b>	<b>Maximum bid size*</b>	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility of the Member or the Clients to adhere to this rule.
<b>15</b>	<b>Price Quote Basis</b>	Rs. per MWh (excluding all fees, charges, taxes etc.)
<b>16</b>	<b>Tick size*</b>	Rs. 1 per MWh
<b>17</b>	<b>Quantity Variation</b>	Zero quantity variation allowed
<b>18</b>	<b>Settlement</b>	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of revision of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed.
<b>19</b>	<b>Initial Margins (Operational Limit)*</b>	The buyer has to pay a nominal non-refundable fee up to Rs. 1,00,000 or as may be specified by the Exchange for initiating the reverse auction. This fee will be adjusted in the additional margins to be collected from buyer after the successful execution of the contract.  The seller will be required to provide an initial margin calculated at the rate of 30000/MW/Month or part thereof, or as may be specified by the Exchange, at the time of bidding in the Reverse Auction. The initial margin can be in the form of cash or non-cash collateral. If a seller gets eliminated during

		the Reverse Auction or the trade gets rejected by Buyer, the initial margin as collected will be refunded to the seller. If the seller gets selected, then the initial margin will get adjusted with the Additional Margin to be collected from the seller. In absence of adequate initial margin, seller will not be allowed to place bid.
<b>20</b>	<b>Additional Margins *</b>	<p>On acceptance of the trade and prior to submitting Application before the concerned Load Dispatch Center for scheduling, Additional Margin equivalent to 50%, 25%, and 20% of the Trade Value for contracts up to 7 days, 15 days and beyond 15 days respectively or as may be specified by the Exchange from time to time will be collected from the Member/Client (both from buyers &amp; sellers). Additional Margin can be in the form of cash or non-cash or combination thereof. Non receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default.</p> <p>Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract</p>
<b>21</b>	<b>Transaction Fees*</b>	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point as specified by the exchange from time to time, as approved by the Commission.

### **Trading Cycle\***

<b>Sr. No.</b>	<b>Time</b>	<b>Details</b>
<b>22</b>	As per the Trading & Settlement Calendar	Concerned LDC Clearance <sup>1</sup> from Members and fulfillment of additional margin requirement call, if any.
		On completion of formality and receipt of adequate additional margin, application on 'Advance', 'First-Come-First-Serve' or 'Day-Ahead Bilateral' basis will be sent to Nodal RLDC or as the case may be.
		----
		Acceptance for Scheduling from Nodal RLDC.
		Receipt of Transmission/Operating Charges and Application Fees from the members.
		Payment of Charges to Nodal RLDC.
		Pay-in ; equivalent to one day's obligation collected on D-1 basis , till the contract delivery ends
		Pay-out; Equivalent to one day's obligation credited on D+1 basis, till the contract delivery ends



<sup>1)</sup> Application for Scheduling will be sent only when the SLDC Clearances from buyer and seller are received by the Exchange. In case, the SLDC approval is not received from SLDCs of buyer/seller as per the timeline specified in the Trading and Settlement Calendar then it will be treated as default by concerned buyer or seller.

D = Delivery Day

### **Delivery Procedure**

<b>26</b>	<b>Delivery</b>	Trade once executed shall not be revised and shall be sent for scheduling. The quantity shall be deliverable as per the schedule issued by the RLDC.
<b>27</b>	<b>Delivery period</b>	Delivery for each time block.
<b>28</b>	<b>Delivery point</b>	The delivery point shall be as may be specified by the Exchange
<b>29</b>	<b>Application for Scheduling</b>	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Delivery Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
<b>30</b>	<b>SLDC Clearance</b>	Post trade, in case of buyer/seller is connected to State transmission or distribution system, the buyer/seller shall provide concurrence of LDC of their respective State to the Exchange for the traded quantity. The concurrence shall be submitted to the Exchange as per the timelines specified in the trading calendar. In case of any mismatch between the buyer and seller NOC in terms of quantum and duration approved by LDC, the minimum of two shall be considered for application for scheduling. Except otherwise provided, in case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller

31	<b>Delivery Process</b>	Application for Scheduling, as specified in the trading and settlement calendar, shall be sent to the Nodal RLDC, on the first available date after trading, as per the "Procedure for scheduling of bilateral transactions".
32	<b>Application fees, Operating and Transmission Charges and Losses</b>	Seller will bear the applicable Transmission, Scheduling & Operating charges and Transmission Losses (in kind), as applicable, up to the delivery point and Buyer shall bear applicable Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
33	<b>Alternate route</b>	The buyer shall be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
34	<b>Revision of Schedule</b>	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
35	<b>Cancellation of trade</b>	In Any Day Single Sided contracts, it is proposed that buyer shall have the option to specify number of days (maximum up to two days before the day of delivery) within which it has to confirm or partially or fully reject the trade. During this time, the bid will remain valid, and the successful bidders will not be able to change their bids.
36	<b>E-bidding</b>	In the event, LDC conducts e-bidding process for allocation of transmission corridor in case of congestion, the Exchange will participate in the process of e-bidding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission charges) in the ebidding. Exchange will collect the requisite amount from the concerned member/client before e bidding.
37	<b>Force majeure</b>	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.

38	<b>Fines &amp; penalties*</b>	As decided by the Exchange from time to time and informed through circular.
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**Settlement procedure\***

39	<b>Payment of Application Fees by Members</b>	Application fees will be collected from buyer on date of application to Nodal RLDC. Transmission and Operating Charges as applicable on quantum scheduled at the delivery point and payable to the Nodal RLDC, will be recovered from the buyer and seller members on the next day of receiving the acceptance from the nodal RLDC.
40	<b>Funds pay in by Members</b>	Exchange will debit the funds pay-in on D-1 basis at 11:00am from buyer member settlement account
41	<b>Funds pay out to Members</b>	Exchange will credit the funds pay out in seller's member's settlement account on D+1 basis at 12.00 noon for each delivery day subject to confirmation of delivery pay in by the seller.

\* Exchange may modify these parameters from time to time with prior intimation to its Members after taking approval of CERC

## **CHAPTER 9**

### **RENEWABLE ENERGY CERTIFICATE (REC) MARKET**

#### **9.1. Introduction**

This market segment will cover Renewable Energy Certificate contracts in accordance with CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 as amended from time to time.

- 9.1.1. REC Market will operate in accordance with the procedures issued by Central Agency for trading of RECs.
- 9.1.2. This market segment will typically cover two categories of certificates, solar certificates and non-solar certificates can be traded in this segment.
- 9.1.3. Seller Eligibility for participation in this market would be based on number of REC's issued to the eligible entities.
- 9.1.4. All terms and conditions of the contracts including trading sessions, matching rules, margin requirement and delivery procedure etc., will be as per specific rules mentioned herein.

#### **9.2. Membership**

The different terms and conditions for Members of the Exchange is defined in the Rules. The Member shall be governed by CERC (Power Market) Regulation, 2021. Additional eligibility conditions, if any, for Members to participate in REC segment will be notified by the Exchange from time to time through circulars

#### **9.3. Client**

- 9.3.1. A separate category of Client is introduced for the participants who wish to trade only RECs at the Exchange.
- 9.3.2. A Member, trading for his own account or on behalf his Clients, shall pay the Exchange, Annual Client Fees, as decided by the Exchange. Exchange, on receipt of such client fee shall issue a registration identification code.

#### **9.4. Fees and Charges**

The detail of the Fees and charges are specified in Clause 5.4 of the Business Rules. The Member and Client who wish to register and trade in REC segment shall pay such fees and charges as decided by the Exchange from time to time.

#### **9.5. Trading Days**

The Exchange shall operate on days as notified by the Exchange in advance for each calendar year in accordance with detailed procedure issued by the Central Agency.

#### **9.6. Trading Hours**

Trading hours shall be as per procedure issued by the Central Agency

#### **9.7. Market Operations**

9.7.1. REC Market segment will operate in accordance with the procedures issued by Central Agency for trading of RECs. The REC market operations and the exact time schedule relating to pay in and pay out activities shall be adhered by all the Exchange Members in order to have smooth and orderly operations of the Exchange.

9.7.2. Summary of terms and conditions of the contract is as specified in Contract Specifications at Annexure – 1 of this chapter.

#### **9.8. Trading Phases**

##### **9.8.1. Pre-trade phase**

The Exchange will validate available margins of the Buying participants required as per contracts specifications. Members will be allowed to place orders upto the available margins.

##### **9.8.2. Order accumulation phase (Bidding phase)**

Bidding session also referred to as the Order call period will start from 13.00 Hrs to 15.00 Hrs on the trading days specified as per the REC Trading and Settlement calendar published from time to time. Orders entered by the direct access clients shall be treated as orders entered by Members. The orders collected during the order accumulation phase will not be visible to the market participants.

##### **9.8.3. Order matching and trade finalization phase**

At the end of the bidding phase, the trading platform will seek to match orders. During this matching process, orders cannot be entered into the trading platform, and orders already entered cannot be cancelled or modified. A report of all offers received by the exchange shall be prepared in the format approved by the Central Agency and would be sent to the Central Agency. Central Agency will verify

availability of sufficient number of certificates in the sellers account and confirm the same to the exchange. In case, based on the report received from the Central Agency it is found that sufficient number of certificates are not available in the account of the seller, his offer shall be rejected. All bids and offers (after rejecting offers as mentioned above) are aggregated and Market Clearing Price and Market Clearing Volume shall be determined by 16.30 Hrs.

After the final market clearing price and volume determination phase is concluded by 16.30 Hrs, Members, whose orders have been executed, will be provided all relevant trade information regarding final trade on the trading platform. The Exchange shall also inform the Central Agency about the same by 17.00 Hrs.

**9.8.4. Obligation determination process (Settlement Phase)**

After end of the order matching and trade finalization phase, an obligation report will be generated by the Exchange at 17.00 Hrs, which will provide the quantity and amount of pay in / pay out and transaction fee payable etc. The Exchange will advise the Clearing Banks for transfer of pay-in at 17.00 Hrs and pay-out at 11.00 Hrs of next bank working day to / from Member's accounts.

**9.8.5. Delivery phase**

On the basis of trade finalized, the Central Agency shall extinguish the requisitioned number of RECs from the respective seller's account by 18.00 Hrs. of the trade day. Information would be sent to the Central Agency as per the agreed data interchange formats. The Exchange shall also send a written invoice to all the successful buyers and sellers by 17.30 Hrs. stating the total number of RECs purchased / sold by them along with the unique identification code for each transaction.

9.8.6. The information regarding Market Clearing Price and Market Clearing Volume shall be posted on the website by 18.00 Hrs.

9.8.7. The Exchange shall issue an electronically printable certificate as per format prescribed by CERC at Annexure – 2 of this chapter, along with the REC account statement pertaining to such certificate, to the Buyers within five days of trading.

9.8.8. The Exchange timelines are as under. They are subject to change as per procedure specified by the Central Agency towards implementation of REC mechanism as approved by CERC and Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010.

TIME on TRADE DAY	DETAILS
<b>Pre-trade Phase:</b>	
By 12.00 Hrs	Exchange to check initial margin check for Members
<b>Order Accumulation phase (Bidding)</b>	
13.00 Hrs to 15.00 Hrs	Order Accumulation
<b>Order matching and trade finalization</b>	
By 15.30 Hrs	<ul style="list-style-type: none"> <li>Exchange to send details of maximum offer placed by Sellers to Central Agency</li> </ul>
By 16.00 Hrs	<ul style="list-style-type: none"> <li>Central Agency to send report confirming valid RECs with Eligible Entities</li> </ul>
By 16.30 Hrs	<ul style="list-style-type: none"> <li>Finalization of trade results after removal of defaulters' orders</li> <li>Exchange to inform participants about trade results</li> </ul>
By 17.00 Hrs	<ul style="list-style-type: none"> <li>Exchange to inform Central Agency the details of buyers and sellers</li> </ul>
<b>Settlement Phase</b>	
By 17.00 Hrs	<ul style="list-style-type: none"> <li>Files to be sent by Exchange to banks for actual debits/ (Pay-in)</li> </ul>
By 11.00 Hrs (next bank working day)	<ul style="list-style-type: none"> <li>Files to be sent by Exchange to banks for actual credits (Pay-out)</li> </ul>
<b>Delivery Phase</b>	
By 18.00 Hrs	<ul style="list-style-type: none"> <li>Central Agency to extinguish RECs in Seller's Account</li> </ul>
	<ul style="list-style-type: none"> <li>Exchange to raise invoices to each participant as proof of transfer of RECs.</li> </ul>

## 9.9. Order Management

### 9.9.1. Order types

The Exchange Members will be able to place an order specifying the price, quantity and type (solar/non-solar) of RECs to be traded.

### 9.9.2. Modification and cancellation of orders

A Member shall be permitted to modify or cancel his orders, during the trading hours. No request of any member/client for manual

entry/modifications/cancellation of bids by the power exchanges shall be entertained within or after the trading hours. The exchange can only cancel the order in case of any direction received from NLDC/RLDC or Regulatory Commission/ Statutory Authority.

#### 9.9.3. **Order validation**

Orders entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.

### 9.10. Matching Rules

9.10.1. All the Clients shall be assigned unique ID / Portfolio ID. The Exchange may launch more than one order book running either parallel or at different time spans. Subject to the approval of the CERC, the Exchange is also entitled to modify or change the matching rules relevant to any market or order books any time where it is necessary to do so.

#### 9.10.2. **Uniform Price Step Auction for Renewable Energy Certificates**

If the auction is having prices (buy price  $\geq$  Sell Price) in the order book, then matching of the auction take place. The equilibrium price is determined with following conditions:

1. **Maximum tradable volume:** The Equilibrium Price will be the price at which maximum volume in the market can be traded.
2. **Minimum unbalance:** If there are multiple prices having maximum tradable volume, the price that leaves the least volume untraded at its level is chosen as Equilibrium Price.

Auction uniform price discovery will be guided through four principles, which will test different condition, and in any principle during matching process, system justifies the price than that will become the auction uniform price and system will not check further.

The Auction Uniform Price calculation logic is explained below with the help of an example.



The Order Book would be sorted on Best Buy and Best Sell basis for a product at the end of the Auction session as below:

BUY			SELL		
Order	Qty	Price	Price	Qty	Order
1	1,350	2030	2050	87	10
2	8,460	2024	2045	3,426	11
3	570	2022	2038	6,495	12
4	14,910	2020	2030	2,550	13
5	2,400	2019	2023	570	14
6	4,920	2015	2020	5,250	15
7	1,620	2013	2019	1,080	16
8	270	2010	2015	3,480	17
9	1,373	2008			

### 3. Principle: Determining the Maximum Tradable Volume

The principle would establish the price(s) at which maximum tradable volume would be executed. There would be two steps involved in applying this principle.

STEP 1 – Determine the Cumulative Buy and Sell quantities at each eligible price. The Cumulative Buy and Sell quantities at each price are as follows:

BUY		Price	SELL	
Cumulative Buy Quantity	Buy Quantity at Price		Sell Quantity at Price	Cumulative Sell Quantity
0	0	2050	87	22,938
0	0	2045	3,426	22,851
0	0	2038	6,495	19,425
1,350	1,350	2030	2,550	12,930
9,810	8,460	2024	0	10,380
9,810	0	2023	570	10,380
10,380	570	2022	0	9,810
25,290	14,910	2020	5,250	9,810
27,690	2,400	2019	1,080	4,560
32,610	4,920	2015	3,480	3,480
34,230	1,620	2013	0	0
34,500	270	2010	0	0
35,873	1,373	2008	0	0

STEP 2 – Establish the total tradable volume at each eligible price (i.e. Maximum Quantity which may be traded at that each price). The total tradable volume at a price would be computed as ‘Minimum of Cumulative Buy and Cumulative Sell quantity’ at the respective price. The Maximum Executable Volume (MEV) for each eligible price is as below:

BUY		Price	SELL		Maximum Executable Volume
Cumulative Buy Quantity	Buy Quantity at Price		Sell Quantity at Price	Cumulative Sell Quantity	
0	0	2050	87	22,938	0
0	0	2045	3,426	22,851	0
0	0	2038	6,495	19,425	0
1,350	1,350	2030	2,550	12,930	1,350
9,810	8,460	2024	0	10,380	9,810
9,810	0	2023	570	10,380	9,810
10,380	570	2022	0	9,810	9,810
25,290	14,910	2020	5,250	9,810	9,810
27,690	2,400	2019	1,080	4,560	4,560
32,610	4,920	2015	3,480	3,480	3,480
34,230	1,620	2013	0	0	0
34,500	270	2010	0	0	0
35,873	1,373	2008	0	0	0

Note: The Maximum Tradable Volume is the highest value amongst ‘Maximum Tradable Volume’ derived for all price points.

In this example, Tradable quantity may be 9,810 at prices 2024, 2023, 2022 and 2020. Therefore, as per Principle 1, the algorithm would eliminate all other price points as the potential Auction Uniform Price. To narrow down the price choices, system will establish minimum unbalance.

#### 4. Principle: Establishing the Minimum Unbalance

The second principle would figure out the eligible price levels (from prices 2024, 2023, 2022 and 2020) at which the Unmatched Quantity is a minimum.

The Minimum Unbalance at each price level is equal to ‘Cumulative Buy Quantity – Cumulative Sell Quantity.’

BUY		Price	SELL		Maximum Executable Volume	Minimum Unbalance (Cumulative buy qty- Cumulative sell qty)
Cumulative Buy Quantity	Buy Quantity at Price		Sell Quantity at Price	Cumulative Sell Quantity		
9,810	8,460	2024	0	10,380	9,810	-570
9,810	0	2023	570	10,380	9,810	-570
10,380	570	2022	0	9,810	9,810	570
25,290	14,910	2020	5,250	9,810	9,810	15,480

Note: 0 is the lowest Minimum Unbalance Quantity.

The minimum Unbalance occurs at prices 2024, 2023, 2022. Therefore, as per completion of Principle 2, the Prices eligible for Auction Uniform Price Calculation are 2024, 2023, 2022. In the above process price 2020 is eliminated and for further refining the auction prices, 3rd principle will be applied for the market pressure.

**5. Principle: Ascertaining where the Market Pressure exists**

3rd principle will check where the Market pressure exist on buy side or on sell side Following conditions will be checked and accordingly market uniform auction price will be determined:

- a) If minimum unbalance for all the price point established in 2nd principle is –ve than minimum of the price will be the uniform auction price.
- b) If minimum unbalance for all the price point established in 2nd principle is +ve than maximum of the price will be the uniform auction price.
- c) If the minimum unbalance having +ve and –ve values, than all the price point will be further refined through 4th principle. In the abovementioned example we are having both +ve and –ve minimum unbalance as shown below:

BUY		Price	SELL		Maximum Executable Volume	Minimum Unbalance (Cumulative buy qty- Cumulative sell qty)
Cumulative Buy Quantity	Buy Quantity at Price		Sell Quantity at Price	Cumulative Sell Quantity		
9,810	8,460	2024	0	10,380	9,810	-570
9,810	0	2023	570	10,380	9,810	-570
10,380	570	2022	0	9,810	9,810	570

All the prices i.e. 2024, 2023 and 2022 are still valid therefore 4th principle will be checked and accordingly a uniform price auction will be determined.

**6. Principle: Marking of sign change and Average of Price Points**

The fourth and final principle determines Auction Uniform Price from the range of prices established in Principle 3 (from prices 2024, 2023, 2024). There are two steps to this Principle. The first step is to narrow the options of potential Auction Uniform Prices within the derived price range.

STEP 1: If the result of Principle 3 is a combination of positive and negative Market Pressure, then the algorithm should mark the two prices where the sign changes.

BUY		Price	SELL		Maximum Executable Volume	Minimum Unbalance (Cumulative buy qty- Cumulative sell qty)
Cumulative Buy Quantity	Buy Quantity at Price		Sell Quantity at Price	Cumulative Sell Quantity		
9,810	0	2023	570	10,380	9,810	-570
10,380	570	2022	0	9,810	9,810	570

STEP 2: The auction uniform price would be the average of the price where the minimum unbalance changes its sign i.e. Average (2022, 2023) = 2022.5

The discovered Auction Uniform Price would be '2022.5'

Note 1: if discovered Auction Uniform Price is not as per Product's Price Tick then Auction Uniform Price would be rounded off to the nearest product's price tick.

All the matching orders would get traded at the Determined Auction Uniform Price, regardless of the price actually stated when placing an order. The Order Priority for matching purpose would be determined on 'Price-Time' Priority basis. All the Auction Session's Unmatched Pending Orders would get cancelled.

Note 2: If the Auction session has no overlapping Buy and Sell orders (i.e. Trades = 0), then the abovementioned conditional rule to determine 'Auction Uniform Price' would not be referred.

Note 3: In case of rounding off difference at the time of pro rata allocation, the same will be adjusted in following manner:

- a) One unit each of the total rounding off error would be adjusted to/from the highest selected quantum in the descending order.
- b) However, total selected quantity along with rounding off adjustment will not exceed the total bid quantity of individual order.

## 9.11. Margin Requirements

9.11.1. Initial Margin: The initial Security Deposit paid by a Member or a Client, as applicable, will be used as Initial Margin and will be considered the minimum Margin required for submitting bids. The initial margin paid by a Member will be considered as the minimum margins required.

9.11.2. The Member or the Client as the case may be, will be allowed to place a purchase order against cash amount made available, equivalent to 100% of the order value.

Funds in the Settlement Account of the Member will be blocked to provide exposure for the purchase orders.

- 9.11.3. Additional Margin: The Exchange may levy additional margin on Member(s) or across the market for covering any enhanced risk.

## **9.12. Risk Management System**

- 9.12.1. The Member, or the Client as the case may be, will be allowed to place a purchase order against cash amount made available, equivalent to 100% of the order value.

- 9.12.2. After receiving confirmation about availability of RECs in the depository account of Eligible Entity, then the Exchange processes the final bid matching solution. While processing bid matching solution, the bids of the Sellers for whom the balance in the depository account with the central agency is reported short, shall not be considered. The Exchange has the right to impose penalty on defaulting Member and may debar for further trading

- 9.12.3. In case of clients having their own settlement account, operational limit will be provided as per their bank balance after reducing amount towards applicable charges.

## **9.13. Surveillance**

- 9.13.1. In order to ensure market integrity and to avoid market abuses, the Exchange will use various on-line surveillance tools. The Exchange shall have the right to take appropriate actions in such cases.

- 9.13.2. Validation of orders: Members are required to ensure that bids and offers are in conformity with relevant regulatory provisions. In order to avoid any abnormal orders being put by the Exchange Members like high bid or offer rate, the Exchange will validate such orders through software on every trading day, wherever possible.

- 9.13.3. Price movement: The Exchange will observe any variation in prices as compared to past data.

- 9.13.4. Market behavior: Any unwarranted change in the price pattern or order trend shall be brought to the notice of the Exchange management.

- 9.13.5. Price rigging, concentration, price manipulation and other market abuses: The Exchange will monitor concentration, price rigging, price manipulation and other market abuses and take suitable actions whenever such practices are identified

**9.14. Transaction Fees**

The Exchange will charge a transaction fee on the transactions carried through the Exchange in this market segment. Such transaction fee will be computed on volume/value basis, as may be decided from time to time, which will be applied on both purchases and sales separately. This will be billed separately on periodic basis and will be recovered from the settlement account of the Member. Any changes in the transaction fees shall be effected by Exchange with prior approval of the Commission.

**9.15. Reports**

- 9.15.1. After end of trading session, the Exchange will publish/share the reports to the Members which consist of Trade file Report, Final Obligation Report and other relevant matters.
- 9.15.2. Exchange shall also report trade details to the CERC / Central Agency as well as the State Nodal Agency.

## Annexure 1

### REC Contract Specification

#### 1. General Terms

Name of the Tradable Instrument:	Renewable Energy Certificate
Underlying	Green Attributes of 1MWh of electricity generated by eligible Renewable Generator allowed in CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010
Instrument Types	Solar RECs & Non-Solar RECs
Price Quotation	INR/REC
Price tick:	1 INR
Volume tick:	1 REC
Price Limits	As notified by CERC from time to time
Minimum Order volume limit:	1 REC
Transaction Fee	Fees payable by REC buyer and seller to Exchange for the quantity approved by Central Agency as specified by the exchange from time to time.

#### 2. Trading Methodology, its phases and associated schedules

Trading Method	Closed double-sided uniform price auction for Solar and Non-Solar RECs
Trading System	HPX Trading System
Pre-trade phase	By 12.00 Hrs
Order Accumulation or Bidding phase	Between 13.00 Hrs and 15:00 Hrs of the Trading Day

Order matching and trade finalization phase	Between 15:00 Hrs and 17:00 of the Trading Day
Settlement and Delivery phase:	Between 17:00 Hrs and 18:00 of the Trading Day
Post-auction phase:	Between 17.00 and 18:00 Hrs of the Trading Day
<b>Order Types</b>	As defined in Chapter 9 of HPX Business Rules

### 3. Collateral and Margining

HPX requires Purchasing Participants to make funds available equivalent to their order value. Sellers shall submit orders only up to number of RECs available in their account held with Central Agency. In case of default for more than three cases, the Sellers may be liable for barred from transaction of RECs for the time duration as specified in the 'Procedures for redemption of Renewable Energy Certificate issued by Central Agency.

### 4. Delivery of RECs

Delivery of RECs shall be as per the procedure issued by Central Agency in pursuance to CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010.

- Exchange may modify the terms and conditions of contract subject to CERC (Power market) Regulations, 2021 as amended from time to time.



**Annexure 2****Certificate of Purchase of REC (s)****HPX****Certificate of Purchase of REC(s)**Number C-[**Certificate No.**]

Issued On-[DD-MMM-YYYY]

**Serial No.-[... ]****[NAME OF CORPORATION]**

A [ ] Corporation

**[#Issued]** CertificatesREC Type [**Solar / Non Solar**]**Session ID**

This certifies that [**REC Buyer**] is the holder of [**Number Issued**] [**Solar / Non Solar**] non transferable Renewable energy certificate(s) bought on \_day of \_\_\_\_\_, 20\_\_\_\_, through ***Hindustan Power Exchange Limited***.

This certificate represented hereby is issued and shall be held subject to all the provisions of the regulations of Honorable CERC as amended from time to time and the Bye-laws, Rules and Business Rules of ***Hindustan Power Exchange Limited***

*This is a computer-generated statement hence doesn't require signature*

## **CHAPTER 10**

### **ENERGY SAVINGS CERTIFICATE (ESCert) MARKET**

#### **10.1. Introduction**

- 10.1.1. The Energy Savings Certificate (ESCert) Market segment is introduced on the Exchange to facilitate transaction of ESCerts in accordance with Central Electricity Regulatory Commission (Terms and Conditions for Dealing in Energy Savings Certificates) Regulations 2016 dated 27thMay 2016 and its amendments thereof (hereinafter referred as 'ESCerts Regulations') notified by Central Electricity Regulatory Commission.
- 10.1.2. The ESCerts issued to Designated Consumers in accordance with the Energy Conservation Act 2001(EC Act) read with Energy Conservation (Energy Consumption Norms and Standards for Designated Consumers, Form, Time within which, and Manner of Preparation and Implementation of Scheme, Procedure for Issue of Energy Savings Certificate and Value of Per Metric Ton of Oil Equivalent of Energy Consumed) Rules 2012 and its amendments thereof ("hereinafter referred as PAT Rules")are qualified for transaction on Exchange subject to Clause 3 of this chapter.
- 10.1.3. Exchange shall operate ESCert Market in accordance with the Detailed Procedure issued by the Administrator under Regulation 7(a) of ESCerts Regulations.
- 10.1.4. This market segment will typically cover Energy Savings Certificates, based on issuance in a specific cycle as per PAT Rules.
- 10.1.5. All terms and conditions of the contracts including trading sessions, matching rules, margin requirement and delivery procedure etc, shall be as per specific rules mentioned herein

#### **10.2. Definitions**

- 10.2.1. "Administrator" means the Bureau of Energy Efficiency;
- 10.2.2. "Cycle" means a period as specified in PAT Rules, commencing from the 1st day of April of the starting year and ending on the 31stday of March of the target year.
- 10.2.3. "Designated Consumer" means any consumer notified by the Central Government under clause (e) of section 14 of the Energy Conservation Act, 2001 and for which a

target is notified under the Statutory Orders issued by the Government of India from time to time;

- 10.2.4. "Eligible entity" means any designated consumer registered with Registry who has been issued or deemed to have been issued ESCerts and desire to sell or purchase such ESCerts for compliance with the energy consumption norms and standards specified under clause (g) of section 14 of the EC Act.
- 10.2.5. "ESCerts" means the Energy Savings Certificates issued by the Central Government in the Ministry of Power to the designated consumer under sub-section (1) of section 14(A) of EC Act, 2001.
- 10.2.6. "Registry" means the agency designated by Government of India in the Ministry of Power to perform such functions as defined in ESCerts Regulations.
- 10.2.7. "Transaction of ESCerts" means sale or purchase of ESCerts under the Perform, Achieve and Trade (PAT) scheme on Power Exchanges, and includes delivery of ESCerts.

### **10.3. Eligibility**

- 10.3.1. Only 'Eligible Entities' are eligible for transaction of ESCerts on Exchange.
- 10.3.2. 'Eligible Entities' can either buy or sell ESCerts, as the case may be, on the Exchange in a Cycle.
- 10.3.3. All 'Eligible Entities' who intend to participate for the transaction of ESCerts on Exchange shall register themselves with the Exchange as Member or Client in accordance with the Rules and Byelaws of the Exchange.
- 10.3.4. 'Eligible Entities', who have been barred from transaction of ESCerts on Exchange by Registry or Administrator or Commission or Exchange or by any statutory body, shall not be eligible for transaction of ESCerts on Exchange.

### **10.4. Membership**

All the existing categories of Members of the Exchange shall be eligible for transaction of ESCerts at the Exchange Platform. However, if any Member is interested in only carrying out transaction in ESCerts, the same shall also be considered as per CERC (Power Market) Regulation, 2021 and amendments thereof. Additional eligibility conditions, if any, shall be specified by the Exchange from time to time through circulars

**10.5. Client**

A category of Client termed as 'ESCert Client' is introduced for the participants who wish to transact in ESCerts on the Exchange. All Clients, whether existing or new, shall be required to register themselves through any Member of the Exchange for transacting in ESCerts on the Exchange. Only new clients shall receive a registration identification code from the Exchange provided that they comply with all the requirements prescribed by the Exchange from time to time.

**10.6. Fees**

The Member and Client who wish to register and trade in ESCerts segment shall pay such fees and charges as decided by the Exchange from time to time.

**10.7. Trading Days**

The Exchange shall operate ESCert market on days as notified by the Exchange in accordance with detailed procedure issued by the Administrator.

**10.8. Trading Hours**

Trading hours shall be as per approved detailed procedure issued by the Administrator.

**10.9. Market Operations**

ESCert Market segment shall operate in accordance with the procedures issued by the Administrator for transaction of ESCerts on Exchange. The ESCerts market timelines shall be adhered to by all the Exchange Members in order to have smooth and orderly operations of the Exchange.

**10.10. Contract specifications**

The contract specification shall be as per Annexure – 1 to this Chapter.

**10.11. Trading Phases****10.11.1. Pre-trade phase**

The Exchange shall validate available margins of the Buying participants required as per contracts specifications. Members shall be allowed to place orders upto the available margins.

**10.11.2. Order accumulation phase (Bidding phase)**

Bidding session also referred to as the Order call period shall be available from 13.00 Hrs to 15.00 Hrs on the trading days specified in the ESCerts Trading and Settlement calendar issued by Exchange from time to time. The participants shall place their sell/buy bids within the Bidding session. Orders entered by the direct access clients

shall be treated as orders entered by Members. The orders collected during the order accumulation phase will not be visible to the market participants.

#### **10.11.3. Order Verification phase**

Post bidding session, sell bids received from the participants shall be sent to Registry through D-CRM portal by 15.30 Hrs for verification of quantity of ESCerts offered for Sell against the quantity of ESCerts available for transaction with the concerned participant in their Registry account. Registry shall send confirmation report by 16.00 Hrs to exchange. In case, bids have been confirmed by Registry, same shall be processed for order matching. However, in case, cumulative sell bids placed exceed the quantity of ESCerts available in their registry account, Registry shall declare such eligible entities as defaulter, bids of such participants shall not be processed for order matching.

#### **10.11.4. Order matching and transaction finalization phase**

After Order verification phase, the trading platform shall seek to match orders. During this matching process, orders cannot be entered into the trading platform, and orders already entered cannot be cancelled or modified. All buy bids and confirmed sell bids are aggregated and Market Clearing Price (MCP) and Market Clearing Volume (MCV) shall be determined by 17.00 Hrs through the closed double-sided uniform price auction for that particular trading session of ESCerts market.

10.11.5. After the final market clearing price and volume determination phase is concluded by 17.00 Hrs, Members whose orders have been executed, will be provided all relevant trade information regarding final trade on the trading platform.

#### **10.11.6. Obligation determination process (Settlement Phase)**

After end of the order matching and transaction finalization phase, an obligation report will be generated by the Exchange at 17.00 Hrs, which will provide the quantity of ESCerts transacted and amount of pay in / pay out and transaction fee payable etc. The Exchange will advise the Clearing Banks for transfer of pay-in at 17.00 Hrs and pay-out at 11.00 Hrs of next bank working day to / from Member's or Client's accounts, as applicable.

#### **10.11.7. Delivery phase**

On the basis of transaction finalized, Exchange shall send the confirmation report to Registry through D-CRM portal providing the ESCerts sell and buy volume along with

the purchase certificate number for each of the participants who have successfully transacted ESCerts in the trading session by 17.15 Hrs. Based on the confirmation report uploaded by Exchange on D-CRM portal, Registry shall send the transaction approval acknowledgement to Exchange by 17.30 Hrs of the trade day. The Exchange shall also send transaction report to all the successful buyers and sellers by 18.00 Hrs stating the total number of ESCerts purchased / sold by them along with the unique identification code for each transaction.

10.11.8. The information regarding Market Clearing Price and Market Clearing Volume, sell and buy bids along with demand supply curves shall be published on HPX's website by 18.30 Hrs.

10.11.9. The Exchange shall issue an electronically printable ESCert purchase certificate as per format prescribed at Annexure – 2 of this chapter, to the Buyers within five days of trading. – (HPX Format).

#### 10.11.10. Timelines

Timelines for transaction of ESCerts on the Exchange shall be as under.

TIME on TRADE DAY	DETAILS
<b>Pre-trade Phase:</b>	
By 12.00 Hrs	Exchange to check initial margin for Members
<b>Order Accumulation phase (Bidding)</b>	
13.00 Hrs to 15.00 Hrs	Order Accumulation
<b>Order Verification phase</b>	
By 15.30 Hrs	Exchange to send details of maximum offer placed by Sellers and buy bids to Registry
By 16.00 Hrs	Registry to send report confirming valid ESCerts available with participant
<b>Order matching and transaction finalization</b>	
By 17.00 Hrs	Market clearing price and Market clearing volume determination and publishing of transaction results on Exchange Terminal
<b>Settlement Phase</b>	
By 17.00 Hrs	Files to be sent by Exchange to banks for actual debits (Pay-in)

By 11.00 Hrs (next bank working day)	Files to be sent by Exchange to banks for actual credits (Pay- out)
<b>Delivery Phase</b>	
By 17.15Hrs	Exchange to upload the confirmation report on D-CRM portal providing the final sell and buy volume of each participant.
By 17.30 Hrs	Registry to send the transaction approval acknowledgement to Exchange
By 18:00 Hrs	Exchange to send transaction report to each participant as proof of transfer of ESCerts.

## 10.12. Order Management

### 10.12.1. Order types

Single order type specifying the price and quantity of ESCerts to be traded shall be available for submission of orders by Members/Clients.

### 10.12.2. Modification and cancellation of orders

Members/Clients shall be permitted to modify or cancel their orders, during the trading hours. No request of any member/client for manual entry/modifications/cancellation of bids by the power exchanges shall be entertained within or after the trading hours. The exchange can only cancel the order in case of any direction received from NLDC/RLDC or Regulatory Commission/ Statutory Authority.

### 10.12.3. Order validation

Orders entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.

## 10.13. Matching Rules

As per Clause 10(b) of Chapter 9.

## 10.14. Margin requirements

### 10.14.1. Initial Margin

The initial Security Deposit paid by a Member or a Client, as applicable, will be used as Initial Margin and will be considered the minimum Margin required for submitting

bids. The initial margin paid by a Member will be considered as the minimum Margins required which will be equivalent to the 100% of the order value.

10.14.2. Funds available in the settlement account will be blocked to provide the exposure for the order. Member will not be allowed to place buy orders exceeding the total amount available in his settlement account.

**10.14.3. Additional Margin**

The Exchange may levy additional margin on Member(s) or across the market for covering any enhanced risk.

**10.15. Risk management system**

10.15.1. The Member, will have an exposure up to the initial margin deposited in the settlement account netting off haircut factor.

10.15.2. The Exchange has the right to impose penalty, as decided from time to time, on defaulting Member who sells ESCerts in excess of available ESCerts in his Registry account.

**10.16. Surveillance**

10.16.1. In order to ensure market integrity and to avoid market abuses, the Exchange will use various on-line surveillance tools. The Exchange shall have the right to take appropriate actions in such cases.

10.16.2. Validation of orders: Members are required to ensure that bids are in conformity with relevant regulatory provisions. In order to avoid any abnormal orders being put by the Exchange Members the Exchange will validate such orders through software on every trading day, wherever possible.

10.16.3. Price movement: The Exchange will observe any variation in prices as compared to past data.

10.16.4. Market behavior: Any unwarranted change in the price pattern or order trend shall be brought to the notice of the Exchange management.

10.16.5. Price rigging, concentration, price manipulation and other market abuses: The Exchange will monitor concentration, price rigging, price manipulation and other market abuses and take suitable actions whenever such practices are identified.



**10.17. Transaction Fees**

The Exchange will charge a transaction fee on the transactions carried through the Exchange in this market segment. Such transaction fee will be computed on volume/value basis, as may be decided from time to time, which will be applied on both purchase and sale transactions separately. This will be billed separately on periodic basis and will be recovered from the settlement account of the Member/Client. Any changes in the transaction fees shall be effected by Exchange with prior approval of the Commission.

**10.18. Reports**

10.18.1. After end of trading session, the Exchange will share with successful Members various reports like Trade file Report, Final Obligation Report and reports for other relevant matters.

10.18.2. Exchange shall also report trade details to the CERC/ Registry

## Annexure 1

### ESCert Contract Specification

#### 1. General Terms

Name of the Tradable Instrument:	Energy Savings Certificate (ESCert)
Underlying	Energy consumed in terms of one metric Ton of Oil Equivalent (mtoe).( Energy Savings Attributes of 1toe of energy savings by Designated Consumer certified and issued as per Energy Conservation (Energy Consumption Norms and Standards for Designated Consumers, Form, Time within which, and Manner of Preparation and Implementation of Scheme, Procedure for Issue of Energy Savings Certificate and Value of Per Metric Ton of Oil Equivalent of Energy Consumed) Rules, 2012)
Instrument Types	ESCert
Price Quotation	INR/ESCert
Price tick:	1 INR
Volume tick:	1 ESCert
Price Limits	As notified by BEE from time to time
Minimum Order Volume limit	1 ESCert
Transaction Fee	Fees payable by ESCert buyer and seller to Exchange, for the transacted quantity. Such fee shall be specified by the Exchange from time to time.

#### 2. Trading Methodology, its phases and associated schedules

Trading Method	Closed double-sided uniform price auction
Trading System	HPX Trading System
Pre-trade phase	By 12.00 Hrs
Auction phase	13.00 Hrs to 15:00 Hrs of the Trading Day

Order Verification phase Confirmation from Registry	By 15.30Hrs By 16.00 Hrs
Order matching and transaction finalization phase	By 17:00 of the Trading Day
Settlement and Delivery phase	Between 17:00 Hrs and 18:00 of the Trading Day
Order Types	As defined in chapter 10 of HPX Business Rules

**3. Collateral and Margining**

Exchange requires purchasing participants to make funds available equivalent to their order value and Sellers shall submit orders only upto number of ESCerts available in their account held with the Registry. In case of default for more than three cases, the Sellers may be liable for barred from transaction of ESCerts for next six months, notwithstanding any penalty due to be imposed as per the provisions of the Regulations and Procedure, by relevant authority.

**4. Delivery of ESCerts**

Delivery of ESCerts through Registry shall be as per the procedure issued by the Administrator in pursuance with Central Electricity Regulatory Commission (Terms and Conditions for Dealing in Energy Savings Certificates) Regulations, 2016.

5. Exchange may modify the terms and conditions of contract subject to Central Electricity Regulatory Commission (Terms and Conditions for Dealing in Energy Savings Certificates) Regulations, 2016 and Central Electricity Regulatory Commission (Power Market) Regulations, 2021 as amended from time to time.

**Annexure 2****Certificate of Purchase of ESCert (s)****HPX****Certificate of Purchase of ESCert(s)**Number C-[**Certificate No.**]  
YYYY]

Issued On-[DD-MMM-

**Serial No.-[... ]****[NAME OF ELIGIBLE ENTITY]**

A [ ] Corporation

**[#Issued]** Certificates**Session ID**

This certifies that [**ESCERT Buyer**] is the holder of [**Number Issued**] non transferable Energy Savings certificate(s) bought on \_\_day of \_\_\_\_\_, 20\_\_\_\_, through **Hindustan Power Exchange Limited**.

This certificate represented hereby is issued and shall be held subject to all the provisions of the regulations of Honorable CERC as amended from time to time and the Bye-laws, Rules and Business Rules of **Hindustan Power Exchange Limited**

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## **CHAPTER 11**

### **REAL TIME MARKET (RTM)**

Real Time Market (RTM) segment shall provide platform for trading of Real Time Contracts every half an hour i.e. every alternate time block for delivery in fifteen-minute time blocks with gate closure. The matching will be through double-sided closed bid auction with uniform price. Congestion on transmission network will be managed through market splitting. The contracts concluded in this segment shall be scheduled in accordance with the “Procedure of Collective Transaction in Real Time Market” issued by National Load Dispatch Center (NLDC) and CERC Regulations. All terms and conditions of the contracts including eligibility, trading sessions, matching rules, margin requirement and delivery procedure etc., will be as per specific rules mentioned herein.

#### **11.1. Eligibility**

- 11.1.1. Sellers: All grid connected entities shall be eligible to sell electricity in 'Real Time Market' (RTM) subject to submission of No Objection Certificate (NoC)/Standing clearance issued by RLDC/SLDCs to Exchange containing details viz maximum sell quantum, time period etc. as may be specified in the procedure issued by NLDC or its amendments from time to time
- 11.1.2. Buyers: All the entities which are eligible to procure electricity through Open Access shall be eligible to participate in RTM as buyer subject to submission NoC/Standing Clearance issued by RLDC/SLDCs to Exchange containing details viz maximum buy quantum, time period etc. as may be specified in the procedure issued by NLDC or its amended from time to time.
- 11.1.3. Generator will have an option to purchase electricity in RTM only in the case of forced outage of a unit(s) subject to submission of details viz. maximum buy quantum, time period etc. approved by RLDC/SLDCs to Exchange and fulfillment of other terms and conditions as may be specified in the procedure issued by NLDC or its amendments thereof.

#### **11.2. Trading Days**

The Real Time Market shall be operated every day throughout the year except on the days of Exchange declared trading holidays.

**11.3. Trading hours**

- 11.3.1. The Exchange will operate 48 trading sessions for Real Time Contracts for all trading days every alternate 15 min time block.
- 11.3.2. The trading sessions may be extended, advanced or reduced by notifying the Members as and when the Exchange deems fit and necessary.

**11.4. Contract specifications**

The contract specification shall be as per Annexure – 1 to this Chapter.

**11.5. Delivery Point**

The actual schedule at various interconnection point including that of grid connected entities shall be worked out after incorporation of transmission losses in kind. The trade schedules shall be used for the purpose of payment of transmission charges and wheeling charges (if applicable). For example, delivery point of an embedded entity in state 'A' will be the interconnection point of intra state entity, which will be the state periphery. For a trade schedule of 100 MW purchase by this entity, the schedule for this transaction at the ISTS periphery would be 100 MW, and at the periphery of the state it would be 96 MW (assuming 4% All India Transmission Loss) and at the intra state entity periphery would be 91.20 MW (assuming 5% intra state losses). The transmission charges payable will be for 100 MW.

Similarly, in the above example, if the State embedded entity in state 'A' has a trade schedule of 100MW sell, then the schedule at the ISTS periphery and the state periphery will be 100MW, ISTS transmission losses for generator are not applicable. State and other losses will be applicable on the trade schedule. At intra state periphery, the quantity would be 105.26 (Assuming STU losses as 5%). However, charges as applicable as per the "Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020", shall be applicable on the sellers for trade quantum that is 100 MW.

**11.6. Order types**

The Exchange will make available one or more type of orders from the following types of orders to be separately notified by the Exchange.

**11.6.1. Single bid**

Single bid will specify multiple sequences of price and quantity pairs in a portfolio manner. The quantity shall be assumed to vary linearly between two price pairs. All purchase bids can have only non-increasing quantity for every increase in the bid price, and every sale bid will have only non-decreasing quantity for every increase in the bid price.

**11.6.2. Block bid**

Block bids have an “All-or-nothing” condition i.e. either the bids will be accepted or rejected. It consists of a specified volume and price for a certain continuous time blocks within the same day. For execution of block bids, the price is compared with the average of the area-clearing price of the clients bid area. Maximum number of block bids and maximum quantity per block bid shall be prescribed by the Exchange from time to time, with the prior approval of the commission.

#### 11.6.3. **Minimum Quantity Block Bid**

Minimum Quantity Block Bids will specify one price and one quantity for a combination of continuous 15-minute time blocks along with a ‘Minimum Quantity percentage’ and number of sub-bids. The Minimum quantity block bids are block bids wherein partial acceptance of Block Bid is possible. The minimum quantity percentage will specify the quantity up to which the block bid can be accepted whereas the number of sub-bids will specify the size in which the remaining quantity shall be divided into. The system will first consider ‘Min Quantity’ in selection criteria. If it were selected, the system would then consider remaining sub bids in selection criteria till it has reached to the equilibrium at which no further sub-bids can be selected. Maximum number of Minimum Quantity Block Bids, Minimum quantity percentage limit and maximum number of sub-bids per block bid shall be prescribed by the Exchange from time to time.

#### 11.6.4. **Profile Block Bids**

Profile Block bid specifies one price and varying quantities for a combination of 15-minute time blocks. The volume weighted average price over the duration of the order is used to determine its acceptance. The price is compared with the block volume weighted average area clearing price of client’s bid area for the periods for which the block is defined. It will be an ‘All or None’ type of order.

Maximum number of profile block bids and maximum quantity per block bid shall be prescribed by the Exchange from time to time.

#### 11.6.5. **Linked Bid**

Block bids can be paired in a mother child relationship wherein child would be considered for selection only if mother bid is selected. Exchange would notify if any surplus arising in mother/child bid can be considered for selection of corresponding child/mother bid in the pair.

#### 11.6.6. **New Bids or modifications of existing Bids**

The Exchange may introduce other types of bids or modify existing bid types, in accordance with PMR 2021, as per the requirement of the market and the same will be notified by exchange in advance to the members.

**11.7. Treatment of Transmission Charges and Losses**

The bids and offers submitted will be for delivery at the specified delivery point. Transmission charges and losses will be dealt as under:

**11.7.1. Transmission charges**

Buyers and Sellers shall be required to pay in cash for the transmission charges for their respective ISTS and State transmission systems and wheeling charges for distribution network (if applicable). These charges shall be payable as stipulated by the appropriate Commission. These charges shall be recovered by the Exchange and paid as per CERC (Open Access in inter State Transmission) Regulation 2008 and procedure made thereunder, as amended from time to time.

**11.7.2. Transmission losses**

Buyers and Sellers shall be required to bear transmission losses in kind for their respective ISTS and State transmission systems. These losses are declared by the NLDC/RLDCs / SLDCs. The requisition submitted by the Exchange would be based on the trade quantum and would not reflect losses. The schedules issued by NLDC/RLDCs/SLDCs reflects such transmission losses.

**11.7.3. Scheduling and System Operation Charges**

Scheduling and System operational charges for respective LDCs shall be payable by the Exchange in accordance with the Procedures issued by NLDC. Such charges shall be recovered by the Exchange through socializing such charges amongst all Buyers and Sellers.

**11.8. Order Management****11.8.1. Modification and cancellation of orders**

A Member shall be permitted to modify or cancel his orders, during the bidding session. No request of any member/client for manual entry/modifications/cancellation of bids by the power exchanges shall be entertained within or after the trading hours. The exchange can only cancel the order in case of any direction received from NLDC/RLDC or Regulatory Commission/ Statutory Authority.

**11.8.2. Order validation**

Orders and bids entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price



steps (tick size) in which orders shall be entered on the trading system of the Exchange.

#### **11.9. Matching rules**

The rules for matching of bids as specified in Chapter 6 – Integrated Day Ahead Market (IDAM) of these Business Rules shall be mutatis-mutandis applicable for the Real-Time Market Segment.

#### **11.10. Margin requirements**

Initial margin and Additional margin shall be considered as provided in Clause 6.5.6 of the HPX Business Rules. The Margins shall be calculated considering exposure of a Member in the IDAM segment. Decisions of the Exchange in this respect, shall be binding on the Member and Clients.

#### **11.11. Real-Time Market Segment Operations**

The Real-Time market segment operations and the exact time schedule relating to pay-in and pay-out activities shall be adhered to by the Exchange Members in order to have smooth and orderly operations of the Exchange. These market operations shall be in accordance with the Procedures issued by NLDC. The operations activities shall be as follows:

##### **11.11.1. Order accumulation period (Bidding phase)**

- a) Bidding session for day (D0) shall be open for 15 minutes from 2245 hrs. to 2300 hrs. of previous Day (D0-1) for the delivery of power for the first two-time blocks of (D0) i.e. 0000 hrs. to 0030 hrs. and shall be repeated after every half an hour on rolling basis on all seven (7) days of a week except Exchange declared holidays.
- b) During the bidding sessions, all the orders shall be accumulated in the central order book and after the end of the bidding session, bid matching will take place and contracts shall be executed. Orders entered by the direct access clients shall be treated as orders entered by Members.
- c) Members will have option to enter orders in advance for all trading sessions or part thereof in a trading day, however, orders entered in advance will get activated in the respective bidding session. Such advance orders may be modified/deleted till end of respective bidding session.

##### **11.11.2. Bid matching process**

- a) Once the bidding session ends, Exchange will send the requisition for the corridor availability from NLDC. NLDC will communicate the ATC in each transmission corridor for the time blocks wherein contracts executed in a bidding session will be delivered.

- b) After the congestion file is received from NLDC, the Exchange will re-run the bid matching process to determine constrained Area Clearing Price (ACP) and Area Clearing Volume (ACV) taking into consideration the ATC provided by NLDC

#### 11.11.3. Congestion management

- a) In case of congestion, in various power transmission corridors, the solution shall be determined through market splitting process, which may result into different prices for different areas. These prices are Area Clearing Price (ACP). This price differential of different bid areas may generate Congestion amount.
- b) Congestion amount is the amount by which total funds pay in may exceed total funds pay out, this arises because of the market splitting, and the said congestion amount will be transferred to a regulatory fund as may be directed by the Commission.
- c) The market splitting methodology explained in the Annexure – 2 of the Chapter 6 (Integrated Day Ahead Market) of these Business Rules shall be mutatis-mutandis applicable for the Real-Time Market Segment

#### 11.11.4. Clearing Process

- a) Based on the ACP, obligation reports will be generated and shall be made accessible.
- b) The instructions of debit and credit of Settlement Accounts of the respective Members/Clients by the amount payable and receivable will be generated and sent to the respective Clearing Banks in banking hours.
- c) The funds pay in from the buyer Members will be done on the “T” or “T+1” day where “T” stands for trade day. The funds pay out to the seller Members will be on the “T+1” or “T+2” day. In case of Bank Holiday, payout will be made on the bank working day. The Bank will run the pay in file at the scheduled time and report to the Exchange regarding successful debits.

#### 11.11.5. Timelines

The Exchange timelines for one trading session is as under. This will be repeated for every bidding session on rolling basis. They are subject procedures issued by NLDC or CERC Regulations.

TIME	DETAILS
2245 hrs. to 2300 Hrs.	<ul style="list-style-type: none"> <li>• Bid - Call session</li> </ul>
By 2315 Hrs.	<ul style="list-style-type: none"> <li>• NLDC to inform available ATC in the interfaces/control areas/ regional transmission system.</li> <li>• Exchange to determine MCP and ACP &amp; obligations of the Members</li> <li>• Scheduling request of Collective Transaction in Real Time Market to NLDC</li> <li>• Publishing constrained and unconstrained results on the website</li> </ul>
By 2330 Hrs.	<ul style="list-style-type: none"> <li>• Communication of Schedule to NLDC/RLDCs/ SLDCs.</li> <li>• Exchange will issue obligation report to Members</li> </ul>
0000 Hrs. to 0030 Hrs.	<ul style="list-style-type: none"> <li>• Delivery</li> </ul>

### 11.12. Delivery procedure

- 11.12.1. After finalization of successful trades, the Exchange will send its requisition for scheduling to the NLDC/RLDC/SLDCs as per Detailed Procedure issued by the NLDC.
- 11.12.2. Respective LDC will include these requisitions in their final schedules after adjusting for transmission losses as per the Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008, Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 and detailed procedure issued by the NLDC as amended from time to time.
- 11.12.3. The quantity of power scheduled by respective NLDC/RLDCs/SLDCs, in respect of Exchange traded Contracts, shall be deemed to have been delivered. The scheduling procedure will be as per the Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008, as amended from time to time and detailed procedure issued by the NLDC thereunder.
- 11.12.4. Transmission charges and losses shall be in accordance with the Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008, and, Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time, detailed procedures issued by the NLDC thereunder and rate of Transmission Losses as determined by the NLDC for ISTS and as prescribed by the concerned SERC / SLDC for use of intra-state network.

- 11.12.5. Any shortage or excess delivery of electricity from the total schedule, including schedule for Contracts traded on the Exchange of the grid connected entity will be settled by them under Deviation Settlement / imbalance settlement mechanism as per the procedure laid down by the CERC or SERC, as may be applicable.
- 11.12.6. Taxes, duties, cess and other levies: The price of all the Contracts shall be quoted on the basis of actual value of the electricity Contract excluding the transmission charges, losses, scheduling and system operation charges, taxes, duties, cess and other levies and the same shall be borne by the Buyers or Sellers as applicable.
- 11.12.7. Metering of electricity: Arrangement for metering shall be made by the Seller/Buyer at the point of injection and the point of off-take from the GRID should conform to the provisions of Indian Electricity Grid Code (IEGC) and Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008, as amended from time to time. The Members and the relevant authority shall be responsible to resolve the issues related to metering of electricity. The Members shall indemnify and keep indemnified the Exchange from any disputes related to metering.
- 11.12.8. Transmission Charges of STU or State transmission licensees, wheeling charges of distribution licensee (if applicable) and Scheduling and Operation Charges of State Load Dispatch Centre shall be recovered from the Members and shall be paid to the STU / SLDCs respectively as per CERC's / SERC's regulations by the Exchange

### **11.13. Risk Management System**

- 11.13.1. A Member can trade only when it maintains adequate margin determined by the Exchange for such Member.
- 11.13.2. In case of Clients having their own settlement account, such clients shall be allowed to bid only to the extent of funds available in their settlement bank account and lien marked in favor of the Exchange, net of provision towards applicable charges.
- 11.13.3. An Exchange Member can pay additional margin by depositing funds in its Settlement Account and inform the Exchange through fax or email any time during the trading session. Thereafter, based on the instruction received, the Exchange will increase the bid limit and margin deposit of the Member with Exchange.
- 11.13.4. In case a Member fails to bring in additional margin, as may be required, at beginning of the trading session, such Members or the Clients, as applicable, will not be allowed

to put orders till Margins are brought in. The decisions of the Exchange shall be final and binding on the Members.

11.13.5. In case a Member fails to pay to the Exchange any amount towards its final pay-in, the Exchange will be at liberty and has the power and discretion to restrict its subsequent trades at Exchange and initiate appropriate action against such Member. The Exchange may also impose penalty on such defaulting member or the Client, as applicable.

#### **11.14. Surveillance**

11.14.1. Validation of orders: Members are required to ensure that bids and offers are in conformity with relevant regulatory provisions. In order to avoid any abnormal orders being put by the Exchange Members like high bid or offer rate, bids quantity or offer quantity submitted higher than the declared capacity/demand by the Member, or the maximum quantity of purchase or sale as allowed in the Standing Clearance, the Exchange will validate such orders through software on a daily basis, wherever possible. Further, the order value of the Member will also be compared with the available limits of such Member for any over utilization.

11.14.2. Price movement: The Exchange will observe any variation in prices as compared to past data. Further, the price movement in the Exchange shall be correlated with that of the bilateral markets that is available with the Exchange.

11.14.3. Market behavior: The Exchange shall compare the trend in other national or bilateral markets with that of the Exchange. Any unwarranted change in the price pattern or order trend in this will be brought under the notice of the Exchange management.

11.14.4. Correlation with Deviation Prices: The trend in the DSM rate and the prices in the Exchange shall be compared for any major differences. In case of individual Member its trend of trading on the Exchange shall also be compared with his DSM obligations.

11.14.5. Price rigging, concentration, price manipulation and other market abuses: The Exchange will monitor concentration, price rigging, price manipulation and other market abuses and take suitable actions whenever such practices are identified.

## Annexure 1

### Real Time Market 15-minute Contract Specifications

1.	Contract Name	Real-Time Contract
2.	Trading system	HPX trading system
3.	Trading Session	Each session of 15 Minute duration on rolling basis with a gap of 15 minutes (E.g. 2145 to 2200 than 2215 to 2230)
4.	Delivery Period	Half hourly delivery consisting of two separate 15-Min time blocks.
5.	Minimum volume	0.1 MW
6.	Minimum volume step	0.1 MW
7.	Minimum quotation step	Rs. 1 per MWh
8.	Auction method	Double sided close bid auction with uniform Market Clearing Price for all buyers and sellers.
9.	Order Code	Trader's ID, instrument, quantity/price combination
10.	Delivery point	ISTS Periphery in which the grid-connected entity is located.
11.	Settlement	Settlement at ACP x volume traded in MWh
12.	Transmission charges	As per Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008 and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
13.	Transmission losses	Payable in kind from delivery point to its grid connection point.
14.	Pay in and Pay out	Pay-in on day 'T' or 'T+1' and Pay-out on 'T+1' or 'T+2' where 'T' is the Trade day.

## CHAPTER 12

### GREEN DAY AHEAD CONTINGENCY AND GREEN INTRA DAY MARKET

The Green Term Ahead Market (G-TAM) segment comprises of contracts for trade in electricity generation from renewable energy sources e.g. Solar, Wind, Hydro etc. and shall operate in accordance with the procedure issued by POSOCO for 'Scheduling of Bilateral Transactions' under CERC (Open Access in Inter-State Transmission) Regulations, 2008, as amended from time to time. There are three sub-segments within G-TAM market namely Solar, Non-Solar and Hydro. In Solar sub- segment, only electricity generated from solar energy sources shall be traded and in Non-Solar sub-segment, electricity generated from renewable energy sources other than Solar energy sources shall be traded. In Hydropower segment, only the electricity generated from Hydropower sources, which are eligible for compliance of Hydro Purchase Obligation (HPO) notified by appropriate commission, shall be traded. This chapter provides market timelines of intra-day, day-ahead contingency contracts etc. as approved by the Commission. All terms and conditions of the contracts including trading sessions, matching rules, margin requirement and delivery procedure etc. will be as per specific rules mentioned herein.

#### 12.1. Eligibility

##### 12.1.1. Sellers

Renewable Energy sources generating electricity from Solar Energy shall be eligible to trade in 'Solar' sub segment of Contingency contract and Sources which are generating electricity from renewable energy other than Solar energy shall be eligible to trade in 'Non-Solar' sub- segment of Contingency contract. Similarly, sources which are generating electricity from Hydro shall be eligible to trade in 'Hydro' sub segment of contingency contract. The qualification of an electricity generation source as renewable source shall be determined as per norms of appropriate government (Center/State) or appropriate Commission, as the case may be. Renewable Energy Generators, Discoms, etc. shall be eligible to trade in these contracts subject to issuance of NoC/Standing clearance by RLDC/SLDCs containing type of RE source along with other details viz maximum quantum etc. in accordance with the applicable regulations. Eligibility of RE sellers shall be ascertained at the time of registration at the Exchange based on NOC/Standing clearance issued by RLDC/SLDC, as applicable. RE Generators registered under REC mechanism shall not be eligible to participate in these segments.

### 12.1.2. Buyers

All the entities which are eligible to procure power through Open Access shall be eligible to participate in these contracts as buyer. Buyers shall be eligible to participate in these contracts based on the same NoC/Standing Clearance issued for Short-term Open Access. No separate NoC is required for the buyers.

## 12.2. Renewable Purchase Obligation (RPO) /Hydropower Purchase Obligation (HPO)

The buyers may claim compliance of Solar and Non-Solar RPO against electricity procured from the 'Solar' and 'Non-Solar' sub-segments of these contracts respectively and HPO against electricity procured from the 'Hydro' sub-segment subject to applicable regulations. The Exchange will issue an electronically printable "Certificate of Purchase of Renewable Energy" as per format prescribed at Annexure – 1 to this Chapter, along with the trades executed pertaining to such certificate, to the Buyers within five days of trading. This Certificate shall be non-transferable and non-tradable.

## 12.3. Contracts

The Exchange shall make the contracts as specified in this section available for trading as per the trading and settlement calendar. These contracts will be traded in accordance with provisions of trading as specified in the respective Contract Specification. The trade sessions, matching rules applied in each trade session for concluding the contracts, risk management and settlement for such contracts will be as per specific contract specifications provided herein. The delivery of such contracts will be in accordance with CERC (Open Access in Inter-State Transmission) Regulations, 2008, as amended from time to time and relevant procedures issued by POSOCO/NLDC and by Open Access Regulations of concerned State. The Exchange holds the right to modify the parameters subject to CERC (Power Market) Regulation, 2021. Green day ahead contingency and Green Intra Day contracts are as explained below:

### 12.3.1. Contingency Contracts

The Exchange shall make the 96 time blocks contracts available for trading on day-ahead and on intra-day basis as per the timelines specified by the Exchange in the Trading and Settlement Calendar to be notified from time to time. The Exchange will carry out trading in such contracts through 'Continuous Trade' sessions. The timeline for trade matching sessions will be specified in Contract Specifications. They will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by CTU as specified in the contract specifications. The Exchange



holds the right to modify parameters as specified by CERC. The contract specifications are given at Annexure – 2 of this chapter.

#### **12.4. Trading Days and trading hours**

The Exchange shall operate this segment on all days except Exchange specified holidays. The Exchange shall declare trading and settlement calendar indicating trading sessions and trading days for each of Contracts from time to time. The Exchange may extend, advance or reduce trading hours by notifying the Members in advance.

#### **12.5. Matching Methodologies**

The matching methodology is explained below:

##### **12.5.1. Continuous Trade**

In Continuous trade method, the participants submit their orders for sell and buy on a continuous basis during the trading session. The sell and buy orders are matched on continuous basis with price-time priority. For a specific Contract, the seller with minimum quote and buyer with the maximum quote are considered as best seller and best buyer. Best five buy and sell bids, excluding the details of participants, shall be displayed on the trader's work station (TWS) to all the participants to show the market depth. In case, best buy order is better than or same as best sale order, they will be matched resulting into Contracts. Such matching will continue till the end of trading session. In case, best buy order is lower than the best sale, they will continue to be available in the order book, without resulting into Contracts. Market depth of best five orders in terms of price shall be displayed to all the participants. Order-depth option displays the best five placed orders in terms of price; whereas Price-depth option displays the best five prices by cumulating the volumes under similarly priced bids.

#### **12.6. Order Management**

The Exchange may launch more than one order book running either parallel or at different time spans. All Clients will be assigned unique client ID / Portfolio ID code which may be same or different for different market segments. The types of order available in different trading sessions are mentioned below.

##### **12.6.1. Order Types**

The Exchange Members will be able to submit the following types of orders:

1. 'All or None' type of order or partial selection order or minimum quantity selection order.

2. Other order: The Exchange may introduce other types of orders as per the requirement of the market

#### 12.6.2. **Continuous Trade Session**

The following orders are available in the Continuous Trade Session.

##### 1. Timing Constraints

- a) Rest of day (Day) : The order will be valid till the end of trading hours of that trading day.
- b) Immediate or Cancel (IOC) : The order placed will not be in pending status and will be cancelled immediately in case if not traded.
- c) End of Session (EOS) : Valid for auction session only

##### 2. Execution Constraints

- a) Fill or Kill (FoK) : This order will match the whole order OR delete the whole order.

#### 12.7. **Matching Rules**

The Exchange may modify or change the matching rules relevant to any market or order books with prior approval of the Commission. The rules for matching of bids as specified in Chapter 7 – Day Ahead Contingency & Intra Day Contracts of these Business Rules shall be mutatis-mutandis applicable for the Green Day Ahead Contingency & Green Intra Day Contracts.

#### 12.8. **Margin Requirement**

Initial Margin and Additional Margin shall be considered as provided in the Chapter – 7 (Day Ahead Contingency & Intra Day Contracts) of these Business Rules. The Margins shall be calculated considering exposure of a Member in all the market segments and respective contract specifications. Decisions of the Exchange in this respect, shall be binding on the Member and Clients.

#### 12.9. **Risk Management System**

The risk management shall be as specified in Clause-7.5 of **Chapter 7** -Day Ahead Contingency & Intra Day Contracts of these Business Rules shall be mutatis-mutandis applicable for the Green Day Ahead Contingency & Green Intra Day Contracts.

### 12.10. Surveillance

The Surveillance activities shall be as specified in Clause-7.6 of **Chapter 7** -Day Ahead Contingency & Intra Day Contracts of these Business Rules shall be mutatis-mutandis applicable for the Green Day Ahead Contingency & Green Intra Day Contracts.

### 12.11. Delivery Procedure

12.11.1. All Contracts (trades) shall be for delivery of power as per the requisition submitted by the Exchange and scheduled by respective Load Dispatch Centers.

12.11.2. Delivery Point: The delivery point of all the contracts shall be at the Seller's ISTS Periphery as per Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.

12.11.3. After finalization of successful trades, the Exchange will send details to both the counter parties to obtain concurrence from their respective SLDC, if applicable. The participants would be required to submit these concurrences in the prescribed Format in accordance with the 'Procedure for Scheduling of Bilateral Transactions' and as specified in the Calendar. Exchange will make application for transmission capacity reservation and advance scheduling as per the trading and settlement Calendar issued by Exchange time to time. In case if the "Concurrence from SLDC" received from both the parties does not match with each other, the Exchange will consider the minimum of the quantity mentioned for sending the application for scheduling only if the quantity is same for all the traded hours. In all other cases where there is mismatch in hours and / or in quantity cleared in the SLDC concurrences, the contract will be liable to made void.

12.11.4. The Buyer shall accept the decision on routes that may be available to carry the power without any reservation. Buyer will be deemed to have consented for all possible routes for delivery of the power; however, they can give preference amongst the possible routes along with the concurrence. In absence of any preference from the buyer, the Exchange at its absolute discretion can decide the route through which application is to be made and also the alternate routes to be mentioned in such application.

12.11.5. Nodal RLDC's acceptance for scheduling will be binding on both buyers and sellers. In case of anticipated congestion in one or more transmission corridor, the Exchange will have the right to participate in the electronic bid on behalf of the Members as per the guidelines laid down in the 'Procedure for Scheduling of Bilateral

Transactions'. Trade once executed shall not be revised except as provided in the Contract Specification and shall be sent for reservation of transmission capacity and advance scheduling as per the Trading and Settlement Calendar. The schedule shall not be revised during the delivery period except as provided in the Contract Specification.

- 12.11.6. Any shortage or excess delivery of electricity from the total schedule will be settled by the respective participants under DSM mechanism as per the procedure laid down by the CERC or any other settlement system as prescribed by concerned SERC.
- 12.11.7. Taxes, duties, cess and other levies: The price of all the Contracts shall be quoted at delivery point excluding the transmission charges, losses, scheduling and system operation charges, taxes, duties, cess, surcharge and other levies and the same shall be borne by the Buyers or Sellers as applicable.
- 12.11.8. Metering of electricity: Arrangement for metering shall be made by the Seller/Buyer as per the requirements of respective SLDC / RLDC. Members and the relevant authority shall be responsible to resolve the issues related to metering of electricity. Members shall indemnify and keep indemnified the Exchange from any disputes related to metering.
- 12.11.9. Transmission Losses: Seller shall bear in kind the transmission/ distribution losses from its own interface up to the delivery point. Buyer shall be required to bear in kind all the transmission/ distribution losses from the delivery point up to its own interface. Transmission loss percentage for the respective transmission system as applicable at the time of actual delivery shall be applied for deriving scheduled quantities at various points in the transmission route in accordance with the Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
- 12.11.10. Transmission Charges: All the transmission charges shall be calculated on the total quantum of power scheduled at seller's ISTS Periphery. Seller shall pay for the transmission charges and Wheeling Charges (wherever applicable) up-to the point of delivery and Buyer shall bear all the charges for enroute ISTS transmission system and also the transmission and wheeling charges (wherever applicable) for its respective State grid in accordance with the Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.

12.11.11. Scheduling and Operating charges: Seller will pay for the Scheduling and Operating charges up to delivery point i.e. for the concerned RLDCs /SLDCs /ALDCs involved in transaction. Buyer will bear all the Scheduling and Operating charges from its interface up to delivery point i.e. for the concerned RLDCs /SLDCs /ALDCs involved in transaction. Application fees for the Nodal RLDC/SLDC will be paid by the buyer.

12.11.12. All Transmission, Wheeling charges, Scheduling, Operating charges and application fees will be paid to the Nodal RLDC/SLDC as per advice received from them and the same will be recovered from the buyers and sellers.

12.11.13. The Application fee for processing the 'Concurrence from SLDC' shall be paid by Buyer and Seller for their respective SLDCs.

### **12.12. Transaction Fees**

The Exchange will charge a transaction fee, as may be specified by the Exchange from time to time, on the transactions carried through the Exchange. Any changes in the transaction fees shall be effected by Exchange with prior approval of the Commission.

### **12.13. Reports**

After end of trading session, the Exchange will provide various reports to the Members like Trade file Report, Provisional Obligation Report, Final Obligation Report and other relevant matters.

**Annexure 1****Certificate of Purchase of Renewable Energy****HPX****Certificate of Purchase of Renewable Energy**Number C-[**Certificate No.**]  
YYYY]Issued On-[DD-**MMM-****Serial No.-[... ]****[NAME OF CORPORATION]**

A [ ] Corporation

**[#Issued]** CertificatesEnergy Type [**Solar / Non Solar**]**Session ID**

This certifies that [**Buyer**] has purchased [**Quantity in MWh**] of Renewable Energy generated from [**Solar / Non-Solar**] energy source in the period from [**DD/MM/YYYY**] to [**DD/MM/YYYY**] through **Hindustan Power Exchange Limited**.

This certificate represented hereby is issued on non-transferable and non-tradable basis and shall be held subject to all the provisions of the orders and regulations of Honorable CERC as amended from time to time and the Bye-laws, Rules and Business Rules of **Hindustan Power Exchange Limited**

*This is a computer-generated statement hence doesn't require signature*

## Annexure 2

### Contract Specification: Green Energy Contingency Contract

S. No.	Item	Details
1	<b>Contract Name*</b>	Green National/Region wise Contingency Contracts (Solar/Non-Solar/Hydro)
3	<b>Contract Type</b>	National Contract or regional contract for physical delivery of electricity generated from Solar, Non-Solar and Hydro renewable energy sources.
4	<b>Contract available for Trading</b>	Contracts available for delivery of 15 mins or combination thereof in a day from 1 <sup>st</sup> time block to 96 <sup>th</sup> time block
5	<b>Trading day*</b>	Same day or a day before delivery day or as per trading and settlement calendar declared in advance.
6	<b>Trading Session*</b>	One continuous trading session will be made available to the members for bidding.
7	<b>Bidding process</b>	Sellers and Buyers to submit bid specifying quantum (MW) and Price for each 15-minute time block or combination thereof.
8	<b>Matching of Bids</b>	Continuous trade session.
9	<b>Trading Hours</b>	Continuous trade session as per trading and settlement calendar to be notified by the Exchange from time to time
10	<b>Minimum Volume quotation*</b>	0.1 MW
11	<b>Minimum Volume Step*</b>	0.01MW (Solar, non-solar)/0.1 MW (Hydro)
12	<b>Lot size</b>	0.1 MW * 15 minutes (Solar, non-solar)/ 0.1*15 minutes (Hydro)
13	<b>Maximum bid size*</b>	Bids should not be more than the allowed MW in any of Concurrence/Clearance issued by its SLDC to the Members/Clients at any time. It will be the responsibility of the Member to adhere to this rule.
14	<b>Price Quote Basis</b>	Rs. Per MWh (excluding all fees, charges, taxes, if applicable)
15	<b>Price Tick*</b>	Rs. 1 per MWh
17	<b>Quantity Variation</b>	Zero quantity variation allowed.
18	<b>Settlement</b>	Traded price * Quantity scheduled by RLDC at delivery point.
19	<b>Initial Margins (Operational Limit)*</b>	105% margin from buyers of the total order value should be available in cash with the exchange at the time of bidding for continuous trading sessions.

<b>20</b>	<b>Transaction Fees</b>	Fees payable by buyer and seller to Exchange for the quantity approved by LDC at delivery point as specified by the Exchange from time to time with the approval of the commission.
<b>21</b>	<b>Scheduling</b>	As per Procedure for Scheduling of Bilateral Transactions
<b>22</b>	<b>LDC Clearance</b>	The buyer and seller will have to take concurrence from their respective LDC for scheduling of Power. This concurrence has to be submitted as per the timelines specified in the Trading and Settlement Calendar. NOC / Prior Standing Clearance issued by the LDC in format PX-I as per CERC (Interstate Open Access) Regulations, are also valid for these transactions.
<b>23</b>	<b>Application for Scheduling</b>	Application for Scheduling will be Submitted to Nodal LDC as per the "Procedure for Scheduling of bilateral transactions".
<b>24</b>	<b>Revision of Schedule</b>	Not Allowed.
<b>25</b>	<b>Delivery</b>	The quantity shall be deliverable as per the schedule issued by the respective LDC.
<b>26</b>	<b>Delivery point</b>	At the Sellers ISTS periphery.
<b>27</b>	<b>Application fees, Operating and Transmission Charges and Losses</b>	Seller will bear all the Transmission, Scheduling & Operating charges and Transmission Losses (in kind) up to the delivery point and Buyer shall bear all the Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at seller's ISTS Periphery.
<b>28</b>	<b>Force majeure</b>	In case of force majeure, the Exchange will settle the contract as per final schedule issued by LDCs.
<b>29</b>	<b>Fines &amp; penalties*</b>	As specified by the Exchange.
<b>30</b>	<b>Funds pay in by Members</b>	Exchange will debit/ adjust the funds pay-in on the next day of trading from buyer's Member/ clients as applicable. Excess margins, if any due to partial concurrence received will be refunded back to the Member on the settlement day.
<b>31</b>	<b>Funds pay out to Members</b>	Amount equivalent to net obligation will be credited on D+1 basis (where D stands for Delivery day.)

\* Exchange may modify these parameters from time to time with prior intimation to its Members after taking approval of CERC.



## **CHAPTER 13**

### **GREEN TERM AHEAD MARKET (GTAM)**

13.1. The Green Term Ahead Market (G-TAM) segment comprises of contracts for trade in electricity generation from renewable energy sources e.g. Solar, Wind etc. and shall operate in accordance with the procedure issued by POSOCO for 'Scheduling of Bilateral Transactions' under CERC (Open Access in Inter-State Transmission) Regulations, 2008, as amended from time to time. There are three sub-segments within G-TAM market namely Solar, Non-Solar and Hydro. In Solar sub- segment, only electricity generated from solar energy sources shall be traded and in Non-Solar sub-segment, electricity generated from renewable energy sources other than Solar energy sources shall be traded. Similarly, in Hydro sub-segment, only the electricity generated from Hydro energy sources, which are eligible for compliance of Hydro Purchase Obligation (HPO) notified by appropriate commission, shall be traded. This chapter provides market timelines of daily, weekly, monthly and any-day contracts as approved by the Commission. All terms and conditions of the contracts including trading sessions, matching rules, margin requirement and delivery procedure etc. will be as per specific rules mentioned herein.

#### **13.2. Eligibility**

13.2.1. Sellers: Renewable Energy sources generating electricity from Solar Energy shall be eligible to trade in 'Solar' sub segment of G-TAM and Sources which are generating electricity from renewable energy other than Solar energy shall be eligible to trade in 'Non-Solar' sub- segment of G-TAM. The qualification of an electricity generation source as renewable source shall be determined as per norms of appropriate government (Center/State) or appropriate Commission, as the case may be. Renewable Energy Generators, Discoms, etc. shall be eligible to trade in G-TAM subject to issuance of NoC/Standing clearance by RLDC/SLDCs containing type of RE source along with other details viz maximum quantum etc. in accordance with the applicable regulations. Eligibility of RE sellers shall be ascertained at the time of registration at the Exchange based on NOC/Standing clearance issued by RLDC/SLDC, as applicable. RE Generators registered under REC mechanism shall not be eligible to participate in G-TAM segment.

13.2.2. Buyers: All the entities which are eligible to procure power through Open Access shall be eligible to participate in G-TAM as buyer. Buyers shall be eligible to participate in the G-TAM based on the same NoC/Standing Clearance issued for Short term Open Access. No separate NoC is required for the buyers.

### **13.3. Green Purchase Obligation**

#### **13.3.1. Renewable Purchase Obligation (RPO)**

The buyers may claim compliance of Solar and Non-Solar RPO against electricity procured from the 'Solar' and 'Non-Solar' sub-segments of G-TAM respectively subject to applicable regulations. The Exchange will issue an electronically printable "Certificate of Purchase of Renewable Energy" as per format prescribed at Annexure – 1 to this Chapter, along with the trades executed pertaining to such certificate, to the Buyers within five days of trading. This Certificate shall be non-transferable and non-tradable.

#### **13.3.2. Hydropower Purchase Obligation (HPO)**

The buyers may claim compliance of HPO against electricity procured from the 'Hydro' sub-segment, subject to applicable regulations. The Exchange will issue an electronically printable "Certificate of Purchase of Renewable Energy" as per format prescribed at Annexure-1, along with the trades executed pertaining to such certificate, to the Buyers within five days of trading. This Certificate shall be non-transferable and non-tradable

### **13.4. Contracts**

The Exchange shall make the contracts as specified in this section available for trading as per the trading and settlement calendar. These contracts will be traded in accordance with provisions of trading as specified in the respective Contract Specification. The trade sessions, matching rules applied in each trade session for concluding the contracts, risk management and settlement for such contracts will be as per specific contract specifications provided herein. The delivery of such contracts will be in accordance with CERC (Open Access in Inter-State Transmission) Regulations, 2008, as amended from time to time and relevant procedures issued by POSOCO/NLDC and by Open Access Regulations of concerned State. The Exchange holds the right to modify the parameters subject to CERC (Power Market) Regulation, 2021. Green Term-Ahead Market shall have two types of contracts namely, Daily Contract and Weekly Contract as explained below:

#### **13.4.1. Daily Contracts**

The Exchange will make the Daily Contracts available for trading on each trading day up to a period (Days) specified by the Exchange for delivery of electricity from 00:00 Hrs. to 24:00 Hrs of a Day. The Exchange will carry out trading in such contracts through 'Uniform Price Step Auction' sessions. The timeline for trade matching sessions is specified in the Contract Specifications. Executed contracts will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by

POSOCO/NLDC as specified in the contract specifications. The contract specifications are given at Annexure – 2 of this chapter.

#### 13.4.2. **Weekly Contracts**

The Exchange will make the weekly contracts available for trading on each trading day maximum up to a period specified by Exchange for delivery of electricity on all defined week provided in the trading and settlement calendar. The Exchange will carry out trading in such contracts through 'Uniform Price Step Auction' sessions. The timeline for trade matching sessions is specified in Contract Specifications. Executed contracts will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by POSOCO/NLDC as specified in the contract specifications. The contract specifications are given at Annexure – 3 of this chapter.

#### 13.4.3. **Monthly Contracts**

The Exchange will make the monthly contracts available for trading maximum up to a period as may be specified by the CERC for delivery of electricity on all defined months provided in the trading and settlement calendar. The Exchange will carry out trading in such contracts through 'Uniform Price Step Auction'. The timeline for trade matching sessions is specified in Contract Specifications. Executed contracts will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by POSOCO/NLDC as specified in the contract specifications. The contract specifications are given at Annexure – 4 of this chapter.

#### 13.4.4. **Any-Day(s) Single Sided Contracts**

The Exchange will make the Any-Day(s) Single Sided contracts available for trading maximum up to a period as may be specified by CERC for delivery of electricity as may be requisitioned by the buyer. The buyer may seek any time and day or combination thereof. The Exchange will carry out trading in such contracts through 'Reverse Auction' where Buyer will be the requisitioner. The timeline for trade matching sessions will be specified in contract specifications. Executed contracts will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by POSOCO/NLDC as specified in the contract specifications. The contract specifications are given at Annexure – 5 of this chapter.

### 13.5. **Trading Days and trading hours**

The Exchange shall operate this segment on all days except Exchange specified holidays. The Exchange shall declare trading and settlement calendar indicating trading sessions and

trading days for each of Contracts from time to time. The Exchange may extend, advance or reduce trading hours by notifying the Members in advance.

### **13.6. Matching Methodologies**

The matching methodologies as specified in Clause-8.3 of **Chapter 8** – Term Ahead Market (TAM) of these Business Rules shall be mutatis-mutandis applicable for the Green Term Ahead Market.

### **13.7. Order Management**

The Exchange may launch more than one order book running either parallel or at different time spans. All Clients will be assigned unique client ID / Portfolio ID code which may be same or different for different market segments. The types of order available in different trading sessions are mentioned below.

#### **Order Types**

The Exchange Members will be able to submit the following type of orders:  
Timing Constraints End of Session (EOS) – Valid for auction session only.

### **13.8. Matching Rules**

The Exchange may modify or change the matching rules relevant to any market with prior approval of Commission. The rules for matching of bids as specified in Chapter 8 – Term Ahead Market (TAM) of these Business Rules shall be mutatis-mutandis applicable for the Green Term Ahead Market.

### **13.9. Margin Requirement**

Initial Margin and Additional Margin shall be considered as provided in the Chapter – 8 (Term Ahead Market) of these Business Rules. The Margins shall be calculated considering exposure of a Member in all the market segments and respective contract specifications. Decisions of the Exchange in this respect, shall be binding on the Member and Clients.

### **13.10. Risk Management System**

The Risk Management System as specified in Clause-8.7 of **Chapter 8** – Term Ahead Market (TAM) of these Business Rules shall be mutatis-mutandis applicable for the Green Term Ahead Market.

### **13.11. Surveillance**

The Surveillance as specified in Clause-8.8 of **Chapter 8** – Term Ahead Market (TAM) of these Business Rules shall be mutatis-mutandis applicable for the Green Term Ahead Market.

**13.12. Delivery Procedure**

- 13.12.1. All Contracts (trades) shall be for delivery of power as per the requisition submitted by the Exchange and scheduled by respective Load Dispatch Centers.
- 13.12.2. **Delivery Point:** The delivery point of all the contracts shall be at the Seller's ISTS Periphery as per Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
- 13.12.3. After finalization of successful trades, the Exchange will send details to both the counter parties to obtain concurrence from their respective SLDC, if applicable. The participants would be required to submit these concurrences in the prescribed Format in accordance with the 'Procedure for Scheduling of Bilateral Transactions' and as specified in the Calendar. Exchange will make application for transmission capacity reservation and advance scheduling as per the trading and settlement Calendar issued by Exchange time to time. In case if the "Concurrence from SLDC" received from both the parties does not match with each other, the Exchange will consider the minimum of the quantity mentioned for sending the application for scheduling only if the quantity is same for all the traded hours. In all other cases where there is mismatch in hours and / or in quantity cleared in the SLDC concurrences, the contract will be liable to made void.
- 13.12.4. The Buyer shall accept the decision on routes that may be available to carry the power without any reservation. Buyer will be deemed to have consented for all possible routes for delivery of the power; however, they can give preference amongst the possible routes along with the concurrence. In absence of any preference from the buyer, the Exchange at its absolute discretion can decide the route through which application is to be made and also the alternate routes to be mentioned in such application.
- 13.12.5. Nodal RLDC's acceptance for scheduling will be binding on both buyers and sellers. In case of anticipated congestion in one or more transmission corridor, the Exchange will have the right to participate in the electronic bid on behalf of the Members as per the guidelines laid down in the 'Procedure for Scheduling of Bilateral Transactions'. Trade once executed shall not be revised except as provided in the Contract Specification and shall be sent for reservation of transmission capacity and advance scheduling as per the Trading and Settlement Calendar. The schedule shall not be revised during the delivery period except as provided in the Contract Specification.

- 13.12.6. Any shortage or excess delivery of electricity from the total schedule will be settled by the respective participants under DSM mechanism as per the procedure laid down by the CERC or any other settlement system as prescribed by concerned SERC.
- 13.12.7. Taxes, duties, cess and other levies: The price of all the Contracts shall be quoted at delivery point excluding the transmission charges, losses, scheduling and system operation charges, taxes, duties, cess, surcharge and other levies and the same shall be borne by the Buyers or Sellers as applicable.
- 13.12.8. Metering of electricity: Arrangement for metering shall be made by the Seller/Buyer as per the requirements of respective SLDC / RLDC. Members and the relevant authority shall be responsible to resolve the issues related to metering of electricity. Members shall indemnify and keep indemnified the Exchange from any disputes related to metering.
- 13.12.9. **Transmission Losses:** Seller shall bear in kind the transmission/ distribution losses from its own interface up to the delivery point. Buyer shall be required to bear in kind all the transmission/ distribution losses from the delivery point up to its own interface. Transmission loss percentage for the respective transmission system as applicable at the time of actual delivery shall be applied for deriving scheduled quantities at various points in the transmission route in accordance with the Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
- 13.12.10. **Transmission Charges:** All the transmission charges shall be calculated on the total quantum of power scheduled at seller's ISTS Periphery. Seller shall pay for the transmission charges and Wheeling Charges (wherever applicable) up-to the point of delivery and Buyer shall bear all the charges for enroute ISTS transmission system and also the transmission and wheeling charges (wherever applicable) for its respective State grid in accordance with the Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
- 13.12.11. **Scheduling and Operating charges:** Seller will pay for the Scheduling and Operating charges up to delivery point i.e. for the concerned RLDCs /SLDCs /ALDCs involved in transaction. Buyer will bear all the Scheduling and Operating charges from its interface up to delivery point i.e. for the concerned RLDCs /SLDCs /ALDCs involved in transaction. Application fees for the Nodal RLDC/SLDC will be paid by the buyer.

- 13.12.12. All Transmission, Wheeling charges, Scheduling, Operating charges and application fees will be paid to the Nodal RLDC/SLDC as per advice received from them and the same will be recovered from the buyers and sellers.
- 13.12.13. The Application fee for processing the 'Concurrence from SLDC' shall be paid by Buyer and Seller for their respective SLDCs.
- 13.12.14. **E bidding consent:** The contract finalized between the Buyer and the Seller through Power Exchange shall be subject to the availability of the transmission capacity and constraints in the system. In the event of anticipated congestion in one or more transmission corridor for the application made under advance scheduling and a need for participating in the e- bidding for securing transmission corridor as per the guidelines laid down in the procedure for scheduling of bilateral transaction, the following shall apply:
- 13.12.14.1. The Exchange will have the right to participate in the e-bidding on behalf of the Members as per the above guidelines for bilateral transactions;
- 13.12.14.2. In case of more than one transaction contracted through the Exchange, the Exchange will have the right to participate in the e-bidding for both the transactions;
- 13.12.14.3. Each of the Buyer participating in the transaction through the Exchange shall notify to the Exchange the maximum transmission charges for which the Exchange can bid on his behalf.
- 13.12.14.4. In case any of the Buyer participating in the Exchange is not willing to give consent for e- bidding, there will be an automatic reduction in the contracted quantity for such Buyer and the schedule for dispatch of the related quantum affected by the anticipated congestion may not be implemented, although the Exchange will forward to the concerned RLDC the request for scheduling subject to the availability of the transmission capacity;
- 13.12.14.5. In case the Buyer notifies the maximum transmission charges to which they are agreeing to pay, the Exchange will participate on behalf of the respective Buyer in the e-bidding up to the same limit;
- 13.12.14.6. The decision on the person entitled to the transmission corridor based on e-bidding taken by the concerned RLDC shall be binding on the parties.

**13.13. Transaction Fees**

The Exchange will charge a transaction fee, as may be specified by the Exchange from time to time, on the transactions carried through the Exchange. Any changes in the transaction fees shall be effected by Exchange with prior approval of the Commission.

**13.14. Reports**

After end of trading session, the Exchange will provide various reports to the Members like Trade file Report, Provisional Obligation Report, Final Obligation Report and other relevant matters.



**Annexure 1****Certificate of Purchase of Renewable Energy****HPX****Certificate of Purchase of Renewable Energy**Number C-[**Certificate No.**]  
YYYY]Issued On-[DD-**MMM-****Serial No.-[... ]****[NAME OF CORPORATION]**

A [ ] Corporation

**[#Issued]** CertificatesEnergy Type [**Solar / Non-Solar**]**Session ID**

This certifies that [**Buyer**] has purchased [**Quantity in MWh**] of Renewable Energy generated from [**Solar / Non-Solar**] energy source in the period from [**DD/MM/YYYY**] to [**DD/MM/YYYY**] through *Hindustan Power Exchange Limited*.

This certificate represented hereby is issued on non-transferable and non-tradable basis and shall be held subject to all the provisions of the orders and regulations of Honorable CERC as amended from time to time and the Bye-laws, Rules and Business Rules of *Hindustan Power Exchange Limited*

*This is a computer generated statement hence doesn't require signature*

## Annexure 2

### Contract Specification: Green Daily Contract

S. No.	Item	Details
1	<b>Contract Name*</b>	National/ Regional Daily Contracts (Solar/Non-solar/Hydro)
2	<b>Contract Type</b>	National or Electrical Region-specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
3	<b>Contract available for Trading</b>	Daily contracts for delivery in a calendar day will be available starting from T+2 day to maximum up to T+90 days on a rolling basis. (T-Trade Day).
4	<b>Trading day*</b>	Trading will be available on the days as per Trading and Settlement calendar declared in advance.
5	<b>Trading Session*</b>	Trading session will be made available to the Members/Clients for bidding on each Trading Day on Daily Basis up to two days before delivery day.
6	<b>Bidding process</b>	<p><b>Solar/Non-Solar</b> Sellers and Buyers to submit order specifying duration, quantum in MWh and price in Rs./MWh. Sellers to provide its profile having 15 minute time block wise quantity (MW). It may be an 'All or None' type of order or partial selection type order. Each profile of seller shall be aggregated and converted in MWh for the purpose of matching.</p> <p><b>Hydro</b> Sellers and Buyers to submit bid specifying duration, quantum (MW) and price in Rs/MWh for each 15-minute time block or combination thereof as the case may be</p>
7	<b>Matching of Bids</b>	Uniform Price Step Open Auction
8	<b>Trading Hours</b>	Trading session as per trading and settlement calendar to be notified by the Exchange from time to time
9	<b>Minimum Volume quotation*</b>	0.1 MW
10	<b>Minimum Volume Step*</b>	0.1MW

<b>11</b>	<b>Lot size</b>	0.1 MW * 15 minutes or combination thereof as notified by exchange from time to time.
<b>12</b>	<b>Maximum bid size*</b>	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility of the Member or the Clients to adhere to this rule.
<b>13</b>	<b>Price Quote Basis</b>	Rs. Per MWH (excluding all fees, charges, taxes etc.)
<b>14</b>	<b>Price Tick*</b>	Rs. 1 per MWH
<b>16</b>	<b>Quantity Variation</b>	Zero quantity variation allowed.
<b>17</b>	<b>Settlement</b>	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of change of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed.
<b>18</b>	<b>Risk Management</b>	<p><b>Initial Margins:</b> Initial Margins equivalent to 5% of the order value or as may be specified by the Exchange from time to time will be collected from the Members/Clients (both from buyer &amp; seller) at the time of bidding. The initial margins could be in the form of cash or non-cash or combination thereof. In the absence of initial margins, the Members/Clients will not be allowed to place the bids.</p> <p><b>Additional Margin:</b> After the trade and prior to submitting Application before the concerned Load Dispatch Center for scheduling of transactions, Additional Margin equivalent to the 50% of the Trade Value or as may be specified by the Exchange based on risk assessment, will be collected from the Member/Client (both from buyers &amp; sellers). Additional Margin can be in the form of cash or non-cash or combination thereof. Non-receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default.</p> <p><b>Ad hoc Margin:</b> Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract.</p>

<b>19</b>	<b>Transaction Fees</b>	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point, as specified by the Exchange from time to time, as approved by the Commission.
<b>20</b>	<b>Scheduling</b>	As per Procedure for Scheduling of Bilateral Transactions
<b>21</b>	<b>LDC Clearance</b>	Post trade, in case of buyer/seller connected to State transmission or distribution system, the buyer/ seller shall provide concurrence of SLDC of their respective State to the Exchange. The concurrence shall be submitted to the Exchange as per the timelines specified in the Trading & Settlement calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by SLDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
<b>22</b>	<b>Application for Scheduling</b>	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Settlement Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
<b>23</b>	<b>Alternate Route</b>	The buyer will be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
<b>24</b>	<b>Revision of Schedule</b>	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
<b>25</b>	<b>E-bidding of Transmission Corridor</b>	In case of perceived congestion in the link, if LDC conducts e-bidding process for allocation of transmission corridor, the Exchange will participate in the process of e bidding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission

		charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding.
<b>26</b>	<b>Delivery</b>	The quantity shall be deliverable as per the schedule issued by the LDC.
<b>27</b>	<b>Delivery point</b>	The delivery point shall be at Seller's ISTS Periphery, as may be specified by the Exchange.
<b>28</b>	<b>Application fees, Operating and Transmission Charges and Losses</b>	Seller will bear the Transmission, Scheduling & Operating charges and Transmission and wheeling Losses (in kind), as applicable, up to the delivery point and Buyer shall bear all the Transmission charges, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
<b>29</b>	<b>Force majeure</b>	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
<b>30</b>	<b>Fines &amp; penalties*</b>	As specified by the Exchange.
<b>31</b>	<b>Funds pay in by Members</b>	Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as Pay in default.
<b>32</b>	<b>Funds pay out to Members</b>	Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.

### Annexure 3

#### Contract Specification: Green Weekly Contract

S. No.	Item	Details
1	<b>Contract Name*</b>	National/ Regional Weekly Contracts (Solar/Non-Solar/Hydro)
2	<b>Contract Type</b>	National or Electrical Region-specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
3	<b>Contract available for Trading</b>	The weekly contracts will be available for trading for calendar Weeks from Monday to Sunday from TW+1 week to maximum up to TW+12 weeks on a rolling basis. (TW-Trade Week).
4	<b>Trading day*</b>	Trading will be available on the days as per Trading & Settlement calendar declared in advance.
5	<b>Trading Session*</b>	One trading session will be made available to the members for bidding separately for Solar, Non-solar and Hydro.
6	<b>Bidding process</b>	<p>Solar/Non-Solar</p> <p>Sellers and Buyers to submit order specifying duration, quantum in MWh and price in Rs/MWh. Sellers to provide its profile having 15-minute time block wise quantity (MW). It may be an 'All or None' type of order or partial selection type order. Each profile of seller shall be aggregated and converted in MWh for the purpose of matching.</p> <p>Hydro</p> <p>Hydro Sellers and Buyers to submit bid specifying duration, quantum (MW) and price in Rs/MWh for each 15-minute time block or combination thereof as the case may be</p>
7	<b>Matching of Bids</b>	Uniform Price Step Auction.
8	<b>Trading Hours</b>	Uniform Price Step Auction as per trading and settlement calendar to be notified by the Exchange from time to time
9	<b>Minimum Volume quotation*</b>	0.1 MW

<b>10</b>	<b>Minimum Volume Step*</b>	0.1MW
<b>11</b>	<b>Lot size</b>	0.1 MW * 15 minutes or combination thereof as notified by exchange from time to time.
<b>12</b>	<b>Maximum bid size*</b>	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility of the Member or the Clients to adhere to this rule.
<b>13</b>	<b>Price Quote Basis</b>	Rs. Per MWh (excluding all fees, charges, taxes etc.)
<b>14</b>	<b>Price Tick*</b>	Rs. 1 per MWh
<b>16</b>	<b>Quantity Variation</b>	Zero quantity variation allowed
<b>17</b>	<b>Settlement</b>	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of change of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed.
<b>18</b>	<b>Contracted Quantity</b>	Contracted quantity shall be the quantity approved and scheduled by LDC at delivery point against the Application for Scheduling made by Exchange. However, till the approval of application by LDC, traded quantity shall be considered as contracted quantity. In case, multiple applications are to be filed for single trade and partial quantity has been scheduled, the contracted quantity shall be equal to sum of quantity scheduled and balance trade quantity to be delivered.
<b>19</b>	<b>Risk Management</b>	<p><b>Initial Margins :</b> Initial Margins equivalent to 5% of the order value or as may be specified by the Exchange from time to time will be collected from the Members/Clients (both from buyer &amp; seller) at the time of bidding. The initial margins could be in the form of cash or non-cash or combination thereof. In the absence of initial margins, the Members/Clients will not be allowed to place bid.</p> <p><b>Additional Margins :</b> After the trade and prior to submitting of Application before the concerned Load Dispatch Center for scheduling of transactions, Additional Margin equivalent to the 50% of the Trade Value or as may be specified by the Exchange based on risk assessment will be collected from the Member/Client</p>

		<p>(both from buyers &amp; sellers). Additional Margin can be in the form of cash or non-cash or combination thereof. Nonreceipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default.</p> <p><b>Ad hoc Margin:</b> Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract. d) Funds pay in Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any nonpayment of funds shall be considered as pay in default. e) Funds pay out Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.</p>
<b>20</b>	<b>Transaction Fees</b>	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point, as specified by the Exchange from time to time, as approved by the Commission.
<b>21</b>	<b>Scheduling</b>	As per Procedure for Scheduling of Bilateral Transactions
<b>22</b>	<b>LDC Clearance</b>	Post trade, in case of buyer/seller connected to State transmission or distribution system, the buyer/ seller shall provide concurrence of SLDC of their respective State to the Exchange. The concurrence shall be submitted to the Exchange as per the timelines specified in the Trading & Settlement calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by SLDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
<b>23</b>	<b>Application for Scheduling</b>	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Settlement Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation



		between traded quantity and scheduled quantity on account of LDC approval.
<b>24</b>	<b>Alternate Route</b>	The buyer will be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
<b>25</b>	<b>Revision of Schedule</b>	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
<b>26</b>	<b>E-bidding</b>	In case of perceived congestion in transmission link, if LDC conducts e-bidding process for allocation of transmission corridor then the Exchange will participate in the process of e bidding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding
<b>27</b>	<b>Delivery</b>	The quantity shall be deliverable as per the schedule issued by the LDC.
<b>28</b>	<b>Delivery point</b>	The delivery point shall be at Seller's ISTS Periphery, as may be specified by the Exchange.
<b>29</b>	<b>Application fees, Operating and Transmission Charges and Losses</b>	Application fees shall be collected from buyer on date of application to Nodal LDC. Transmission and Operating Charges as applicable on quantum scheduled at the delivery point and payable to the Nodal LDC, will be collected from the buyer and seller members/Clients on receipt of the acceptance from the nodal LDC.
<b>30</b>	<b>Force majeure</b>	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
<b>31</b>	<b>Fines &amp; penalties*</b>	As decided by the Exchange from time to time and informed through circular.
<b>32</b>	<b>Funds pay in by Members</b>	Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as Pay in default.
<b>33</b>	<b>Funds pay out to Members</b>	Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.

## Annexure 4

### Contract Specification: Green Monthly Contract

S. No.	Item	Details
1	<b>Contract Name*</b>	National/ Regional Monthly Contracts (Solar/Non-solar/Hydro)
2	<b>Contract Type</b>	National or Electrical Region-specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
3	<b>Contract available for Trading</b>	The Monthly contracts will be available for calendar Months from TM+1 Month to maximum up to TM+3 Months on a rolling basis. (TM-Trade Month)
4	<b>Trading day*</b>	Trading will be available on the days as per Trading & Settlement calendar declared in advance.
5	<b>Trading Session*</b>	Bidding session will be made available to the members/Clients for bidding on each Trading Day from  For the first month (M1) contract – ten days prior to the close of zero month (M0); For the second month (M2) contract – five days prior to the close of zero month (M0); For the third month (M3) contract – last day of zero month (M0).
6	<b>Bidding process</b>	Solar/Non-Solar Sellers and Buyers to submit order specifying duration, quantum in MWh and price in Rs/MWh. Sellers to provide its profile having 15-minute time block wise quantity (MW). It may be an 'All or None' type of order or partial selection type order. Each profile of seller shall be aggregated and converted in MWh for the purpose of matching. Hydro Sellers and Buyers to submit bid specifying duration, quantum (MW) and price in Rs/MWh for each 15-minute time block or combination thereof as the case may be.
7	<b>Matching of Bids</b>	Uniform Price Step Auction.
8	<b>Trading Hours</b>	As per trading and settlement calendar to be notified by the Exchange from time to time

9	<b>Minimum Volume quotation*</b>	0.1 MW
10	<b>Minimum Volume Step*</b>	0.1MW
11	<b>Lot size</b>	0.1 MW * 15 minutes or combination thereof as notified by Exchange
12	<b>Maximum bid size*</b>	Bid quantity shall not be more than the maximum injection/drawl allowed by the concerned LDC. Member/Client shall ensure the compliance of this rule.
13	<b>Price Quote Basis</b>	Rs. Per MWh (excluding all fees, charges, taxes etc.)
14	<b>Price Tick*</b>	Rs. 1 per MWh
16	<b>Quantity Variation</b>	Zero quantity variation allowed
17	<b>Settlement</b>	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of revision of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed
18	<b>Contracted Quantity</b>	Contracted quantity shall be the quantity approved and scheduled by LDC at delivery point against the Application for Scheduling made by Exchange. However, till the approval of application by LDC, traded quantity shall be considered as contracted quantity. In case, multiple applications are to be filed for single trade, and partial quantity has been scheduled, the contracted quantity shall be equal to sum of quantity scheduled and balance trade quantity to be delivered.
19	<b>Risk Management</b>	<p><b>Initial Margins :</b> Initial Margins equivalent to 1% of the order value or as may be specified by the Exchange from time to time will be collected from the Members/Clients (both from buyer &amp; seller) at the time of bidding. The initial margins could be in the form of cash or non-cash or combination of both. In the absence of initial margins, the Members/Clients will not be allowed to place the bids</p> <p><b>Additional Margins :</b> After the trade and prior to submitting of Application before the concerned Load Dispatch Center for scheduling, Additional Margin equivalent to the 20% of the Trade Value or as may be specified by the Exchange time to time based on risk assessment will be collected from the</p>

		<p>Member/Client (both from buyers &amp; sellers). Additional Margin can be in the form of cash or non-cash or combination thereof. Non receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default. c)</p> <p><b>Ad hoc Margin:</b> Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract.</p>
<b>20</b>	<b>Transaction Fees</b>	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point as specified by the exchange from time to time, as approved by the Commission.
<b>21</b>	<b>Scheduling</b>	As per procedure of Bilateral transaction.
<b>22</b>	<b>SLDC Clearance</b>	Post trade, in case of buyer/seller is connected to State transmission or distribution system, the buyer/seller shall provide concurrence of LDC of their respective State to the Exchange for the traded quantity. The concurrence shall be submitted to the Exchange as per the timelines specified in the trading calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by LDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
<b>23</b>	<b>Application for Scheduling</b>	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Delivery Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
<b>24</b>	<b>Alternate Route</b>	The buyer shall be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.

<b>25</b>	<b>Revision of Schedule</b>	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
<b>26</b>	<b>E-bidding</b>	In case of perceived congestion in the transmission link, if LDC conducts e-bidding process for allocation of transmission corridor then the Exchange will participate in the process of e-bidding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding.
<b>27</b>	<b>Delivery</b>	The quantity shall be deliverable as per the schedule issued by the LDC.
<b>28</b>	<b>Delivery point</b>	The delivery point shall be at Seller's ISTS Periphery as may be specified by requisitioner.
<b>29</b>	<b>Application fees, Operating and Transmission Charges and Losses</b>	Seller will bear the Transmission, Scheduling & Operating charges and Transmission Losses (in kind), as applicable, up to the delivery point and Buyer shall bear all the Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
<b>30</b>	<b>Force majeure</b>	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
<b>31</b>	<b>Fines &amp; penalties*</b>	As decided by the Exchange from time to time and informed through circular.
<b>32</b>	<b>Funds pay in by Members</b>	Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as pay in default.
<b>33</b>	<b>Funds pay out to Members</b>	Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.

## Annexure 5

### Contract Specification: Green Any-Day Contract

S. No.	Item	Details
1	<b>Contract Name*</b>	Green Any-Day(s) Single Sided Contracts (Solar/Non-solar/Hydro)
2	<b>Contract Type</b>	Contracts for physical delivery of electricity generated from Solar or Non-Solar or Hydro renewable energy sources
3	<b>Contract available for Trading</b>	Any-Day(s) Single Sided contracts will be available for user defined Day(s) and hour(s)/time block(s) from T+2 day to maximum upto T+90 days (T-Trade Day)
4	<b>Trading day*</b>	Trading will be available on the days as per Trading & Settlement calendar declared in advance.
5	<b>Trading Session*</b>	Trading sessions will be made available to the members/Clients for bidding on each Trading Day on Daily basis upto 2 days before delivery as per Trading & Settlement calendar.
6	<b>Bidding process</b>	<p>Solar/ Non-Solar</p> <p>Reverse Auction: Buyer to specify its requirement in terms of quantum in MW and duration. Sellers to bid their offers specifying quantum in MW and Price in Rs/MWh against the requirement of buyer during the auction window. Buyer and Seller may also specify minimum quantum. The bidding shall take place in 2 stages i.e., Initial Price Offering (IPO) and Reverse Auction.</p> <p>Hydro</p> <p>Reverse Auction: Buyer to specify its requirement in terms of quantum in MW and duration. Sellers to bid their offers specifying quantum in MW and Price in Rs/MWh against the requirement of buyer during the auction window. Buyer and Seller may also specify minimum quantum. The bidding shall take place in 2 stages i.e., Initial Price Offering (IPO) and Reverse Auction.</p>
7	<b>Matching of Bids</b>	Reverse Auction for buyer's requisition

<b>8</b>	<b>Trading Hours</b>	As per trading and settlement calendar to be notified by the Exchange from time to time
<b>9</b>	<b>Minimum Volume quotation*</b>	0.1 MW
<b>10</b>	<b>Minimum Volume Step*</b>	0.1 MW
<b>11</b>	<b>Minimum Requisition /Offer Quantity</b>	Bidder while initiating the Reverse Auction will have to submit a minimum requisition or as may be specified by the Exchange from time to time
<b>12</b>	<b>Lot size</b>	0.1 MW * 15 minutes or combination thereof.
<b>13</b>	<b>Maximum bid size*</b>	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility of the member/Clients to adhere to this rule.
<b>14</b>	<b>Price Quote Basis</b>	Rs. per MWh (excluding all fees, charges, taxes etc.)
<b>15</b>	<b>Price Tick*</b>	Rs. 1 per MWh
<b>17</b>	<b>Quantity Variation</b>	No quantity variation allowed.
<b>18</b>	<b>Settlement</b>	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of revision of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed.
<b>19</b>	<b>Contracted Quantity</b>	Contracted quantity shall be the quantity approved and scheduled by LDC at delivery point against the Application for Scheduling made by Exchange. However, till the approval of application by LDC, traded quantity shall be considered as contracted quantity. In case, multiple applications are to be filed for single trade and partial quantity has been scheduled, the contracted quantity shall be equal to sum of quantity scheduled and balance trade quantity to be delivered.
<b>20</b>	<b>Risk Management</b>	<b>Initial Margins :</b> The buyer has to pay a nominal non-refundable fee up to Rs. 1,00,000 or as may be specified by the Exchange for initiating the reverse auction. This fee will be adjusted in the additional margins to be collected from buyer after the successful execution of the contract. The seller will be required to provide an initial margin calculated at the rate of 30000/MW/Month or part thereof, or as may be specified by the Exchange, at the time of bidding in the Reverse

		<p>Auction. The initial margin can be in the form of cash or non-cash collateral. If a seller gets eliminated during the Reverse Auction or the trade gets rejected by Buyer, the initial margin as collected will be refunded to the seller. If the seller gets selected, then the initial margin will get adjusted with the Additional Margin to be collected from the Seller. In absence of adequate initial margin, seller will not be allowed to place bid.</p> <p><b>Additional Margins :</b> On acceptance of the trade and prior to submitting of Application before the concerned Load Dispatch Center for scheduling, Additional Margin equivalent to 50%, 25%, and 20% of the Trade Value for contracts up to 7 days, 15 days and beyond 15 days respectively or may be as specified by the Exchange from time to time will be collected from the Member/Client (both from buyers &amp; sellers). Additional Margin can be in the form of cash or non-cash or combination thereof. Non receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default.</p> <p><b>Ad hoc Margin:</b> Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract.</p>
<b>21</b>	<b>Right to Reject</b>	After the Reverse Auction, the Buyer may partially or fully reject the trade within the timelines as may specified by the Exchange from time to time. During such time, the bid will remain valid and the successful bidders will not be able to change their bid. In case no communication is received from the Buyer regarding acceptance of the trade or on non-payment of additional margin, within stipulated time, the trade shall be deemed to be rejected by the Buyer
<b>22</b>	<b>Transaction Fees</b>	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point as specified by the exchange from time to time, as approved by the Commission.
<b>23</b>	<b>Scheduling</b>	As per scheduling procedure of bilateral transactions.
<b>24</b>	<b>SLDC Clearance</b>	Post trade, in case of buyer/seller is connected to State transmission or distribution system, the buyer/seller shall provide concurrence of LDC of their respective State to the



		Exchange for the traded quantity. The concurrence shall be submitted to the Exchange as per the timelines specified in the trading calendar. In case of any mismatch between the buyer and seller NOC in terms of quantum and duration approved by LDC, the minimum of two shall be considered for application for scheduling. Except otherwise provided, in case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller
<b>25</b>	<b>Application for Scheduling</b>	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Delivery Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
<b>26</b>	<b>Revision of Schedule</b>	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
<b>27</b>	<b>Cancellation of Trade</b>	In Green Any Day Single Sided contracts, it is proposed that buyer shall have the option to specify number of days (maximum up to two days before the day of delivery) within which it has to confirm or partially or fully reject the trade. During this time, the bid will remain valid, and the successful bidders will not be able to change their bids.
<b>28</b>	<b>E-bidding</b>	In the event, LDC conducts e-bidding process for allocation of transmission corridor in case of congestion, the Exchange will participate in the process of e-bidding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding.
<b>29</b>	<b>Delivery</b>	The quantity shall be deliverable as per the schedule issued by the LDC.

<b>30</b>	<b>Delivery point</b>	The delivery point shall be as may be specified by the Exchange
<b>31</b>	<b>Application fees, Operating and Transmission Charges and Losses</b>	Seller will bear the applicable Transmission, Scheduling & Operating charges and Transmission Losses (in kind), as applicable, up to the delivery point and Buyer shall bear applicable Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
<b>32</b>	<b>Force majeure</b>	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
<b>33</b>	<b>Fines &amp; penalties*</b>	As decided by the Exchange from time to time and informed through circular.
<b>34</b>	<b>Funds pay in by Members</b>	Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as pay-in default.
<b>35</b>	<b>Funds pay out to Members</b>	Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.

## **CHAPTER 14**

### **ANCILLARY SERVICES DAY AHEAD MARKET (AS-DAM)**

In Ancillary services Day Ahead Market (AS-DAM) segment, market participants can place bids in Tertiary Reserve Ancillary Services (TRAS)-UP and Tertiary Reserve Ancillary Services (TRAS)-DOWN bids for delivery on the next day for 24 hours starting midnight, which will be matched by National Load Dispatch Center (NLDC). The contracts concluded in this segment are scheduled in accordance with the procedures issued by NLDC for 'Detailed Procedure for Tertiary Reserve Ancillary Services (TRAS)' including any amendments or replacements thereof.

#### **14.1 AS Day-Ahead Market Operations**

14.1.1.1 The Ancillary Services Day-Ahead market will operate as per the 'Detailed Procedure for Tertiary Reserve Ancillary Services (TRAS)' issued by NLDC and are subject to approval from the CERC for activities related to NLDC/RLDCs or SLDCs, Member shall adhere to the timeliness for bidding phase, pay in and pay out as follows:

14.1.1.2 Trading session (Bidding) will start from 10.00 am to 12.00 pm on all seven (7) days of a week except Exchange declared holidays for Ancillary Services Day-Ahead market with a functionality that member may transfer the uncleared bids of G-DAM & DAM to Ancillary Services Day-Ahead market for clearance. The Exchange will validate available Margins of the Members before the trading hours. Member has to ensure sufficient margin in exchange before placing the bid else, bidding will not be allowed.

#### **14.1.2 Delivery procedure**

The Scheduling and Delivery Procedure shall be in accordance with the Detailed Procedure for Tertiary Reserve Ancillary Services (TRAS)' issued by NLDC and subsequent amendments thereof. With reference to these contracts, quantity traded shall be considered as delivered once it is scheduled under these procedures.

#### **14.2 Trading Days**

The market shall remain open every day throughout the year except on the days of Exchange declared trading holidays.

### 14.3 Trading hours

For AS-DAM Contracts, trading sessions shall be conducted for all trading days from 1000 hrs to 1100 hrs. No extension shall be allowed in the trading hours, except in case of any constraint identified by the system operator. Trading hours as stipulated under the IEGC 2023 shall be strictly complied with.

### 14.4 Contract specifications

The contract specifications for AS-DAM shall be as per **Annexure 14 A** to this Chapter.

#### 14.4.1 Order Types

In AS-DAM segment, there would be possibility to submit TRAS-UP and DOWN bid  
Following types of orders shall be available in AS-DAM segments:

#### 14.4.2 Single bid

Single bid will specify multiple sequences of price and quantity pairs in a portfolio manner. The quantity shall be assumed to vary linearly between two price pairs. All TRAS-DOWN bids can have only monotonically decreasing bid. All TRAS-UP bid will have monotonically increasing bid.

#### 14.4.3 Modification and cancellation of orders

Members shall be permitted to modify or cancel his orders, during the trading hours only. No request of any member/client for manual entry/modifications/cancellation of bids by the power exchanges shall be entertained within or after the trading hours. The exchange can only cancel the order in case of any direction received from NLDC/RLDC or Regulatory Commission/ Statutory Authority.

#### 14.4.4 Order validation

Orders and bids entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.

14.4.5 **Matching rules:** The matching of bids shall be governed by the principle of NLDC Procedure of TRAS. Power exchange would be collecting bids and submitting to NLDC, NLDC further combined bids and the price discovery and matching methodology to be followed shall be as per the NLDC notification and the price discovery shall be as per Uniform Clearing Price Mechanism for TRAS UP bids and Pay

As Bid for TRAS DOWN. The exchange shall not be liable for any damage due to price discovery

#### 14.4.6 **Margin requirements**

##### 14.4.6.1 **Initial Margin**

The Security Deposit paid by a Member or a Client, as applicable, will be used as Initial Margin and will be considered the minimum Margin required for submitting bids.

##### 14.4.6.2 **Additional Margin**

Member must bring the additional margin (required time to time by exchange) in advance payment before the commencement of the trading session. The margin would be, required quantity \*2 Paisa+Applicable service tax. The Exchange would define a haircut factor from time to time and bids would be permitted to the extent of funds available in his settlement account net off haircut for professional member

##### 14.4.6.3 **Refund of Additional Margin**

In case the existing margins of a member or a Client, as applicable, are less than the margins calculated as in Rule 14.4.6.2 mentioned above, the Member and the Client, as applicable, will have to bring in additional funds. The Member or the Client, as applicable, will be able to get information regarding additional margin requirement, through file transfer protocol (FTP) at end of the trading session. Unless the Member or the Client, as applicable, brings in the additional margin required, he will not be allowed to submit his order. The Exchange may levy more margin or across market for covering any enhanced risk.

#### 14.4.7 **Risk management system**

14.4.7.1 Fund availability and margins shall be as per the clause 14.4.6 above.

14.4.7.2 Exchange has the right to reject the bid of the Buyers/Sellers, who do not have sufficient balance in their account. The Exchange has the right to impose penalty on defaulting Member or the Client, as applicable, as decided from time to time.

14.4.7.3 An Exchange Member or the Client, as applicable, can pay Additional Margin by depositing funds in its Settlement Account and inform the Exchange through written communication or portal any time during the trading session. Thereafter, based on the funds received, the Exchange will increase the margin

of the Member or the Client, as applicable. In case a Member or the Client, as applicable, fails to bring in any additional margin at beginning of the trading session, such Members or the Clients, as applicable, will not be allowed to put orders till Margins are brought in or its orders would not be accepted for matching or if matched then the trades would not be scheduled. The decisions of the Exchange shall be final and binding on the Members or the Clients, as applicable.

14.4.7.4 In case a Member or the Client, as applicable, fails to pay to the Exchange any amount towards its final pay in, the Exchange will be at liberty and has the power and discretion to cancel the allocation of its trades and initiate appropriate action against such Member or the Client, as applicable. The Exchange in such circumstances will revise the trade allocation by incorporating other bidders at lower price and who have sufficient balance in their accounts. Any loss arising out of such instructions by the Exchange shall be borne by the defaulting Member or the Client, as applicable, The Exchange may also impose penalty on such defaulting member or the Client, as applicable.

#### 14.4.8 **Surveillance**

##### 14.4.8.1 **Validation of orders**

Members are required to ensure that their bids and offers are in conformity with the relevant regulatory provisions. In order to avoid any abnormal orders being submitted by the Exchange Members, the Exchange will validate such orders through software on a daily basis, to the extent possible. The abnormalities include high bid or offer rate, bids quantity or offer quantity submitted higher than the declared capacity/demand by the Member, or the maximum quantity of purchase or sale as allowed in the Standing Clearance. Further, the order value of the Member will also be compared with the available limits of such Member for any over utilization.

##### 14.4.8.2 **Price movement**

Price variation as compared to past data will be observed by the Exchange. Further, the price movement in the Exchange shall be correlated with that of the bilateral markets that is available with the Exchange.

##### 14.4.8.3 **Price rigging, concentration, price manipulation and other market abuses**

The Exchange will monitor concentration, price rigging, price manipulation and other market abuses and take suitable actions whenever such practices are identified.

**14.5.1 Counterparty risk**

- 14.5.1.1 Exchange shall only be liable to collect transaction fees of 2 paisa on cleared and dispatched quantity provide by NLDC.
- 14.5.2 Any payin/payout related to TRAS-UP and TRAS-DOWN shall directly be handled by NLDC from their designated pool account. The timelines will be as per NLDC Tertiary reserve ancillary services procedure.

## Annexure 14 A

### Contract Specification: Day Ahead AS Market

S. No.	Item	Details
1	<b>Contract Name*</b>	AS DAM UP & AS DAM DOWN.
2	<b>Contract Type</b>	96 separate fifteen-minute time blocks throughout the following delivery day (D) for AS DAM UP & AS DAM DOWN.
3	<b>Contract available for Trading</b>	Contracts available for delivery of 15 mins or combination thereof in a day from 1 <sup>st</sup> time block to 96 <sup>th</sup> time block.
4	<b>Trading day*</b>	A day before delivery day.
5	<b>Trading Session*</b>	10:00 AM to 12:00 PM of previous day (D-1).
6	<b>Bidding process</b>	TRAS providers will bid for AS DAM UP & AS DAM DOWN at a specifying quantum (MW) and Price for each 15-minute time block or combination thereof.
7	<b>Bid Type</b>	Single Bid
8	<b>Minimum Volume quotation*</b>	1 MW
9	<b>Minimum Volume Step*</b>	0.1MW
10	<b>Minimum quotation step</b>	Rs. 1 per MWh
11	<b>Maximum Ceiling</b>	<p>For AS DAM UP: -</p> <ul style="list-style-type: none"> <li>• Rs. 20000 per MWh (For sellers eligible to participate in HP-DAM)</li> <li>• Rs. 10000 per MWh (For other sellers)</li> </ul> <p>For AS DAM DOWN: - Rs. 20000 per MWh</p>
12	<b>Maximum bid size*</b>	Bids should not be more than the allowed MW in any of Concurrence/Clearance issued by its RLDC/SLDC to the Members/Clients at any time. It will be the responsibility of the Member to adhere to this rule.
13	<b>Price Quote Basis</b>	Rs. per MWh (excluding all fees, charges, taxes, if applicable).
14	<b>Price Tick*</b>	Rs. 1 per MWh.
15	<b>Quantity Variation</b>	Zero quantity variation allowed.
16	<b>Settlement</b>	The payment to the TRAS Provider(s) shall be from the surplus available in Deviation and Ancillary Service Pool Account of the concerned Region where the TRAS Provider(s) is located.



<b>17</b>	<b>Initial Margins (Operational Limit)*</b>	The Security Deposit paid by a Member or a Client, as applicable, will be used as Initial Margin and will be considered the minimum Margin required for submitting bids.
<b>18</b>	<b>Transaction Fees</b>	Rs 20/MWh
<b>19</b>	<b>Delivery</b>	The quantity shall be deliverable as per the schedule issued by the NLDC.
<b>20</b>	<b>Delivery point</b>	At the TRAS provider's ISTS periphery.
<b>21</b>	<b>Fines &amp; penalties*</b>	As specified by the Exchange.
<b>22</b>	<b>Funds pay in by Members</b>	Exchange will debit/ adjust the funds pay-in on the next day of trading from buyers/Seller Member/ clients as applicable. Excess margins, if any due to partial concurrence received will be refunded back to the Member on the settlement day.
<b>23</b>	<b>Funds pay out to Members</b>	Any excess amount due to partial clearance will be credited to member on D+1.

\* Exchange may modify these parameters from time to time with prior intimation to its members after taking approval of CERC.

## **CHAPTER 15**

### **ANCILLARY SERVICES REAL TIME MARKET (AS-RTM)**

In Ancillary services Real Time Market (AS-RTM) segment, market participants can place bids in Tertiary Reserve Ancillary Services (TRAS)-UP and Tertiary Reserve Ancillary Services (TRAS)-DOWN bids for delivery on the next day for 24 hours starting midnight, which will be matched by National Load Dispatch Center (NLDC). The contracts concluded in this segment are scheduled in accordance with the procedures issued by NLDC for 'Detailed Procedure for Tertiary Reserve Ancillary Services (TRAS)' including any amendments or replacements thereof.

#### **15.1 AS Real Time Market Operations**

The Ancillary Services Real Time Market will operate as per the 'Detailed Procedure for Tertiary Reserve Ancillary Services (TRAS)' issued by NLDC and are subject to approval from the CERC for activities related to NLDC/RLDCs or SLDCs, Member shall adhere to the timeliness for bidding phase, pay in and pay out as follows:

Trading session (Bidding) will start as per timelines of the RTM session except Exchange declared holidays for Ancillary Services Real Time Market. The Exchange will validate available Margins of the Members before the trading hours. Member has to ensure sufficient margin in exchange before placing the bid else, bidding will not be allowed.

#### **15.2 Delivery procedure**

The Scheduling and Delivery Procedure shall be in accordance with the Detailed Procedure for Tertiary Reserve Ancillary Services (TRAS)' issued by NLDC and subsequent amendments thereof. With reference to these contracts, quantity traded shall be considered as delivered once it is scheduled under these procedures.

#### **15.3 Trading Days**

The market shall remain open every day throughout the year except on the days of Exchange declared trading holidays.

#### **15.4 Trading hours**

For AS-RTM Contracts, trading sessions shall be conducted for all trading days as per timelines of the RTM session.

**15.5 Contract specifications**

The contract specifications for AS-RTM shall be as per Annexure 15 A to this Chapter.

**15.6 Order Types**

In AS-RTM segment, there would be possibility to submit TRAS-UP and DOWN bid Following types of orders shall be available in AS-RTM segments:

**Single bid:**

Single bid will specify multiple sequences of price and quantity pairs in a portfolio manner. The quantity shall be assumed to vary linearly between two price pairs. All TRAS-DOWN bids can have only monotonically decreasing bid. All TRAS-UP bid will have monotonically increasing bid.

**Modification and cancellation of orders:**

A Member shall be permitted to modify or cancel his orders, during the trading hours only. No request of any member/client for manual entry/modifications/cancellation of bids by the power exchanges shall be entertained within or after the trading hours. The exchange can only cancel the order in case of any direction received from NLDC/RLDC or Regulatory Commission/ Statutory Authority.

**Order validation:**

Orders and bids entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.

**15.7 Matching Rules**

The matching of bids shall be governed by the principle of NLDC Procedure of TRAS. Power exchange would be collecting bids and submitting to NLDC, NLDC further combined bids and the price discovery and matching methodology to be followed shall be as per the NLDC notification and the price discovery shall be as per Uniform Clearing Price Mechanism for TRAS UP bids and Pay As Bid for TRAS DOWN. The exchange shall not be liable for any damage due to price discovery.

## 15.8 Margin requirements

### **Initial Margin:**

The Security Deposit paid by a Member or a Client, as applicable, will be used as Initial Margin and will be considered the minimum Margin required for submitting bids.

### **Additional Margin:**

Member must bring the additional margin (required time to time by exchange) in advance payment before the commencement of the trading session. The margin would be, required quantity \*2 Paisa+Applicable service tax. The Exchange would define a haircut factor from time to time and bids would be permitted to the extent of funds available in his settlement account net off haircut for professional member

### **Refund of Additional Margin:**

In case the existing margins of a member or a Client, as applicable, are less than the margins calculated as in Rule 14.5.6.2 mentioned above, the Member and the Client, as applicable, will have to bring in additional funds. The Member or the Client, as applicable, will be able to get information regarding additional margin requirement, through file transfer protocol (FTP) at end of the trading session. Unless the Member or the Client, as applicable, brings in the additional margin required, he will not be allowed to submit his order. The Exchange may levy more margin or across market for covering any enhanced risk.

## 15.9 Risk Management System

Fund availability and margins shall be as per the clause 14.5.6.2 above. Exchange has the right to reject the bid of the Buyers/Sellers, who do not have sufficient balance in their account. The Exchange has the right to impose penalty on defaulting Member or the Client, as applicable, as decided from time to time.

An Exchange Member or the Client, as applicable, can pay Additional Margin by depositing funds in its Settlement Account and inform the Exchange through written communication or portal any time during the trading session. Thereafter, based on the funds received, the Exchange will increase the margin of the Member or the Client, as applicable. In case a Member or the Client, as applicable, fails to bring in any additional margin at beginning of the trading session, such Members or the Clients, as applicable, will not be allowed to put orders till Margins are brought in or its orders would not

be accepted for matching or if matched then the trades would not be scheduled. The decisions of the Exchange shall be final and binding on the Members or the Clients, as applicable.

In case a Member or the Client, as applicable, fails to pay to the Exchange any amount towards its final pay in, the Exchange will be at liberty and has the power and discretion to cancel the allocation of its trades and initiate appropriate action against such Member or the Client, as applicable. The Exchange in such circumstances will revise the trade allocation by incorporating other bidders at lower price and who have sufficient balance in their accounts. Any loss arising out of such instructions by the Exchange shall be borne by the defaulting Member or the Client, as applicable, The Exchange may also impose penalty on such defaulting member or the Client, as applicable.

#### **15.10 Surveillance**

##### **Validation of orders:**

Members are required to ensure that their bids and offers are in conformity with the relevant regulatory provisions. In order to avoid any abnormal orders being submitted by the Exchange Members, the Exchange will validate such orders through software on a daily basis, to the extent possible. The abnormalities include high bid or offer rate, bids quantity or offer quantity submitted higher than the declared capacity/demand by the Member, or the maximum quantity of purchase or sale as allowed in the Standing Clearance. Further, the order value of the Member will also be compared with the available limits of such Member for any over utilization.

##### **Price movement:**

Price variation as compared to past data will be observed by the Exchange. Further, the price movement in the Exchange shall be correlated with that of the bilateral markets that is available with the Exchange.

##### **Price rigging, concentration, price manipulation and other market abuses:**

The Exchange will monitor concentration, price rigging, price manipulation and other market abuses and take suitable actions whenever such practices are identified.

##### **Counterparty risk:**

Exchange shall only be liable to collect transaction fees of 2 paisa on cleared and dispatched quantity provided by NLDC. Any payin/payout related to TRAS-UP and TRAS-DOWN shall directly be handled by NLDC from their designated pool account. The timelines will be as per NLDC Tertiary reserve ancillary services procedure.

## Annexure 15 A

### Contract Specification: Real Time AS Market

S. No.	Item	Details
1	<b>Contract Name*</b>	AS RTM UP & AS RTM DOWN.
2	<b>Contract Type</b>	48 sessions in a day where each session contains 2-time blocks of 15mins each.
3	<b>Contract available for Trading</b>	Half hourly delivery consisting of two separate 15-Min time blocks.
4	<b>Trading day*</b>	Starts from 22:45 onwards for the delivery starting from 00:00 hrs of next day.
5	<b>Trading Session*</b>	Each session of 15 Minute duration on rolling basis with a gap of 15 minutes (E.g. 2145 to 2200 than 2215 to 2230).
6	<b>Bidding process</b>	TRAS providers will bid for AS RTM UP & AS RTM DOWN at a specifying quantum (MW) and Price for each 15-minute time block or combination thereof.
7	<b>Bid Type</b>	Single Bid
8	<b>Minimum Volume quotation*</b>	1 MW
9	<b>Minimum Volume Step*</b>	0.1MW
10	<b>Minimum quotation step</b>	Rs. 1 per MWh
11	<b>Maximum Ceiling</b>	For AS DAM UP: - <ul style="list-style-type: none"> <li>• Rs. 20000 per MWh (For sellers eligible to participate in HP-DAM)</li> <li>• Rs. 10000 per MWh (For other sellers)</li> </ul> For AS DAM DOWN: - Rs. 20000 per MWh
12	<b>Maximum bid size*</b>	Bids should not be more than the allowed MW in any of Concurrence/Clearance issued by its RLDC/SLDC to the Members/Clients at any time. It will be the responsibility of the Member to adhere to this rule.
13	<b>Price Quote Basis</b>	Rs. per MWh (excluding all fees, charges, taxes, if applicable).
14	<b>Price Tick*</b>	Rs. 1 per MWh
15	<b>Quantity Variation</b>	Zero quantity variation allowed.
16	<b>Settlement</b>	The payment to the TRAS Provider(s) shall be from the surplus available in Deviation and Ancillary Service Pool Account of the concerned Region where the TRAS Provider(s) is located.

<b>17</b>	<b>Initial Margins (Operational Limit)*</b>	The Security Deposit paid by a Member or a Client, as applicable, will be used as Initial Margin and will be considered the minimum Margin required for submitting bids.
<b>18</b>	<b>Transaction Fees</b>	Rs 20/MWh
<b>19</b>	<b>Delivery</b>	The quantity shall be deliverable as per the schedule issued by the NLDC.
<b>20</b>	<b>Delivery point</b>	At the Sellers ISTS periphery.
<b>21</b>	<b>Fines &amp; penalties*</b>	As specified by the Exchange.
<b>22</b>	<b>Funds pay in by Members</b>	Exchange will debit/ adjust the funds pay-in on the next day of trading from buyers/sellers Member/ clients as applicable. Excess margins, if any due to partial concurrence received will be refunded back to the Member on the settlement day.
<b>23</b>	<b>Funds pay out to Members</b>	Any excess amount due to partial clearance will be credited to member on D+1 .

\* Exchange may modify these parameters from time to time with prior intimation to its members after taking approval of CERC.

## **CHAPTER 16**

### **HIGH PRICE DAY AHEAD CONTINGENCY AND HIGH PRICE INTRA DAY CONTRACTS**

This segment will cover market timeframes of High Price Day ahead contingency and High Price Intra Day contracts as allowed by the Commission. These contracts together constitute the Contingency Market/Contracts. The contingency market will operate in accordance with the procedures issued by CTU for 'Scheduling of Bilateral Transactions'. All terms and conditions of the contracts, including trading sessions, matching rules, margin requirement and delivery procedure etc., will be as per specific rules mentioned herein.

#### **16.1 Contingency Contracts (Day Ahead and Intra Day)**

The Exchange shall make the 96-time blocks contracts available for trading on High Price day-ahead and on High Price intra-day basis as per the timelines specified by the Exchange in the Trading and Settlement Calendar to be notified from time to time. The Exchange will carry out trading in such contracts through 'Continuous Trade' sessions. The timeline for trade matching sessions will be specified in Contract Specifications. They will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by CTU as specified in the contract specifications. The Exchange holds the right to modify parameters as specified by CERC. The contract specifications are given at **Annexure – 1** of this chapter.

These two products can be launched as two separate contracts or an integrated contract.

#### **16.2 Trading Days and trading hours**

The Exchange shall operate this segment on all days except Exchange specified holidays. The Exchange shall declare trading and settlement calendar indicating trading sessions and trading days for each of Contracts from time to time. The Exchange may extend, advance or reduce trading hours by notifying the Members in advance.

#### **16.3 Matching Methodologies**

The matching methodology as specified in Chapter 7 – Day Ahead Contingency and Intra Day Contracts of these Business Rules shall be mutatis-mutandis applicable for the High Price Day Ahead Contingency and High Price Intra Day Contracts.



**16.4 Margin Requirement**

Margin Requirement as specified in Chapter 7 – Day Ahead Contingency and Intra Day Contracts of these Business Rules shall be mutatis-mutandis applicable for the High Price Day Ahead Contingency and High Price Intra Day Contracts.

**16.5 Surveillance**

Surveillance as specified in Chapter 7 – Day Ahead Contingency and Intra Day Contracts of these Business Rules shall be mutatis-mutandis applicable for the High Price Day Ahead Contingency and High Price Intra Day Contracts.

**16.6 Delivery procedure**

Delivery procedures as specified in Chapter 7 – Day Ahead Contingency and Intra Day Contracts of these Business Rules shall be mutatis-mutandis applicable for the High Price Day Ahead Contingency and High Price Intra Day Contracts.

**16.7 Transaction Fees**

The Exchange will charge a transaction fee, as may be specified by the Exchange from time to time, on the transactions carried through the Exchange. Such transaction fee will be computed on value basis or volume basis, as may be decided from time to time, which will be computed on both purchases and sales separately. Any changes in the transaction fees shall be effected by Exchange with prior approval of the Commission.

**16.8 Reports**

After end of trading session, the Exchange will download the reports to the Members which consist of Trade file Report, Provisional Obligation Report, Final Obligation Report and other relevant matters.

Based on the Exchange's Reports, the Members can inform their Clients about their successful trades along with their obligation.

**Annexure 1****Contract Specification: National/Regional HP Contingency Contracts**

1	Contract Name*	National/Region wise High Price Contingency Contracts
2	Regions	One National contract and preference wise Regional contracts for each electrical region will be available for trading i.e. for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North-East Region (NER)
3	Contract Type	Delivery Option - Firm Delivery
4	Contract available for Trading	15 minute time blocks contracts as per the trading and settlement calendar to be notified by the Exchange from time to time.
5	Trading day*	Same day or a day before delivery day or as per trading and settlement calendar declared in advance.
6	Trading Session*	One continuous trading session will be made available to the members for bidding.
7	Bidding process	Seller and buyer can bid in national contract and also, Seller can submit bid for the contract of that region to which he belongs. Whereas a buyer can buy any National/regional contract. Netting off (square off) of positions will not be allowed.
8	Matching of Bids	Continuous trade session. Details in clause 2. (A) of chapter 7 of Business Rules. Each trade will be sent for scheduling, on trade to trade basis.
9	Trading Hours	Continuous trade session as per trading and settlement calendar to be notified by the Exchange from time to time
10	Minimum Volume quotation*	1 MW
11	Minimum Volume Step*	0.1MW
12	Lot size	1MW * 15 minutes
13	Maximum bid size*	Bids should not be more than the allowed MW in any of Concurrence/Clearance issued by its SLDC to the Members / Clients at any time. It will be the responsibility of the Member to adhere to this rule.
14	Price Quote Basis	Rs. per MWh (excluding all fees, charges, taxes, if applicable)
15	Price Tick*	Rs. 1 per MW
16	Minimum & Maximum Order price limit	As notified by the Hon'ble commission from time to time.

17	Quantity Variation	Zero quantity variation allowed.
18	Settlement	Traded price * Quantity scheduled by RLDC at delivery point.
19	Initial Margins (Operational Limit) *	105% margin from buyers of the total order value should be available in cash with the exchange at the time of bidding for continuous trading sessions.
20	Transaction Fees*	Fees payable by buyer and seller to Exchange for the quantity approved by nodal RLDC at delivery point as specified by the exchange from time to time.
21	Eligibility	Sellers: Valid NOC/Standing Clearance issued by respective Load Dispatch Centre specifying maximum quantum and verification of eligibility to participate in HP- Contingency. Buyers: All eligible Open Access buyers with valid NOC/Standing clearance specifying maximum quantum issued by Load dispatch Centre.

### Trading Cycle

	Details	Time (Hrs)
22	Continuous Trade Session (Daily)	As specified in TAM Trading and Settlement Calendar
23	SLDC Clearance and Declaration Form sent to Members	As specified in TAM Trading and Settlement Calendar
24	Submission of SLDC Clearance to the Exchange by the Member	As specified in TAM Trading and Settlement Calendar
25	Submission of Application to Nodal RLDC <sup>(1)</sup>	As per Procedure for scheduling of Bilateral transactions
26	Approval from nodal RLDC	As per the procedure for bilateral transactions.
	Pay in/ adjustment on T/T+1 basis where T is the trading day	Post receipt of nodal RLDC approval
	Payout on T+1/T+2 basis where T is the trading day	By 1200
27	Payment of charges to Nodal RLDC	As per Procedure for Scheduling of Bilateral Transaction
	<sup>(1)</sup> Application for Scheduling will be sent only when the Exchange receives the SLDC Clearances from buyer and seller. In case, the SLDC approval is not received from SLDCs of buyer/ seller as specified in Trading and Settlement Calendar, then it will be considered as default by buyer/seller.	

**Delivery Procedure**

28	Delivery	Delivery shall commence 3 hours after expiry of the contract. Trade once executed shall not be revised and shall be sent for scheduling, and at no point of time during the contract period shall be allowed to be revised. The quantity shall be deliverable as per the schedule issued by the respective RLDC.
29	Delivery period	Delivery for each time block.
30	Delivery point	The delivery point shall be at Seller's ISTS Periphery as per Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
31	Application for Scheduling	Application for Scheduling will be Submitted to Nodal RLDC on Contingency basis as per the "Procedure for Scheduling of bilateral transactions"
32	SLDC Clearance	The buyer and seller will have to take concurrence from their respective SLDC for scheduling of Power. This concurrence has to be submitted as per the timelines specified in the Trading and Settlement Calendar. NOC / Prior Standing Clearance issued by the SLDC in format PX-I as per CERC (Interstate Open Access) Regulations, are also valid for these transactions.
33	Application fees, Operating and Transmission Charges and Losses	Seller will bear all the Transmission, Scheduling & Operating charges and Transmission Losses (in kind) up to the delivery point and Buyer shall bear all the Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at seller's Regional Periphery.
34	Alternate route	Not Applicable
35	Force majeure	In case of force majeure, the Exchange will settle the contract as per final schedule issued by RLDCs.
36	Fines & penalties*	As decided by the Exchange from time to time and informed through circular.

**Settlement procedure**

37	Payment of Application fees, Transmission & Operating Charges by Members	Application fees, Transmission and Operating Charges as applicable on quantum scheduled at the delivery point and payable to the Nodal RLDC, will be recovered from the buyer and seller members on receipt of acceptance from the nodal RLDC.
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38	Funds pay in by Members	Exchange will debit/adjust the funds pay-in on the same day/next day of trade from buyer's member's /clients, as applicable. Excess margins, if any due to partial concurrence received will be refunded back to the member on the settlement day.
39	Funds pay out to Members	Exchange will credit the funds pay out in seller's member's settlement account on T+1/T+2 basis at 12.00 noon for each delivery day subject to confirmation of delivery pay in by the seller.

\* Exchange may modify these parameters from time to time with prior intimation to its Members after taking approval of CERC

## CHAPTER 17

### HIGH PRICE TERM AHEAD MARKET (HP-TAM)

This segment will cover market timeframes of Daily, Weekly, Monthly, Any-Day(s) Single Sided Contracts (ADSS) as allowed by the Commission. The High Price Term Ahead Market will operate in accordance with the procedures issued by CTU for 'Scheduling of Bilateral Transactions'. All terms and conditions of the contracts including trading sessions, matching rules, margin requirement and delivery procedure etc., will be as per specific rules mentioned herein.

#### 17.1 Contracts

The Exchange shall make the contracts as specified in this section available for trading as per the trading and settlement calendar which shall be issued by the Exchange from time to time. These contracts will be traded in accordance with provisions of trading as specified in the respective Contract Specification. The trade sessions, matching rules applied in each trade session for concluding the contracts, risk management and settlement for such contracts will be as per specific contract specifications provided herein. The delivery of such contracts will be in accordance with CERC (Open Access in Inter-State Transmission) Regulations, 2008, as amended from time to time and relevant procedures issued by CTU and by Open Access Regulations of concerned State. The Exchange holds the right to modify the parameters subject to CERC (Power Market) Regulation, 2021.

Following contracts shall be available for trading in High Price Term Ahead Market:

##### a) Daily Contracts

The Exchange shall make the daily contracts available for trading up to a period specified by CERC for delivery of electricity for defined blocks of hours of the day. The Exchange will carry out trading in such contracts 'Uniform Price Step Auction' sessions. The timeline for trade matching sessions will be specified in Contract Specifications. They will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by CTU as specified in the contract specifications. The contracts may contain provisions allowing quantity variation in delivery. The Exchange holds the right to modify parameters as specified by CERC. The contract specifications are given at **Annexure – 1** of this chapter.

##### b) Weekly Contracts

The Exchange shall make the weekly contracts available for trading maximum up to a period specified by CERC for delivery of electricity for defined blocks of hours on all defined week- days and/or weekends of the week. The Exchange will carry out trading in such contracts through 'Uniform Price Step Auction' sessions. The timeline for trade matching sessions will be specified in Contract Specifications. They will be sent

for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by CTU as specified in the contract specifications. The contracts may contain provisions allowing quantity variation in delivery. The Exchange holds the right to modify parameters as specified by CERC. The contract specifications are given at **Annexure – 2** of this chapter.

**c) Monthly Contracts**

The Exchange will make the monthly contracts available for trading maximum up to a period as may be specified by Exchange for delivery of electricity on all defined months provided in the trading and settlement calendar. The Exchange will carry out trading in such contracts through 'Uniform Price Step Auction'. The timeline for trade matching sessions is specified in Contract Specifications. Executed contracts will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by POSOCO/NLDC as specified in the contract specifications. The contract specifications are given at **Annexure – 3** of this chapter.

**d) Any-Day(s) Single Sided Contracts**

The Exchange will make the Any-Day(s) Single Sided contracts available for trading maximum up to a period as may be specified by Exchange for delivery of electricity as may be requisitioned by the buyer. The buyer may seek any time and day or combination thereof. The Exchange will carry out trading in such contracts through 'Reverse Auction' where Buyer will be the requisitioner. The timeline for trade matching sessions will be specified in contract specifications. Executed contracts will be sent for scheduling in accordance with CERC (Open Access in Inter-State Transmission) Regulation, 2008, as amended from time to time and relevant procedures issued by POSOCO/NLDC as specified in the contract specifications. The contract specifications are given at **Annexure – 4** of this chapter.

**17.2 Trading Days and trading hours**

The Exchange shall operate this segment on all days except Exchange specified holidays. The Exchange shall declare trading and settlement calendar indicating trading sessions and trading days for each of Contracts from time to time. The Exchange may extend, advance or reduce trading hours by notifying the Members in advance.

**17.3 Matching Methodologies**

The matching methodology as specified in Clause-8.3 of **Chapter 8 – Term Ahead Market (TAM)** of these Business Rules shall be mutatis-mutandis applicable for the High Price Term Ahead Market.

#### **17.4 Order Management**

The Exchange may launch more than one order book running either parallel or at different time spans. The types of order available in different trading sessions are mentioned below:

##### **Uniform Price Step Auction Session**

Following orders are available in the Uniform Price Step Auction

- a) Timing Constraints
- b) End of Session (EOS)

#### **17.5 Matching Rules**

The Exchange may modify or change the matching rules relevant to any market with prior approval of Commission. The rules for matching of bids as specified in Clause 8.5 of **Chapter 8 – Term Ahead Market (TAM)** of these Business Rules shall be mutatis-mutandis applicable for the High Price Term Ahead Market.

#### **17.6 Margin Requirement**

The margin requirements as specified in Clause-8.6 of **Chapter 8 – Term Ahead Market (TAM)** of these Business Rules shall be mutatis-mutandis applicable for the High Price Term Ahead Market.

#### **17.7 Risk Management System**

The risk management shall be as specified in Clause-8.7 of **Chapter 8 – Term Ahead Market (TAM)** of these Business Rules shall be mutatis-mutandis applicable for the High Price Term Ahead Market.

#### **17.8 Surveillance**

The Surveillance activities shall be as specified in Clause-8.8 of **Chapter 8 – Term Ahead Market (TAM)** of these Business Rules shall be mutatis-mutandis applicable for the High Price Term Ahead Market.

#### **17.9 Delivery procedure**

The delivery procedure shall be as specified in Clause-8.9 of **Chapter 8 – Term Ahead Market (TAM)** of these Business Rules shall be mutatis-mutandis applicable for the High Price Term Ahead Market.

#### **17.10 Transaction Fees**

The Exchange will charge a transaction fee, as may be specified by the Exchange from time to time, on the transactions carried through the Exchange. Such transaction fee will be computed on value basis or volume basis, as may be decided from time to time, which will be computed on both purchases and sales separately. Any changes in the transaction fees shall be effected by Exchange with prior approval of the Commission.



**17.11 Reports**

After end of trading session, the Exchange will download the reports to the Members which consist of Trade file Report, Provisional Obligation Report, Final Obligation Report and other relevant matters. Based on the Exchange's Reports, the Members can inform their Clients about their successful trades along with their obligation.

**Annexure 1****Contract Specification: National/Regional High Price Daily Contracts**

<b>Sr. No.</b>	<b>Item</b>	<b>Details</b>
1	Contract Name*	High Price Daily Contracts
2	Regions	National or Electrical Region specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
3	Contract Type	Delivery Option – Firm Delivery
4	Firm Daily Contract	The daily contracts for trading will be available on a rolling basis i.e. everyday starting from T+2 day to maximum up to T+90 days on a rolling basis. (T-Trade Day).
5	Trading day*	Trading will be available on all days or as per trading and settlement calendar declared in advance
6	Trading Session*	On each trading day, one Uniform price step auction session will be made available to the members for bidding up to two days before delivery day.
7	Order Management*	The Exchange Members will be able to submit orders as specified in these Business Rules. A Member shall be permitted to modify or cancel his orders, during the trading hours. Orders and bids entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.
8	Bidding process	Sellers and Buyers to submit order for pre specified duration, quantum in MW and price in Rs./MWh. Seller and buyer can bid in national contract and also, Seller can submit bid for the contract of that region to which he belongs. Whereas a buyer can buy any National/regional contract. Netting off (square off) of positions will not be allowed.

9	Matching of Bids	Uniform price step auction session: Details as per clause no. 5 of chapter 8 of Business Rules. Each trade will be sent for scheduling, on trade-to-trade basis.
10	Trading Hours*	As per trading and settlement calendar.
11	Minimum Volume Quotation*	1 MW
12	Minimum Volume Step*	0.1 MW
13	Lot size	Base or RTC Contract (DYB): 1 lot = 1MW * 24 Hours Night Off-peak Contract (DYN) : 1 lot = 1MW * 8 Hours Day Contract (DYD) : 1 lot = 1MW * 11 Hours Day Peak Contract (DYP): 1 lot = 1MW * 5 Hours Pre specified time blocks as notified by Exchange from time to time
14	Maximum bid size*	Bids should not be more than the allowed MW in any of Concurrence/Clearance issued by concerned Load Dispatch Center to the members/clients at any time. It will be the responsibility of the member to adhere to this rule.
15	Price Quote Basis	Rs. per MWh (excluding all fees, charges and taxes, if applicable)
16	Price Tick*	Rs. 1 per MWh
	Minimum & Maximum Order price limit	As notified by the Hon'ble commission from time to time.
17	Quantity Variation	Zero quantity variation allowed.
18	Settlement	Traded price * Quantity scheduled by RLDC at delivery point.
19	Initial Margins (Operational Limit)*	5% margin of the total order value or as may be specified by the Exchange from time to time, should be available in cash/non cash with the exchange at the time of bidding.
20	Additional Margins *	50% of the total trade value will be collected from the member/client. The margins can be in the form of cash or noncash. Additional Margin will be based on a risk curve defined by the Exchange for each contract. Exchange will have the right to define and modify the risk curves from time to time. Additional Margin could be in the form of collaterals (Bank Guarantee or FDR or LC) or bank limit. For advance payment option member shall keep 50% of the total bid value before the trading session in settlement account. Additional Margin based on open positions may be collected from buyer Members only. This Additional Margin is the difference in the Value of the contract based on the Trade price and the Settlement price. In case the Settlement price is less

		<p>than the trade price, the difference in the value is collected from the buyers however at any point the sum of Basis Margin collected up to that day and this Additional Margin will not exceed the trade value. this Additional Margin will be computed at the end of each available trading day for a specific contract and will be collected from the member on the same day in the form of collaterals. This Additional Margin will be applied at client level.</p> <p>Exchange can impose any ad hoc additional margin, which the exchange can apply any time during the life of the contract.</p>
21	Transaction Fees*	Fees payable by buyer and seller to Exchange for the quantity approved by nodal concerned LDC at delivery point as specified by the exchange from time to time.
22.	Eligibility	<p>Sellers: Valid NOC/Standing Clearance issued by respective Load Dispatch Centre specifying maximum quantum and verification of eligibility to participate in HP- TAM.</p> <p>Buyers: All eligible Open Access buyers with valid NOC/Standing clearance specifying maximum quantum issued by Load dispatch Centre.</p>

**Trading Cycle.** \*

Sr. No.	Time	Details
23	12:00 – 17:00	Uniform price step auction Session
	As and when the trade executed	Concerned LDC Clearance and Declaration Form sent to Members.
	After trade executed	Calculation of Additional Margin of the buyer's member
24	After 15 minutes of the trade executed	Blocking of the Additional Margin from the available cash/non-cash collateral of the buyer's Member provided to the exchange. In case if there is any deficit, call for the deficit additional margins.
25	As per the Trading & Settlement Calendar	Concerned LDC Clearance from Members and fulfillment of additional margin requirement call, if any.
		On completion of formality and receipt of adequate additional margin, application on 'Advance', 'First Come First Serve' or 'Day-Ahead Bilateral' basis will be sent to Nodal RLDC as the case may be.
		Acceptance for Scheduling from Nodal RLDC.
		Receipt of Transmission/Operating Charges and Application Fees from the members.
		Payment of Charges to Nodal RLDC.

	Pay-in; equivalent to one day's obligation collected on D-1 basis , where D=Delivery day.
	Payout; Equivalent to one day's obligation credited on D+1 basis, till the contract delivery ends

### **Delivery Procedure**

26	Delivery	Trade once executed shall not be revised and shall be sent for scheduling, The quantity shall be deliverable as per the schedule issued by the RLDC.
27	Delivery period	Delivery for each time block
28	Delivery point	The delivery point shall be at Seller's ISTS Periphery as per Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter- State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
29	SLDC Clearance	After trading on the exchange, in case of buyer/seller is connected to State transmission or distribution system, the buyer and seller will have to take a concurrence of their respective SLDCs. This concurrence has to be submitted to the exchange as per the timelines specified in the trading and settlement calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by SLDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
30	Application for Scheduling	Application for Scheduling will be submitted to Nodal RLDC as specified in the Trading and Settlement Calendar and as per the "Procedure for scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
31	Delivery Process	Application for Scheduling, as specified in the trading and settlement calendar, shall be sent to the Nodal RLDC, on FCFS basis as per the "Procedure for scheduling of bilateral transactions".

32	Application fees, Operating and Transmission Charges and Losses	Seller will bear all the Transmission, Scheduling & Operating charges and Transmission Losses (in kind) up to the delivery point and Buyer shall bear all the Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at seller's ISTS Periphery.
33	Alternate route	Unless preference is specified by the buyer, it will be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
34	Revision of Schedule	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event. However, in case of unit tripping/outage, the provisions relating to revision of schedule as specified in the IEGC as amended from time to time shall apply to the contracts under HP-TAM.
35	Force majeure	In case of force majeure the Exchange will settle the contract as per final schedule issued by RLDCs.
36	Fines & penalties*	As decided by the Exchange from time to time and informed through circular, with prior approval of CERC

#### **Settlement Procedure\***

37	Payment of Application fees, Transmission & Operating Charges by Members	Application fees will be collected from buyer on date of application to Nodal RLDC. Transmission and Operating Charges as applicable on quantum scheduled at seller's periphery and payable to the Nodal RLDC, will be recovered from the buyer and seller members on the next day of receiving the acceptance from the nodal RLDC.
38	Funds pay in by Members	Exchange will debit the funds pay-in on each D-1 basis at 11.00 am from buyer's member's settlement account.
39	Funds pay out to Members	Exchange will credit the funds pay-out in seller's member's settlement account on D+1 basis at 12.00 noon subject to confirmation of delivery pay in by the seller.

\*Exchange may modify these parameters from time to time with prior intimation to its Members after taking approval of CERC

## Annexure 2

### Contract Specification: National/Regional High Price Weekly Contracts

Sr. No.	Item	Details
1	Contract Name*	National/ Regional High Price Weekly Contracts
2	Regions	One National contract and preference wise Regional contracts for each electrical region will be available for trading i.e. for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
3	Contract Type	Delivery Option – Firm Delivery
4	Firm Weekly Contract	The weekly contracts for trading will be available as per the trading and settlement calendar from Monday to Sunday from TW+1 week to maximum up to TW+12 weeks on a rolling basis. (TW-Trade Week).
5	Trading day*	Please refer to trading and settlement calendar for more details. Exchange can also hold multiple trading sessions on specified trading days or other days to minimize unmatched volume.
6	Trading session*	On each trading day, one uniform price step auction trading session will be made available to the members for bidding from Monday to Friday for next week onwards available weekly contracts.
7	Order Management	The Exchange Members will be able to submit orders as per these Business Rules. A Member shall be permitted to modify or cancel his orders, during the trading hours. Orders and bids entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.
8	Bidding process	Sellers and Buyers to submit bid pre-specified duration, quantum (MW) and price in Rs/MWh for each 15-minute time block or combination thereof as the case may be. Seller and buyer will submit bid in the national contract and also Seller can submit bid for the contract of that region to which he

		belongs. Whereas a buyer can buy any regional contract. Netting off (square off) of positions will not be allowed.
9	Matching of Bids	Uniform Price Step Auction session: Details as per clause no. 5 of chapter 8 of Business Rules. Each trade will be sent for scheduling, on trade to trade basis.
10	Trading Hours*	As per trading and settlement calendar.
11	Minimum Volume quotation*	1 MW
12	Minimum Volume Step*	0.1MW
13	Lot size	Base or RTC Contract (DYB): 1 lot = 1 MW*24*7 Hours Night Off-peak Contract (DYN): 1 lot= 1MW*8*7 Hours Day Contract (DYD): 1 lot = 1MW *11*7 Hours Day Peak Contract (DYP): 1 lot = 1MW*5*7 Hours Pre specified time blocks as notified by Exchange from time to time
14	Maximum bid size*	Bids should not be more than the allowed MW in any of Concurrence/Clearance issued by its concerned load dispatch centre to the Members/clients at any time. It will be the responsibility of the member to adhere to this rule.
15	Price Quote Basis	Rs. per MWH (excluding all fees, charges, taxes etc.)
16	Tick size*	Rs. 1 per MWH
17	Minimum & Maximum Order price limit	As notified by the Hon'ble commission from time to time.
18	Quantity Variation	Zero quantity variation allowed.
19	Settlement	Traded price * Quantity scheduled by RLDC at delivery point.
20	Initial Margins (Operational Limit)*	5% margin of the total order value as may be specified by the Exchange from time to time, should be available in cash/non cash with the exchange at the time of bidding by buyer.
21	Additional Margins *	50% of the total trade value will be collected from the member/client. The margins can be in the form of cash or non-cash. Another half day margins will be collected towards collection of various transmission related charges. Members opted for advance payment shall made the funds available up to the 50% of bid value netting of the haircut factor or as may be specified by the Exchange from time to time, Additional Margin based on open positions may be collected from buyer Members only. this Additional Margin is the



		<p>difference in the Value of the contract based on the Trade price and the Settlement price. In case the Settlement price is less than the trade price, the difference in the value is collected from the buyers however at any point the sum of Basis Margin collected up to that day and this Additional Margin will not exceed the trade value. This Additional Margin will be computed at the end of each available trading day for a specific contract and will be collected from the member on the same day in the form of collaterals. This Additional Margin will be applied at client level.</p> <p>Exchange can impose any ad hoc additional margin, which the exchange can apply any time during the life of the contract.</p>
22	Transaction Fees*	Fees payable by buyer and seller to Exchange for the quantity approved by concerned nodal LDC at delivery point as specified by the exchange from time to time.
23	Eligibility	<p>Sellers: Valid NOC/Standing Clearance issued by respective Load Dispatch Centre specifying maximum quantum and verification of eligibility to participate in HP- TAM.</p> <p>Buyers: All eligible Open Access buyers with valid NOC/Standing clearance specifying maximum quantum issued by Load dispatch Centre.</p>

#### Trading Cycle\*

Sr. No.	Time	Details
24	12:00 – 17:00	Auction Trade Session
	17:00	Publish results.
	17.30	SLDC clearance and Declaration form sent to Members through FTP.
25	17:30	Blocking of the Additional Margin from the available cash/non-cash collateral of the Buyer Member provided to the exchange. In case if there is any deficit, call for the deficit additional margins.
26	As per the Trading & Settlement Calendar	Concerned LDC Clearance <sup>1</sup> from Members and fulfillment of additional margin requirement call, if any.
		On completion of formality and receipt of adequate additional margin, application on 'Advance', 'First-Come-First-Serve' or 'Day-Ahead Bilateral' basis will be sent to Nodal RLDC or as case may be
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		Acceptance for Scheduling from Nodal RLDC.

	Receipt of Transmission/Operating Charges and Application Fees from the members.
	Payment of Charges to Nodal RLDC.
	Pay-in ; equivalent to one day's obligation collected on D-1 basis , till the contract delivery ends
	Pay-out; Equivalent to one day's obligation credited on D+1 basis, till the contract delivery ends

<sup>1)</sup> Application for Scheduling will be sent only when the SLDC Clearances from buyer and seller are received by the Exchange. In case, the SLDC approval is not received from SLDCs of buyer/ seller as per the timeline specified in the Trading and Settlement Calendar then it will be treated as default by concerned buyer or seller.

D = Delivery Day

### Delivery Procedure

27	Delivery	Trade once executed shall not be revised and shall be sent for scheduling. The quantity shall be deliverable as per the schedule issued by the RLDC.
28	Delivery period	Delivery for each time block.
29	Delivery point	The delivery point shall be at Seller's ISTS Periphery as per Procedure for Scheduling of Bilateral Transaction and Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time.
30	Application for Scheduling	Application for Scheduling will be submitted to nodal RLDC as specified in the Trading and Settlement Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
31	SLDC Clearance	After trading on the exchange, in case of buyer/seller is connected to State transmission or distribution system, the buyer/seller will have to take a concurrence of their respective SLDCs. This concurrence has to be submitted to the exchange as per the date and time specified in the trading and settlement calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by SLDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be

		cancelled and such event shall be considered as default on account of such buyer/seller.
32	Delivery Process	Application for Scheduling, as specified in the trading and settlement calendar, shall be sent to the Nodal RLDC, on the first available date after trading, as per the "Procedure for scheduling of bilateral transactions".
33	Application fees, Operating and Transmission Charges and Losses	Seller will bear all the Transmission, Scheduling & Operating charges and Transmission Losses (in kind) up to the delivery point and Buyer shall bear all the Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at seller's ISTS Periphery.
34	Alternate route	Unless preference is specified by the buyer, he will be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
35	Revision of Schedule	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event. However, in case of unit tripping/outage, the provisions relating to revision of schedule as specified in the IEGC as amended from time to time shall apply to the contracts under HP-TAM.
36	Force majeure	In case of force majeure the Exchange will have the power to settle the contract independently and/or as deemed fit by the Exchange.
37	Fines & penalties*	As decided by the Exchange from time to time and informed through circular.

**Settlement procedure\***

38	Payment of Application Fees by Members	Application fees will be collected from buyer on date of application to Nodal RLDC. Transmission and Operating Charges as applicable on quantum scheduled at the delivery point and payable to the Nodal RLDC, will be recovered from the buyer and seller members on the next day of receiving the acceptance from the nodal RLDC.
39	Funds pay in by Members	Exchange will debit the funds pay-in on D-1 basis at 11.00 am from buyer member settlement account.

40	Funds pay out to Members	Exchange will credit the funds pay out in seller's member's settlement account on D+1 basis at 12.00 noon for each delivery day subject to confirmation of delivery pay in by the seller.
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\* Exchange may modify these parameters from time to time with prior intimation to its Members after taking approval of CERC.

### Annexure 3

## Contract Specification: National/Regional High Price Monthly Contracts

Sr. No.	Item	Details
1	Contract Name*	National/ Regional High Price Monthly Contracts
2	Regions	One National contract and preference wise Regional contracts for each electrical region will be available for trading i.e. for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
3	Contract Type	Delivery Option – Firm Delivery
4	Firm Monthly Contract	The Monthly contracts will be available for calendar Months from TM+1 Month to maximum up to TM+3 Months on a rolling basis. (TM-Trade Month)
5	Trading day*	Trading will be available on the days as per Trading & Settlement calendar declared in advance.
6	Trading session*	On each trading day, Uniform Price Step Auction trading session will be made available to the members for bidding session as follows: For the first month (M1) contract – ten days prior to the close of zero month (M0); For the second month (M2) contract – five days prior to the close of zero month (M0); For the third month (M3) contract – last day of zero month (M0).
7	Order Management	The Exchange Members will be able to submit orders as per these Business Rules. A Member shall be permitted to modify or cancel his orders, during the trading hours. Orders and bids entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.

8	Bidding process	Sellers and Buyers to submit order pre-specified duration, quantum in MW and price in Rs/MWh for each 15-minute time block or combination thereof as the case maybe. Seller and buyer will submit bid in the national contract and also Seller can submit bid for the contract of that region to which he belongs. Whereas a buyer can buy any regional contract. Netting off (square off) of positions will not be allowed.
9	Matching of Bids	Uniform Price Step Auction: Details as per clause no. 5 of chapter 8 of Business Rules. Each trade will be sent for scheduling, on trade to trade basis
10	Trading Hours*	As per trading and settlement calendar to be notified by the Exchange from time to time
11	Minimum Volume quotation*	1 MW
12	Minimum Volume Step*	0.1MW
13	Lot size	Base or RTC Contract (DYB): 1 lot = 1MW*24*days in the month Night Off-peak Contract (DYN): 1 lot= 1MW*8* days in the month Day Contract (DYD): 1 lot = 1MW *11* days in the month Day Peak Contract (DYP): 1 lot = 1 MW*5* days in the month Pre specified time blocks as notified by Exchange from time to time
14	Maximum bid size*	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility of the Member or the Clients to adhere to this rule.
15	Price Quote Basis	Rs. Per MWh (excluding all fees, charges, taxes etc.)
16	Tick size*	Rs. 1 per MWh
16	Minimum & Maximum Order price limit	As notified by the Hon'ble commission from time to time.
17	Quantity Variation	Zero quantity variation allowed
18	Settlement	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of revision of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed
19	Initial Margins (Operational Limit)*	Initial Margins equivalent to 1% of the order value or as may be specified by the Exchange from time to time will be collected from the Members/Clients (both from buyer & seller) at the time of bidding. The initial margins could be in the form of cash or non-

		cash or combination of both. In the absence of initial margins, the Members/Clients will not be allowed to place the bids.
20	Additional Margins *	<p>After the trade and prior to submitting Application before the concerned Load Dispatch Center for scheduling, Additional Margin equivalent to the 20% of the Trade Value or as may be specified by the Exchange based on risk assessment will be collected from the Member/Client (both from buyers &amp; sellers). Additional Margin can be in the form of cash or non- cash or combination thereof. Non receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default. This additional margin will be applied at client level.</p> <p>Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract.</p>
21	Transaction Fees*	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point as specified by the exchange from time to time, as approved by the Commission.
22	Eligibility	<p>Sellers: Valid NOC/Standing Clearance issued by respective Load Dispatch Centre specifying maximum quantum and verification of eligibility to participate in HP- TAM.</p> <p>Buyers: All eligible Open Access buyers with valid NOC/Standing clearance specifying maximum quantum issued by Load dispatch Centre.</p>

**Trading Cycle\***

Sr. No.	Time	Details
23	12:00 – 17:00	Auction Trade Session
	17:00	Publish Results
	17:30	Concerned LDC clearance and Declaration form sent to Members through FTP
24	17:30	Blocking of the Additional Margin from the available cash/non-cash collateral of the Buyer Member provided to the exchange. In case if there is any deficit, call for the deficit additional margins.
25	As per the Trading Settlement Calendar &	Concerned LDC Clearance <sup>1</sup> from Members and fulfillment of additional margin requirement call, if any.
		On completion of formality and receipt of adequate additional margin, application on 'Advance', 'First-Come- First-Serve' or 'Day-Ahead Bilateral' basis will be sent to Nodal RLDC or as case may be.

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		Acceptance for Scheduling from Nodal RLDC.
		Receipt of Transmission/Operating Charges and Application Fees from the members.
		Payment of Charges to Nodal RLDC.
		Pay-in ; equivalent to one day's obligation collected on D-1 basis , till the contract delivery ends
		Pay-out; Equivalent to one day's obligation credited on D+1 basis, till the contract delivery ends

<sup>1)</sup> Application for Scheduling will be sent only when the SLDC Clearances from buyer and seller are received by the Exchange. In case, the SLDC approval is not received from SLDCs of buyer/ seller as per the timeline specified in the Trading and Settlement Calendar then it will be treated as default by concerned buyer or seller.

D = Delivery Day

### Delivery Procedure

26	Delivery	Trade once executed shall not be revised and shall be sent for scheduling. The quantity shall be deliverable as per the schedule issued by the RLDC.
27	Delivery period	Delivery for each time block.
28	Delivery point	The delivery point shall be at Seller's ISTS Periphery as may be specified by requisitioner.
29	Application for Scheduling	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Delivery Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
30	SLDC Clearance	Post trade, in case of buyer/seller is connected to State transmission or distribution system, the buyer/seller shall provide concurrence of LDC of their respective State to the Exchange for the traded quantity. The concurrence shall be submitted to the Exchange as per the timelines specified in the trading calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by LDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.



31	Delivery Process	Application for Scheduling, as specified in the trading and settlement calendar, shall be sent to the Nodal RLDC, on the first available date after trading, as per the "Procedure for scheduling of bilateral transactions".
32	Application fees, Operating and Transmission Charges and Losses	Seller will bear the Transmission, Scheduling & Operating charges and Transmission Losses (in kind), as applicable, up to the delivery point and Buyer shall bear all the Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
33	Alternate route	The buyer shall be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
34	Revision of Schedule	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event. However, in case of unit tripping/outage, the provisions relating to revision of schedule as specified in the IEGC as amended from time to time shall apply to the contracts under HP-TAM.
35	Force majeure	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
36	Fines & penalties*	As decided by the Exchange from time to time and informed through circular.

**Settlement procedure\***

37	Payment of Application Fees by Members	Application fees will be collected from buyer on date of application to Nodal RLDC. Transmission and Operating Charges as applicable on quantum scheduled at the delivery point and payable to the Nodal RLDC, will be recovered from the buyer and seller members on the next day of receiving the acceptance from the nodal RLDC.
38	Funds pay in by Members	Exchange will debit the funds pay-in on D-1 basis at 11:00am from buyer member settlement account
39	Funds pay out to Members	Exchange will credit the funds pay out in seller's member's settlement account on D+1 basis at 12.00 noon for each delivery day subject to confirmation of delivery pay in by the seller.

\* Exchange may modify these parameters from time to time with prior intimation to its Members after taking approval of CERC.

## Annexure 4

### Contract Specification: National/Regional Any-Day (s) Contracts

Sr. No.	Item	Details
1	<b>Contract Name*</b>	Any-Day(s) Single Sided High Price Contracts
2	<b>Regions</b>	One National contract and preference wise Regional contracts for each electrical region will be available for trading i.e. for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
3	<b>Contract Type</b>	Delivery Option – Firm Delivery
4	<b>Firm Any-Day Single Sided Contract</b>	Any-Day(s) Single Sided contracts will be available for user defined Day(s) and hour(s)/time block(s) from T+2 day to maximum upto T+90 days (T-Trade Day)
5	<b>Trading day*</b>	Trading will be available on the days as per Trading & Settlement calendar declared in advance.
6	<b>Trading session*</b>	Bidding sessions will be made available to the members/Clients for bidding on each Trading Day on Daily basis upto 2 days before delivery as per Trading & Settlement calendar.
7	<b>Order Management</b>	The Exchange Members will be able to submit orders as per these Business Rules. A Member shall be permitted to modify or cancel his orders, during the trading hours. Orders and bids entered into the Trading System shall be subject to various validation requirements as prescribed by the Exchange including price and quantity restrictions as decided by the Exchange. Orders that do not meet the validation checks will not be accepted by the Exchange. The Exchange shall specify from time to time price steps (tick size) in which orders shall be entered on the trading system of the Exchange.
8	<b>Bidding process</b>	Reverse Auction: Buyer to specify its requirement in terms of quantum in MW and duration. Sellers to bid their offers specifying quantum in MW and Price in Rs/MWh against the requirement of buyer during the auction window. Buyer and Seller may also specify minimum quantum. The bidding shall take place in 2 stages i.e., Initial Price Offering (IPO) and Reverse Auction.
9	<b>Matching of Bids</b>	Reverse Auction for buyer's requisition

10	<b>Trading Hours*</b>	As per trading and settlement calendar to be notified by the Exchange from time to time
11	<b>Minimum Volume quotation*</b>	1 MW
12	<b>Minimum Volume Step*</b>	0.1 MW
13	<b>Lot size</b>	1MW * 15 minutes or combination thereof.
14	<b>Maximum bid size*</b>	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility of the Member or the Clients to adhere to this rule.
15	<b>Price Quote Basis</b>	Rs. per MWh (excluding all fees, charges, taxes etc.)
16	<b>Tick size*</b>	Rs. 1 per MWh
17	Minimum & Maximum Order price limit	As notified by the Hon'ble commission from time to time.
18	<b>Quantity Variation</b>	Zero quantity variation allowed
19	<b>Settlement</b>	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of revision of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed.
20	<b>Initial Margins (Operational Limit)*</b>	<p>The buyer has to pay a nominal non-refundable fee up to Rs. 1,00,000 or as may be specified by the Exchange for initiating the reverse auction. This fee will be adjusted in the additional margins to be collected from buyer after the successful execution of the contract.</p> <p>The seller will be required to provide an initial margin calculated at the rate of 30000/MW/Month or part thereof, or as may be specified by the Exchange, at the time of bidding in the Reverse Auction. The initial margin can be in the form of cash or non-cash collateral. If a seller gets eliminated during the Reverse Auction or the trade gets rejected by Buyer, the initial margin as collected will be refunded to the seller. If the seller gets selected, then the initial margin will get adjusted with the Additional Margin to be collected from the seller. In absence of adequate initial margin, seller will not be allowed to place bid.</p>

21	<b>Additional Margins *</b>	<p>On acceptance of the trade and prior to submitting Application before the concerned Load Dispatch Center for scheduling, Additional Margin equivalent to 50%, 25%, and 20% of the Trade Value for contracts up to 7 days, 15 days and beyond 15 days respectively or as may be specified by the Exchange from time to time will be collected from the Member/Client (both from buyers &amp; sellers). Additional Margin can be in the form of cash or non-cash or combination thereof. Non receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default.</p> <p>Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract</p>
22	<b>Transaction Fees*</b>	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point as specified by the exchange from time to time, as approved by the Commission.

**Trading Cycle\***

Sr. No.	Time	Details
23	As per the Trading & Settlement Calendar	<p>Concerned LDC Clearance<sup>1</sup> from Members and fulfillment of additional margin requirement call, if any.</p> <p>On completion of formality and receipt of adequate additional margin, application on 'Advance', 'First-Come-First-Serve' or 'Day-Ahead Bilateral' basis will be sent to Nodal RLDC or as the case may be.</p> <p>----</p> <p>Acceptance for Scheduling from Nodal RLDC.</p> <p>Receipt of Transmission/Operating Charges and Application Fees from the members.</p> <p>Payment of Charges to Nodal RLDC.</p> <p>Pay-in ; equivalent to one day's obligation collected on D-1 basis , till the contract delivery ends</p> <p>Pay-out; Equivalent to one day's obligation credited on D+1 basis, till the contract delivery ends</p>

<sup>1)</sup> Application for Scheduling will be sent only when the SLDC Clearances from buyer and seller are received by the Exchange. In case, the SLDC approval is not received from SLDCs of buyer/ seller as per the timeline specified in the Trading and Settlement Calendar then it will be treated as default by concerned buyer or seller.

D = Delivery Day

**Delivery Procedure**

24	<b>Delivery</b>	Trade once executed shall not be revised and shall be sent for scheduling. The quantity shall be deliverable as per the schedule issued by the RLDC.
25	<b>Delivery period</b>	Delivery for each time block.
26	<b>Delivery point</b>	The delivery point shall be as may be specified by the Exchange
27	<b>Application for Scheduling</b>	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Delivery Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
28	<b>SLDC Clearance</b>	Post trade, in case of buyer/seller is connected to State transmission or distribution system, the buyer/seller shall provide concurrence of LDC of their respective State to the Exchange for the traded quantity. The concurrence shall be submitted to the Exchange as per the timelines specified in the trading calendar. In case of any mismatch between the buyer and seller NOC in terms of quantum and duration approved by LDC, the minimum of two shall be considered for application for scheduling. Except otherwise provided, in case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller
29	<b>Delivery Process</b>	Application for Scheduling, as specified in the trading and settlement calendar, shall be sent to the Nodal RLDC, on the first available date after trading, as per the "Procedure for scheduling of bilateral transactions".
30	<b>Application fees, Operating and Transmission Charges and Losses</b>	Seller will bear the applicable Transmission, Scheduling & Operating charges and Transmission Losses (in kind), as applicable, up to the delivery point and Buyer shall bear applicable Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
31	<b>Alternate route</b>	The buyer shall be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.

32	Revision of Schedule	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event. However, in case of unit tripping/outage, the provisions relating to revision of schedule as specified in the IEGC as amended from time to time shall apply to the contracts under HP-TAM.
33	<b>Revision of Schedule</b>	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
34	<b>Cancellation of trade</b>	In HP Any Day Single Sided contracts, it is proposed that buyer shall have the option to specify number of days (maximum up to two days before the day of delivery) within which it has to confirm or partially or fully reject the trade. During this time, the bid will remain valid, and the successful bidders will not be able to change their bids.
35	<b>E-bidding</b>	In the event, LDC conducts e-bidding process for allocation of transmission corridor in case of congestion, the Exchange will participate in the process of e-bidding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding.
36	<b>Force majeure</b>	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
37	<b>Fines &amp; penalties*</b>	As decided by the Exchange from time to time and informed through circular.

**Settlement procedure\***

38	<b>Payment of Application Fees by Members</b>	Application fees will be collected from buyer on date of application to Nodal RLDC. Transmission and Operating Charges as applicable on quantum scheduled at the delivery point and payable to the Nodal RLDC, will be recovered from the buyer and seller members on the next day of receiving the acceptance from the nodal RLDC.
39	<b>Funds pay in by Members</b>	Exchange will debit the funds pay-in on D-1 basis at 11:00am from buyer member settlement account

40	<b>Funds pay out to Members</b>	Exchange will credit the funds pay out in seller's member's settlement account on D+1 basis at 12.00 noon for each delivery day subject to confirmation of delivery pay in by the seller.
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\* Exchange may modify these parameters from time to time with prior intimation to its Members after taking approval of CERC