

# **BUSINESS RULES OF POWER EXCHANGE INDIA LIMITED**

These rules and the bye-laws, including the business rules have been approved by the Central Electricity Regulatory Commission. However, as observed by the Commission, notwithstanding the approval of the rules and bye-laws by the Commission, the persons enrolling themselves as Members or clients of the power Exchange or transacting trade on the power Exchange shall do so after satisfying themselves of all the commercial aspects including the fees and charges leviable under the rules and bye-laws, uninfluenced by the fact that the Commission has approved them since these are the matters exclusively between the parties



PHYSICAL MARKET SEGMENT - BUSINESS RULES
IN Electricity segment (Renewable and Conventional)



# **ARRANGEMENT OF CHAPTERS**

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# 1. MEMBERSHIP

### 1.1. Categories of Members

The Exchange shall have following categories of Members:

#### 1.1.1. Trader Member

Trader Member shall be the Members admitted as such by the Exchange who has been granted licence for trading in electricity under Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of trading licence and other related matters) Regulations, 2020 and who shall trade and clear on their own account or trade and clear on behalf of their client(s).

# 1.1.2. Proprietary Member

Proprietary Member shall be the Members admitted as such by the Exchange are distribution licensees or a deemed distribution licensees or a grid connected entities and who shall transact and clear through their own account.

#### 1.1.3. Facilitator Member

Facilitator Member shall be the Members admitted as such by the Exchange who shall be entitled to provide Support Services which shall include all services as permitted to be provided by such member under Regulation 21 of the Power Market Regulations, which reads as under:

"Regulation 21 (c)

Facilitator Member: Any person who is neither a Trader Member nor a Proprietary Member and admitted as a member of the Power Exchange for providing one or more of the following services to its clients to facilitate transactions at the Power Exchange shall be called a Facilitator Member:

- (i) IT infrastructure for bidding on electronic exchange platform or skilled personnel.
- (ii) Facilitation of clearances for delivery of power:

Provided that the Facilitator Member in no case shall provide any credit or financing or working capital facility to its client."



- **1.2.** The rights and privileges of a Member shall be subject to the Rules and Bye Laws of the Exchange.
- **1.3.** All Members of the Exchange shall have to register themselves with the Exchange prior to commencing operations on the Exchange.
- **1.4.** The Relevant Authority may specify different norms including eligibility, admission and cessation of membership.
- 1.5. The Relevant Authority may specify pre-requisites, conditions, formats and procedures for application for admission, termination, re-admission, etc. of different categories of Members and eligibility criteria for Trading / Clearing. The Relevant Authority may, at its absolute discretion, refuse permission to any applicant to be admitted as Member.
- **1.6.** Such fees, security deposit, contribution and other money as are Prescribed by the Relevant Authority and under Power Market Regulations would be payable on or before admission as Member and for continued admittance thereof.
- 1.7. The Relevant Authority may define different membership criteria including membership fee structure etc. for different categories of products as may be available for Trading on the Exchange. Such criteria would be applicable on Members as notified by the Exchange from time to time.

# 1.8. Clients

- **1.8.1.** Client is a person defined under Reg. 2(1)(m) of the Power Market Regulations.
- 1.8.2. An entity getting Regional Load Despatch Center (RLDC) / State Load Despatch Center (SLDC), as the case may be, standing clearance for injection/drawal of electricity shall be treated as a unit. Each unit registered with the Member and eligible to transact on Exchange shall be regarded as a client.
- **1.8.3.** Each client shall be allocated a unique client ID under the Members.
- **1.8.4.** A unit can get registered with multiple Members. All such units shall be treated as different client and shall have different Client ID.



# 2. <u>DEPOSITS & MARGINS</u>

# 2.1. Initial Security Deposit

The Exchange Members are required to pay the Exchange such security deposits as in accordance with "Admission rules" for various segments as may be decided by the Relevant Authority from time to time. This deposit when Prescribed would be payable by way of demand draft or Cheque drawn in favor of 'Power Exchange India Limited.' or through banking transaction.

Further, as prescribed at Regulation 27(1)(iii) of the CERC (Power Market) Regulations, 2021, the Exchange shall distribute at least 70% of the return earned on the initial security to the members in proportion to initial security deposit of the member and duration for which such deposit was held.

### 2.2. Margins

Margins would need to be brought in by Members to secure their trades on a day to day basis. The Members may provide margins by themselves or with assistance from Clearing Banks, Banks, Financial Institutions (FIs), Public Financial Institutions (PFIs), Non-Banking Financial Company (NBFC) fulfilling the Prescribed eligibility criteria in any of the following forms:

#### 2.2.1. Cash:

In case the member or Client, as applicable, opts to place margins in the form of cash, the Member or Client, as applicable, shall arrange margins in its settlement account maintained with its Clearing Bank or shall transfer funds to the Exchange account as may be Prescribed. The Clearing Bank shall transfer funds from settlement account of the Member or Client, as applicable, to the Exchange's account as per the instruction of Member or Client or Exchange. The Exchange may provide a facility to Member and/or Client for depositing the money directly from their bank account or with the assistance from the Bank, FI, PFI, or NBFC through any financial instruments (viz. working capital loan, Letter of credit) as may be decided by the Exchange for Margin in a designated common account of the Exchange. The details of the account would be notified by the Exchange from time to time. In such case after depositing the money/funds, the Member or Client, as applicable, shall



inform the Exchange through fax or email or phone or through PXIL trading/clearing system any time during the trading session.

#### 2.2.2. Guarantee:

The Exchange shall accept irrevocable Guarantees issued by the approved Banks or Fls. PFls only in formats Prescribed by the Exchange. The list of approved banks, Fls, PFls, 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.

# 2.2.3. Fixed Deposit Receipt:

The Exchange shall accept Fixed Deposit Receipts ("FDR") issued by the approved banks only in formats Prescribed by the Exchange. The list of approved banks, format and other particulars of the FDR(s), and the process of submission shall be Prescribed by the Exchange from time to time.

#### 2.2.4. Credit limit:

Members may have working capital / credit limit with the Clearing Banks or their local banks or FIs, PFIs, NBFCs. Local banks can have an arrangement with Clearing Bank, FIs/PFIs/NBFCs through which the available credit limit shall be intimated by the Clearing Bank to the Exchange and if found suitable by the Exchange, these credit limits shall form part of Trading Margins available for Trading. Financial Institutions, PFIs, Non-Banking Finance Company(s) can provide credit limit to members and intimate the credit limit to the Exchange and if found suitable by the Exchange, these credit limits shall form part of Trading Margins available for Trading. 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, as the case may be.

The Exchange may prescribe any other form of Margins from time to time and the same shall be in accordance with CERC (Power Market) Regulations, 2021. While computing Margins, the Exchange may also take into account the initial security deposit lying with the Exchange.



# 2.3. Arrangement of Margins:

The Member or Client, as applicable, has to arrange and maintain adequate margin, in any form, as may be Prescribed, for the transactions at all times. In case of insufficient margin at any time, the Exchange has the right to transfer the funds from the settlement account of the Member or Client, as applicable, to the Exchange account or cancel the transaction and imposed penalties as may be Prescribed.

In case, a Member or Client, as applicable, fails to bring in requisite margin, then its orders would not be matched or applied for scheduling or would be applied for cancellation of schedules, as may be applicable; the decision of the Exchange in this regard shall be final and binding on the Member or Client, as applicable.

# 2.4 Maintenance of Minimum cash Margin:

A new feature has been introduced for Members wherein a Member can maintain a Minimum level of Cash margin which they want to maintain with the Exchange for smooth trading on the Exchange. If the Available cash margin (i.e. Total Cash Margin minus Cash Margin blocked) goes below the Minimum amount, the Exchange would transfer the funds, equal to the deficit amount with respect to Minimum amount, from the settlement account of the Member or Client, as applicable, to the Exchange account.

Such Transfer shall be done with the running of settlement process or Margin call process during the day. The illustration is given under.

Say Minimum Cash Margin defined is Rs. 20 Lakhs and Available Cash Margin is Rs. 5 Lakhs

S No	Particulars	Due date	Pay-in Amount (Rs.)	Payout Amount (Rs.)	Net amount (Rs.)
1	Cost of power weekly bought	01-01-2020	10,00,000		
2	CTU	01-01-2020	57,890		
3	STU	01-01-2020	10,330		
4	Application RLDC	01-01-2020	5,000		
5	Operating charges	01-01-2020	2,000		
6	Cost of power intraday - sold	01-01-2020		50,000	
7	Operating charges	01-01-2020	2,000		
8	Total		10,77,220	50,000	10,27,220
9	Available cash	01-01-2020		5,00,000	



S No	Particulars	Due date	Pay-in Amount (Rs.)	Payout Amount (Rs.)	Net amount (Rs.)
	balance				
10	Minimum cash Margin defined	01-01-2020		20,00,000	
11	Minimum Balance deficit (10 – 9)	01-01-2020		15,00,000	
12	Total Amount debited (11 + 8)	01-01-2020		25,27,220	

Then With Minimum cash balance defined being Rs. 20,00,000 and net pay-in Obligation Rs. 10,27,220, an amount of Rs. 25,27,220 shall be transferred from the Clearing Members' settlement bank account to the Exchange Settlement bank account. Thereafter, the minimum Cash Margin balance of Rs. 20 Lakhs would be maintained, unless modified by the user.

# 2.4. Release of Margins

Members can withdraw any unutilized margins, other than the initial security deposit, which are in any of the forms as Prescribed by the Exchange by placing a release request to the Exchange. Release request shall be processed by the Exchange in the manner as may be Prescribed by the Relevant Authority from time to time.

However, the initial security deposit would only be refunded on the surrender/ termination of Membership subject to clearance of all Member dues and provided that the Member has not traded in the last six months.



# 3. TRADING SYSTEM AND CONNECTIVITY

#### 3.1. TRADING SYSTEM

- 3.1.1. The Exchange shall provide an electronic automated trading facility through a Trading System for Trading on all the Contracts admitted as applicable for a Member with such rights as the Exchange may permit.
- 3.1.2. Trading on the Exchange shall be allowed through Workstation(s) located at Member office(s) and/or through mobile devices like Laptop, Mobile, tablet PC equipped with secure web based browsing platforms as approved by the Exchange. Exchange may specify, from time to time, necessary security requirements and arrangements for browser based trading system access.
- 3.1.3. Each Member shall have a unique Trading code or Clearing code or both, depending on the type of membership category registered (hereinafter "Member Code") which shall be provided by the Exchange at the time of enrollment of the Member and which shall be used to log on (sign on) to the Trading System.
- **3.1.4.** A Member shall have a non-exclusive permission to use the Trading System, as provided by the Exchange, in the ordinary course of business as a Member of the Exchange.
- **3.1.5.** A Member shall not have any title, rights or interest whatsoever with respect to the Trading System, its facilities, software and the information provided by the Trading System.
- 3.1.6. The Exchange may provide either the application software for installation of the Trading system or a secured web based access to the Trading system, or both, as may be decided by the Exchange, to the Member. The Member will pay to the Exchange, charges for installation and support as may be Prescribed. The Exchange will upgrade/modify the application software to include additional features and functionalities, new products as may be required and provide the same to the Members, charges for the same will be paid by the Member as may be Prescribed.



- 3.1.7. Access to the Trading System may be withdrawn or restricted by the Relevant Authority at any time without assigning any reason at its absolute discretion. The Member shall, at its own costs, install and use such equipment and software as specified by the Exchange from time to time for the purpose of accessing the Trading System.
  - **3.1.8.** A Member shall not, either by himself or through any other person(s):
    - **3.1.8.1.1.** use the software provided by the Exchange for any purpose other than the purpose as approved and specified by the Exchange
    - **3.1.8.1.2.** use the software provided by the Exchange on any equipment other than the workstation approved by the Exchange
    - **3.1.8.1.3.** copy, alter, modify or make available to any other person the software provided by the Exchange
    - **3.1.8.1.4.** use the software in any manner other than the manner as specified by the Exchange
    - **3.1.8.1.5.** attempt directly or indirectly to de-compile, disassemble or reverse engineer the same.
  - 3.1.9. A Member shall not, either by itself or through any other persons on his behalf, publish, supply, show or make available to any other person or reprocess, retransmit, store or use the facilities of the Trading System or the information provided by the Trading System except with the explicit approval of the Exchange or in the ordinary course of business to complete the transactions on the Exchange.
  - 3.1.10. The Exchange shall provide its services on a best effort basis. However the Exchange shall not be liable for failure or malfunctioning of the Trading System or any other support systems and or for any loss, damage, or other costs arising thereupon and/or on account of and in any way out of:



- 3.1.10.1. Failure of telecom network or systems including failure of ancillary or associated systems, or fluctuation of power, or other environmental conditions; or
- 3.1.10.2. accident, loss/damage arising due to transportation, neglect, misuse, errors, frauds of the Member or its Authorized Users or the agents or any third party; or
- 3.1.10.3. any fault in any attachments, system or equipment (either supplied by the Exchange or approved by the Exchange) which forms or does not form part of the Trading workstation installation; or
- **3.1.10.4.** acts of God, fire, flood, war, act of violence, or any other similar occurrence or for any reason beyond the control of Exchange; or
- **3.1.10.5.** any incidental, special or consequential damages
- **3.1.11.** No Member shall deal on or access the Trading System or related facilities through another Member or on behalf of another Member, unless the prior approval of the Exchange in writing is obtained in this regard.
- 3.1.12. Member end connectivity requirements and requirement for other IT infrastructure will be Prescribed by the Exchange from time to time. In order to connect with the Trading System, the Members shall ensure compliance with the Circulars. Members shall also ensure that diversity in workstations and connectivity is provided at their end to safeguard against any unforeseen eventualities. There is no restriction, unless specified otherwise by the Exchange, on the number of terminals or web based interface that the Member can install or use. For enabling each terminal, an application in the prescribed format shall be made to the Exchange for its approval.



# 4. DEALINGS ON THE EXCHANGE

#### 4.1. MEMBERS AND USERS

- **4.1.1.** On registration of a Member on the Exchange, the Exchange shall provide a Corporate ID in the name of the applicant/ applicant entity. This corporate ID shall have the right to use the Trading System and Clearing System.
- 4.1.2. Members shall only be entitled to appoint, (subject to such terms and conditions, as may be Prescribed by the Relevant Authority) from time-to-time Approved Users to use the Trading System. An Approved User shall mean, subject to these Business Rules, Bye Laws and Rules, a user of the Trading System and shall include a Member, a Client of a Member and/or authorized representatives of any of them.
- 4.1.3. Members will issue a unique User log in and a password to each of its Approved Users through which the Approved User shall have access to the Trading System. To enable the Approved User, the Member would have to send the details of the Approved User in the required format to the Exchange. This format would be prescribed by the Exchange from time-to-time. The Approved user will be asked to change his password when he signs on to the Trading system for the first time.
- **4.1.4.** A Member or its Approved Users thereof shall maintain complete secrecy of their password(s).
- **4.1.5.** Any trade or transaction undertaken by the use of a password of an Approved User, shall be deemed to be undertaken by an Approved User and shall be binding on such Member.
- **4.1.6.** The Approved User shall be required to change his password at the end of the password expiry period. The Exchange shall prescribe the password expiry period and/or other security features from time to time.

#### 4.2. CONTRACTS



All the Contracts as detailed herein below are based on extant regulations and may change from time to time, as Prescribed by the Exchange, with any change in the Applicable Laws. Few Regulations and/or Procedures for operations of different Contracts on 'PRATYAY' system are:

- a. Central Electricity Regulatory Commission (Power Market) Regulations, 2021 ('PMR 2021')
- b. Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022 ('GNA Regulations 2022'),
- c. Central Electricity Regulatory Commission (Ancillary Services) Regulations, 2022 ('AS Regulations 2022')
- d. Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulation, 2020 ('Sharing Regulations 2020')
- e. Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2023 ('IEGC 2023')
- f. Procedure for Temporary General Network Access ('Procedure for T-GNA')

### 4.2.1. Integrated Day Ahead Market - Operations

#### 4.2.1.1. TRADING DAYS

The Exchange shall operate Integrated Day Ahead Market Contract on Collective basis as per PMR 2021, GNA Regulations 2022, 'IEGC 2023' 'Sharing Regulations 2020, other Regulations and Orders issued by Commission, amendments from time to time and any re-enactment thereof;

# 4.2.1.2. AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the Integrated Day Ahead Market Contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members by the Exchange from time to time.

The Exchange may extend, advance or reduce Trading hours by notifying the Members as and when it deems fit and necessary.



#### 4.2.1.3. TRADING CYCLE

Trading Cycle of the Exchange would be as per the 'Procedure for Scheduling Collective transactions' issued by the Power System Operation Corporation limited, National Load Despatch Centre. The various steps in the Trading Cycle would be intimated to the Members by the Exchange from time to time

#### 4.2.1.4. TRADING PARAMETERS

#### 4.2.1.4.1. Contract Specifications:

For the Integrated Day Ahead Market the detailed Contract specifications are given in 'Annexure IA1'. These Contract Specifications will form an integral part of these Business Rules and shall be binding on all Members and their 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.

# 4.2.1.4.2. Delivery Date:

The Delivery in the present Contracts would be on 15-minute basis for next day, based on the application submitted by the Exchange to NLDC and scheduled by NLDC / RLDCs / SLDCs

### **4.2.1.4.3. Delivery Point:**

Delivery point is the regional periphery of regional transmission system in which the grid connected entity is located.

#### 4.2.1.4.4. Traded Schedule Vs Actual Schedule:

For the purpose of the Contract in the Integrated Day Ahead Market, the trade schedule shall be reckoned at the Delivery Point as defined in clause 4.2.1.4.3. The actual schedule at various seams including that of grid connected entities shall be worked out after incorporation of transmission losses in kind.

### 4.2.1.4.5. Transmission Charges:

Inter-State Transmission System: As per GNA Regulations 2022, and Sharing Regulations 2020 as amended from time to time.



**State Transmission System**: As per the concerned State Electricity Regulatory Commission's Regulations and/or GNA Regulations 2022, Sharing Regulations 2020 as amended from time to time.

### 4.2.1.4.6. Transmission Losses:

The losses would be charged and handled as per the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time.

# 4.2.1.4.7. Scheduling and System Operation Charges:

Scheduling and System Operational Charges for NLDC / RLDC / SLDC shall be payable by the Exchange in accordance with GNA Regulations 2022, along with the Procedures issued by CTU for 'Procedure for Temporary General Network Access' ('Procedure for T-GNA') as approved by CERC and as amended from time to time.

# 4.2.1.4.8. Fulfillment of Contractual liability

This contract is for physical delivery only. Members can fulfill their contractual liabilities through physical delivery/off-take and by meeting all financial obligations arising out of such physical delivery/off-take.

#### 4.2.1.4.9. Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract if according to the Exchange a Member has attempted to conclude the transaction in violation of the Rules, Bye-laws and/ or Business Rules of the Exchange or with an intention of indulging in price manipulation, price rigging or price distortion or violation of any Applicable Law.

#### 4.2.1.4.10. Settlement Guarantee

Subject to the Bye-Laws, Rules and these Business Rules, the Exchange shall guarantee the settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the Exchange. The settlement guarantee of the Exchange shall be confined to the extent as may be Prescribed in the Applicable laws from time to time.



# 4.2.1.4.11. Governing law & Jurisdiction

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

# 4.2.1.4.12. Types of Orders

The Members through their Approved Users can place the following types of Orders on the Exchange through the Trading System:

- **Normal Orders:** The Members would be able to put multiple pricequantity orders for each Contract (i.e. each timeslot).
- Block Orders: Block Order will specify one price and one quantity for a
  combination of continuous time slots i.e. same quantity, at one particular
  price for multiple time slots, as may be notified by the exchange from time
  to time. A Block order would consist of orders for Single time slot or
  Group of contiguous time slots (i.e. 8 time slots of 15 minutes each) and
  in further multiples of 1 time slots, or as notified by Exchange from time to
  time.
- Unmatched Orders from Renewable segment will be merged with Orders received in Conventional segment prior to initiation of matching in Conventional segment
- Other Orders: The Exchange shall introduce other types of orders as per the requirement of the market. Details of such other possible orders shall be notified by the Exchange from time to time.

#### 4.2.1.4.13. Order Validation

The bids and offers entered by the Approved Users into the Trading System would be validated by the Exchange as per various parameters of price/quantity/margins etc. decided from time to time. Only after successful validation, the Orders would be accepted by the Exchange.

Members shall be solely responsible for the accuracy of details of Orders entered into the Trading System including Orders entered on behalf of their Clients or entered by Approved Users on their behalf.

### **4.2.1.4.14. Matching Rules**



Matching Rules would be as per Annexure V to the Business Rules. The Exchange also reserves its right to modify or change the matching rules as per any of the methodology Prescribed in Annexure V to the Business Rules as would be felt relevant and necessary to do so, subject to the approval of the Commission.

#### 4.2.1.4.15. Reports

During and at the end of a Trading Session, the Exchange will give various reports to the Members including the 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

#### 4.2.1.4.16. Settlement

Based on the application made by the Exchange, NLDC would arrange to schedule the cleared trades which would reflect in the day-ahead schedules of the respective RLDCs / SLDCs.

# 4.2.2. <u>Day Ahead Contingency (DAC) Market – Operations</u>

### 4.2.2.1. TRADING DAYS

The Exchange shall operate on various days as may be Prescribed by Exchange from time to time, called the Trading Day, which shall abide by the requirements of GNA Regulations 2022, as amended from time to time, for open access and scheduling procedure. The same will be intimated to the Members by the Exchange from time to time.

### 4.2.2.2. AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the Day Ahead Contingency Contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members by the Exchange from time to time.

The Exchange may extend, advance or reduce Trading hours by notifying the Members as and when it deems fit and necessary.



#### 4.2.2.3. TRADING CYCLE

Trading Cycle of the Exchange would be in accordance with relevant provisions of the GNA Regulations 2022 as amended from time to time for open access and scheduling procedure. The various steps in the Trading Cycle would be intimated to the Members by the Exchange from time to time.

#### 4.2.2.4. TRADING PARAMETERS

### 4.2.2.4.1. Contract Specifications:

For the DAC market the detailed Contract specifications are given in 'Annexure IA4'. These Contract Specifications will form an integral part of these Business Rules and shall be binding on all Members and their 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.

# 4.2.2.4.2. Delivery Date:

The Delivery in the present Contracts would be on a Day-Ahead basis, based on the application submitted by the Exchange to RLDC and scheduled by RLDCs/SLDCs.

### **4.2.2.4.3. Delivery Point:**

The delivery point shall be on the state/regional periphery of the selling entity. Seller intending to sell Contract of particular region will have to deliver Electricity on the periphery of its state/region and buyer has to take delivery on this periphery. The seller will have to bear all transmission charges and losses up to the periphery of the Contract region from its injection point. The buyer will bear transmission charges and losses from the periphery of the Contract region to his point of drawl and also transmission losses and charges for the Contract region.

Sellers will deliver the power to their point of regional interconnection. In case of State embedded entity, they will deliver it to the state periphery where the State gets connected to the regional interconnection. In case of



regional embedded entity, they will deliver it to their connection with the Regional grid.

#### 4.2.2.4.4. Traded Schedule Vs Actual Schedule:

For the purpose of the Contract in the DAC Market, the trade schedule shall be reckoned at the Delivery Point. The actual schedule at various seams including that of grid connected entities shall be worked out after incorporation of transmission losses in kind.

#### 4.2.2.4.5. Transmission Losses:

The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time

### 4.2.2.4.6. Transmission Charges:

The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020, as amended from time to time and would be payable to the Exchange in cash.

# 4.2.2.4.7. Scheduling and System Operation Charges:

The delivery point shall be at the Regional periphery of the respective Seller and Buyer. Hence, the following shall be applicable.

- 1. Buyer shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Buyer is located.
- 2. Seller shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Seller is located.
- 3. In case both the Buyer and Seller are from the same Region then the RLDC operating charges shall be shared equally between the Buyer and the Seller.
- 4. In case of intermediate region, the intermediate RLDC operating charges shall be shared equally between the Buyer and the Seller.

The Scheduling and Operating charges shall be applicable based on provisions of GNA Regulations 2022, Sharing Regulations 2020 and any other Regulations notified from time to time



#### 4.2.2.4.8. Fulfillment of Contractual liability

This contract is for physical delivery only. Members can fulfill their contractual liabilities through physical delivery/off-take and by meeting all financial obligations arising out of such physical delivery/off-take.

### 4.2.2.4.9. Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract 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 or invalidation of any Applicable Laws.

#### 4.2.2.4.10. Settlement Guarantee

Subject to the Bye-Laws, the Exchange shall guarantee the Settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the Exchange. The Settlement guarantee of the Exchange shall be confined to the extent as may be Prescribed in the Applicable laws from time to time.

# 4.2.2.4.11. Governing law & Jurisdiction

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

#### **4.2.2.4.12. Types of Orders**

The types of Order shall be informed to participants by issuance of Circular from time to time

#### 4.2.2.4.13. Order Validation

The bids and offers entered by the Approved Users into the Trading System would be validated by the Exchange as per various parameters of price/quantity/margins etc. decided from time to time. Only after successful validation the Orders would be accepted by the Exchange.



Members shall be solely responsible for the accuracy of details of Orders entered into the Trading System including Orders entered on behalf of their Clients or entered by Approved Users on their behalf.

# **4.2.2.4.14. Matching Rules**

Matching Rules would be as per Annexure V to the Business Rules. The Exchange also reserves its right to modify or change the matching rules as per any of the methodology Prescribed in Annexure V to the Business Rules as would be felt relevant and necessary to do so, subject to the approval of the CERC.

### 4.2.2.4.15. Reports

During and at the end of Trading Session, the Exchange will give various reports to the Members including the 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

#### 4.2.2.4.16. Settlement

Based on the application made by the Exchange, RLDC would arrange to schedule the cleared trades which would reflect in the day-ahead schedules of the respective RLDCs/SLDCs.

# 4.2.3. Weekly Market - Operations

The Exchange shall provide Week (s) Ahead Market Contract for transacting in Conventional, Solar, Non Solar, Hydro and High-Price power with delivery on Term Ahead basis (i.e. 'T+2 and above'). The 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.

# 4.2.3.1. CONTRACT CALENDAR/ PERIOD

The Exchange shall operate Week(s) Ahead Contracts as would be prescribed in the Trading Calendar from time to time.



#### 4.2.3.2. TRADING DAYS

The Exchange shall operate on various days as may be Prescribed by the Exchange from time to time, called the Trading Day, which shall abide by the requirements of GNA Regulations 2022, as amended from time to time, for open access and scheduling procedure.

Trading Days would be Prescribed in the Trading Calendar and would be intimated to the Members by the Exchange from time to time.

#### 4.2.3.3. AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the Weekly Contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members through the Trading Calendar by the Exchange from time to time.

The Exchange may extend, advance or reduce the Auction Trade Session timings as and when it deems fit and necessary by notifying the Members.

#### 4.2.3.4. TRADING CYCLE

Trading Cycle of the Exchange would be in accordance with relevant provisions of the GNA Regulations 2022 as amended from time to time for open access and scheduling procedure. The various steps in the Trading Cycle would be intimated to the Members by the Exchange from time to time.

#### 4.2.3.5. TRADING PARAMETERS

#### 4.2.3.5.1. Contract Specifications:

For the Weekly market the detailed Contract specifications are given in 'Annexure IA6'. These Contract Specifications will form an integral part of these Business Rules and shall be binding on all Members and their 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.

### 4.2.3.5.2. Delivery Days:



The Delivery would be for the Contract period specified above, based on the application submitted by the Exchange and approved by the Nodal RLDC and scheduled by RLDCs/SLDCs.

# 4.2.3.5.3. Delivery Period:

The Delivery Period will equally spread over the Trading Hour Slot, as detailed in the Contract Specifications at **Annexure IA6**, from the first day of the Contract Period till the last day of the Contract Period, including both days that has been contracted.

# **4.2.3.5.4.** Delivery Point:

The delivery point shall be on the state/regional periphery of the selling entity. Seller intending to sell Contract of particular region will have to deliver Electricity on the periphery of its State and buyer has to take delivery on this periphery. The seller will have to bear all transmission charges and losses up to the periphery of the Contract region from its injection point. The buyer will bear transmission charges and losses from the periphery of the Contract region to his point of drawl and also transmission losses and charges for the Contract region.

Sellers will deliver the power to their point of Regional interconnection. In case of State embedded entity, they will deliver it to the State periphery where the State gets connected to the Regional interconnection. In case of Regional embedded entity, they will deliver it to their connection with the Regional grid.

#### 4.2.3.5.5. Traded Schedule Vs Actual Schedule:

For the purpose of the Contract in the Weekly market, the actual schedule shall be worked out after incorporation of transmission losses in kind on the traded schedule.

# 4.2.3.5.6. Transmission Losses:

The losses would be handled as per the GNA Regulations 2022, and Sharing Regulations 2020 as amended from time to time.

#### 4.2.3.5.7. Transmission Charges:



The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time and would be payable to the Exchange in cash.

# 4.2.3.5.8. Scheduling and System Operation Charges:

The delivery point shall be at the Regional periphery of the respective Seller and Buyer. Hence, the following shall be applicable.

- Buyer shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Buyer is located.
- Seller shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Seller is located.
- In case both the Buyer and Seller are from the same Region then the RLDC operating charges shall be shared equally between the Buyer and the Seller.
- 4. In case of intermediate region, the intermediate RLDC operating charges shall be shared equally between the Buyer and the Seller.

The Scheduling and Operating charges shall be applicable based on provisions of GNA Regulations 2022, Sharing Regulations 2020 and any other Regulations notified from time to time

#### 4.2.3.5.9. Fulfillment of Contractual liability

This contract is for physical delivery only. Members can fulfill their contractual liabilities through physical delivery/off-take and by meeting all financial obligations arising out of such physical delivery/off-take.

# 4.2.3.5.10. Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract 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.

#### 4.2.3.5.11. Settlement Guarantee



Subject to the Bye-Laws, the Exchange shall guarantee the Settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the Exchange. The Settlement guarantee of the Exchange shall be confined to the extent as may be Prescribed in the Applicable laws from time to time.

# 4.2.3.5.12. Governing law & Jurisdiction

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

# **4.2.3.5.13. Types of Orders**

The Members through their Approved Users can place the following types of Orders on the Exchange through the Trading System:

- Normal Bids: The Approved Users would be able put multiple pricequantity bids for each Contract (i.e. each Trading Hour Slot as defined in the Contract Specifications at Annexure IC).
- Block Bids: Block bid will specify one price and one quantity for a combination of continuous time blocks i.e. same quantity, at one particular price for multiple time slots.
- Other bids: The Exchange shall introduce other types of bids as per the requirement of the market. Details of such other possible bids shall be notified by the Exchange from time to time.

#### 4.2.3.5.14. Order Validation

The bids and offers entered by the Approved Users into the Trading System would be validated by the Exchange as per various parameters of price/quantity/margins etc. decided from time to time. Only after successful validation the Orders would be accepted by the Exchange.

Members shall be solely responsible for the accuracy of details of Orders entered into the Trading System including Orders entered on behalf of their Clients or entered by Approved Users on their behalf.

#### 4.2.3.5.15. Matching Rules



Matching Rules would be as per Annexure V to the Business Rules. The Exchange also reserves its right to modify or change the matching rules as per any of the methodology Prescribed in Annexure V to the Business Rules as would be felt relevant and necessary to do so, subject to the approval of the Commission.

#### 4.2.3.5.16. Reports

During and at the end of Trading Session, the Exchange will give various reports to the Members including the 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

#### 4.2.3.5.17. Settlement

Based on the application made by the Exchange, RLDC would arrange to schedule the cleared trades which would reflect in the day-ahead schedules of the respective RLDCs/SLDCs.

# 4.2.4. Intra Day Market - Operations

### 4.2.4.1. TRADING DAYS

The Exchange shall operate on various days as may be Prescribed by Exchange from time to time, called the Trading Day, which shall abide by the requirements of GNA Regulations 2022, as amended from time to time. The same will be intimated to the Members by the Exchange from time to time.

#### 4.2.4.2. AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the Intra Day contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members by the Exchange from time to time. The Exchange may launch more than one Trade Auction Session running either in parallel or at different time spans.

The Exchange may extend, advance or reduce Trading hours by notifying the Members as and when it deems fit and necessary.



#### 4.2.4.3. TRADING CYCLE

Trading Cycle is the entire process of Trading of electricity on the exchange including but not limited to placing bids, trading, matching and scheduling. The Trading Cycle of the Exchange would be in accordance with relevant provisions of the GNA Regulations 2022 as amended from time to time. The various steps in the Trading Cycle would be intimated to the Members by the Exchange from time to time.

### 4.2.4.4. TRADING PARAMETERS

#### 4.2.4.4.1. Contract Specifications

For the Intra Day market the detailed contract specifications are given in 'Annexure IA3'. These Contract Specifications will form an integral part of these Business Rules and shall be binding on all Members and their 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.

# 4.2.4.4.2. Type of Market

Intra-day product will be a part of physical market product family for electricity trading. The market for Intra-day product will be open for trading on all days as specified by the exchange from time to time.

# 4.2.4.4.3. Trading System

For the facilitation of trading, PXIL provides a common platform to the participants for entering the buy & sell orders.

### 4.2.4.4.4. Trading Methodology

The trading methodology followed would be as defined in Annexure V of the Business Rules.

# 4.2.4.4.5. Auction Timings

This defines the specified time period during which the exchange shall create different auction sessions for specified delivery slots. The exchange shall notify the auction trade session timings through issue of a circular.

### 4.2.4.4.6. Minimum Bid Volume

This defines the minimum quantity of electricity trade that needs to be entered in the trading system for it to be considered for matching.



# 4.2.4.4.7. Delivery Date/Time

The Delivery in the present contracts would be on same day based on the application submitted by the Exchange to RLDC/SLDC and scheduled by RLDCs/SLDCs. Members can bid for Delivery on 15 minutes or multiples thereof as notified by Exchange from time to time. For e.g.:- at 08.00 hours a Member can bid from 10:30 hours of the same day till 24.00 hours of the Trading day.

# 4.2.4.4.8. Delivery Point

The Delivery Point shall be on the State/Regional periphery of the selling entity. Seller intending to sell contract of particular Region will have to deliver electricity on the periphery of its State/Region and buyer has to take delivery on this periphery. The seller will have to bear all transmission charges and losses up to the periphery of the contract Region from its injection point. The buyer will bear transmission charges and losses from the periphery of the contract Region to his point of drawl and also transmission losses and charges for the contract Region.

Sellers will deliver the power to their point of Regional interconnection. In case of State embedded entity, they will deliver it to the State periphery where the State gets connected to the Regional interconnection. In case of Regional embedded entity, they will deliver it to their connection with the Regional grid.

#### 4.2.4.4.9. Traded Schedule Vs Actual Schedule

For the purpose of the contract in the IDA Market, the trade schedule shall be reckoned at the Delivery Point. The actual schedule at various seams including that of grid connected entities shall be worked out after incorporation of transmission losses in kind.

# 4.2.4.4.10. Transmission Losses

The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time.

# 4.2.4.4.11. Transmission Charges



The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time and would be payable to the Exchange in cash.

# 4.2.4.4.12. Scheduling and System Operation Charges

The delivery point shall be at the Regional periphery of the respective Seller and Buyer. Hence, the following shall be applicable.

- 1. Buyer shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Buyer is located.
- 2. Seller shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Seller is located.
- In case both the Buyer and Seller are from the same Region then the RLDC operating charges shall be shared equally between the Buyer and the Seller.
- 4. In case of intermediate region, the intermediate RLDC operating charges shall be shared equally between the Buyer and the Seller.

The Scheduling and Operating charges shall be applicable based on provisions of GNA Regulations 2022, Sharing Regulations 2020 and any other Regulations notified from time to time

# 4.2.4.4.13. Fulfillment of Contractual liability

Members can fulfill their contractual liabilities only through physical delivery by seller and/or by financial settlement (in case of buyers).

#### 4.2.4.4.14. Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract 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.

#### 4.2.4.4.15. Settlement Guarantee

Subject to the Bye-Laws, the Exchange shall guarantee the settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the



Exchange. The settlement guarantee of the Exchange shall be confined to the extent as may be Prescribed in the Applicable Laws from time to time.

### 4.2.4.4.16. Governing law & Jurisdiction

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

### 4.2.4.4.17. Types of Orders

The Members through their Approved Users can place various types of orders on the Exchange through the Trading System, which may be based on time condition, price conditions, a combination of both or any other parameter. The details of such types of Orders shall be informed to participants by issuance of Circular from time to time and may include the following.

- a) Based on Time Conditions:
  - Day order: A day order, as the name suggests is an order which is valid for the day on which it is entered. If the order is not executed during the day, the system cancels the order automatically at the end of the day.
  - Immediate or Cancel (IOC): An IOC order allows the user to buy or sell a contract as soon as the order is released into the system, failing which the order is cancelled from the system. Partial match is possible for the order, and the unmatched portion of the order is cancelled immediately.
- b) Based on Price Conditions
  - Limit Price: A Limit Price order, as the name suggests is an order which is valid only for the price which has been entered. Order gets executed only when there is a corresponding buy at a price which is equal to the limit price or higher than that or when there is a corresponding sell at a price which is equal to the limit price or lower than that.



- Market price: Market orders are orders for which no price is specified at the time the order is entered (i.e. price is market price). For such orders, the system will match it with the best price that is available at that point of time.
- Other bids: The Exchange shall introduce other types of bids as per the requirement of the market. Details of such other possible bids shall be notified by the Exchange from time to time.

The Orders will be carried forward in case they are not matched or partially matched. This would enable participants to meet their requirement more close to real time.

#### 4.2.4.4.18. Order Validation

The bids and offers entered by the Approved Users into the Trading system would be validated by the Exchange as per various parameters of price/quantity/margins etc. decided from time to time. Only after successful validation the orders would be accepted by the Exchange.

Members shall be solely responsible for the accuracy of details of orders entered into the Trading System including orders entered on behalf of their Clients.

### **4.2.4.4.19. Matching Rules**

Matching Rules would be as per sub section II of Annexure V of the Business Rules. The Exchange also reserves its right to modify or change the matching rules as per any of the methodology Prescribed in Annexure V to the Business Rules as would be felt relevant and necessary to do so, subject to the approval of the CERC.

### 4.2.4.4.20. Reports

During and at the end of Trading Session, the Exchange will give various reports to the Members including the 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.

#### 4.2.4.4.21. Settlement



Based on the application made by the Exchange, RLDC / SLDC would arrange to schedule the cleared trades which would reflect in the day-ahead schedules of the respective RLDCs/SLDCs.

### 4.2.5 **Daily Market - Operations**

The Exchange shall provide Daily Market Contract for transacting in Conventional, Solar, Non Solar, Hydro and High-Price power with delivery on Term Ahead basis (i.e. 'T+2 and above'). The 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.

#### 4.2.5.1 CONTRACT CALENDAR/ PERIOD

The Exchange shall operate Daily Contract on a Term Ahead Basis as would be prescribed in the Trading Calendar from time to time.

#### 4.2.5.2 TRADING DAYS

The Exchange shall operate on various days as may be Prescribed by the Exchange from time to time, called the Trading Day, which shall abide by the requirements of GNA Regulations 2022 as amended from time to time, for open access and scheduling procedure.

Trading Days would be prescribed in the Trading Calendar and would be intimated to the members by the Exchange from time to time.

#### 4.2.5.3 AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the Daily Contract would be available for transaction on the Exchange. The Auction Trade Session timings would be notified to the Members through the Trading Calendar by the Exchange from time to time.

The Exchange may extend, advance or reduce the Auction Trade Session timings as and when it deems fit and necessary by notifying the Members.

#### 4.2.5.4 TRADING CYCLE

Trading Cycle is the entire process of Trading of electricity on the exchange including but not limited to placing bids, trading, matching and scheduling.



The Trading Cycle of the Exchange would be in accordance with relevant provisions of the GNA Regulations 2022 as amended from time to time for open access and scheduling procedure. The various steps in the Trading Cycle would be intimated to the Members by the Exchange from time to time.

#### 4.2.5.5 TRADING PARAMETERS

# 4.2.5.5.1 Contract Specifications

For the Daily market the detailed contract specifications are given in 'Annexure IA5'. These Contract Specifications will form an integral part of these Business Rules and shall be binding on all Members and their 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.

# 4.2.5.5.2 Type of Market

Daily Contract will be a part of physical market Contract family for electricity trading. The market for Daily Contract will be open for trading on all days as defined by the exchange and will be notified to the participants through the issue of a circular. This Contract will enable the market participants to trade for multiple day contracts on all or none basis.

# 4.2.5.5.3 Trading System

For the facilitation of trading, PXIL provides a common platform to the participants for entering the buy & sell orders.

### 4.2.5.5.4 Trading Methodology

The trading methodology followed would be as defined in Annexure V of the Business Rules.

### 4.2.5.5.5 Auction Timings

This defines the specified time period during which the participants would place their buy/sell orders once the session is made available.

#### 4.2.5.5.6 Minimum Bid Volume



This defines the minimum quantity of electricity trade that needs to be entered in the trading system for it to be considered for matching.

### 4.2.5.5.7 Delivery Days

The Delivery would be for the contract period specified above, based on the application submitted by the Exchange and approved by the Nodal RLDC / SLDC and scheduled by respective RLDCs/SLDCs.

### 4.2.5.5.8 Delivery Period

The Delivery Period will equally spread over the Trading Slot, as detailed in the Contract Specifications at **Annexure IA5**, from the first day of the Contract Period till the last day of the Contract Period, including both days that have been contracted.

# 4.2.5.5.9 Delivery Point

The delivery point shall be on the State/Regional periphery of the selling entity. Seller intending to sell contract of particular Region will have to deliver electricity on the periphery of its State and buyer has to take delivery on this periphery. The seller will have to bear all transmission charges and losses up to the periphery of the contract Region from its injection point. The buyer will bear transmission charges and losses from the periphery of the contract Region to his point of drawl and also transmission losses and charges for the contract Region. Sellers will deliver the power to their point of Regional interconnection. In case of State embedded entity, they will deliver it to the State periphery where the State gets connected to the Regional interconnection. In case of Regional embedded entity, they will deliver it to their connection with the Regional grid.

### 4.2.5.5.10 Traded Schedule Vs Actual Schedule

For the purpose of the contract in the Any Day(s) market, the actual schedule shall be worked out after incorporation of transmission losses in kind on the traded schedule.

#### 4.2.5.5.11 Transmission Losses



The losses would be handled as per the GNA Regulations 2022, , and Sharing Regulations 2020 as amended from time to time.

### 4.2.5.5.12 Transmission Charges

The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022, and Sharing Regulations 2020, as amended from time to time and would be payable to the Exchange in cash.

### 4.2.5.5.13 Scheduling and System Operation Charges

The delivery point shall be at the Regional periphery of the respective Seller and Buyer. Hence, the following shall be applicable.

- 1. Buyer shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Buyer is located.
- 2. Seller shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Seller is located.
- In case both the Buyer and Seller are from the same Region then the RLDC operating charges shall be shared equally between the Buyer and the Seller.
- 4. In case of intermediate region, the intermediate RLDC operating charges shall be shared equally between the Buyer and the Seller.

The Scheduling and Operating charges shall be applicable based on provisions of GNA Regulations 2022, Sharing Regulations 2020 and any other Regulations notified from time to time

# 4.2.5.5.14 Fulfillment of Contractual liability

Members can fulfill their contractual liabilities only through physical delivery by seller and/or by financial settlement (in case of buyers)

# 4.2.5.5.15 Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract 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.



## 4.2.5.5.16 Settlement Guarantee

Subject to the Bye-Laws, the Exchange shall guarantee the settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the Exchange. The settlement guarantee of the Exchange shall be confined to the extent as may be Prescribed in the Applicable Laws from time to time.

# 4.2.5.5.17 Governing law & Jurisdiction

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

## **4.2.5.5.18** Types of Orders

The types of Order shall be informed to participants by issuance of Circular from time to time

## 4.2.5.5.19 Order Validation

The bids and offers entered by the Approved Users into the Trading system would be validated by the Exchange as per various parameters of price/quantity/margins etc decided from time to time. Only after successful validation the orders would be accepted by the Exchange.

Members shall be solely responsible for the accuracy of details of orders entered into the Trading System including orders entered on behalf of their Clients.

## **4.2.5.5.20** Matching Rules

Matching Rules would be as per sub section II of the Annexure V to the Business Rules. The Exchange also reserves its right to modify or change the matching rules as per any of the methodology Prescribed in Annexure V to the Business Rules as would be felt relevant and necessary to do so, subject to the approval of the CERC.

## 4.2.5.5.21 Reports



During and at the end of Trading Session, the Exchange will give various reports to the Members including the 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

#### 4.2.5.5.22 **Settlement**

Based on the application made by the Exchange, RLDC / SLDC would arrange to schedule the cleared trades which would reflect in the day-ahead schedules of the respective RLDCs / SLDCs.

# 4.2.6. Real Time Market - Operations

#### 4.2.6.1. CONTRACT CALENDAR / PERIOD

The Exchange shall operate Real Time Market Contract on Collective basis as per Regulation 5(1) of PMR 2021, GNA Regulations 2022 and IEGC 2023

# 4.2.6.2. AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the Real Time Market Contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members by the Exchange from time to time.

The Exchange may extend, advance or reduce Trading hours by notifying the Members as and when it deems fit and necessary.

#### 4.2.6.3. TRADING CYCLE

Trading Cycle of the Exchange would be as per the 'Procedure for T-GNA' issued by, National Load Despatch Centre. The various steps in the Trading Cycle would be intimated to the Members by the Exchange from time to time.

## 4.2.6.4. TRADING PARAMETERS

## 4.2.6.4.1. Contract Specifications:



For the Real Time Market, the detailed Contract Specifications are given in 'Annexure IA2' below. These Contract Specifications will form an integral part of these Business Rules and shall be binding on all Members and their 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.

# 4.2.6.4.2. Delivery Period:

The Delivery in the present Contracts would be for two consecutive time blocks of 15-minute duration each, based on the application submitted by the Exchange to NLDC and scheduled by NLDC / RLDCs / SLDCs.

## **4.2.6.4.3. Delivery Point:**

Delivery point is the regional periphery of the regional transmission system in which the grid connected entity is located.

## 4.2.6.4.4. Traded Schedule vs. Actual Schedule:

For the purpose of the Contract in the Real Time market, the trade schedule shall be reckoned at the Delivery Point as defined in clause 4.2.6.4.3. The actual schedule at various seams including that of grid connected entities shall be worked out after incorporation of transmission losses in kind.

## 4.2.6.4.5. Transmission Charges:

The transmission charges to be paid by the buyers and sellers shall be as per GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time.

#### 4.2.6.4.6. Transmission Losses:

The transmission losses would be charged and handled as per GNA Regulations 2022 and Sharing Regulations, 2020 as amended from time to time.

# 4.2.6.4.7. Scheduling and System Operation Charges:

Scheduling and System Operational Charges for NLDC / RLDC / SLDC shall be payable by the Exchange in accordance with GNA Regulations 2022, along with the Procedures approved by CERC and as amended from time to time. Such charges shall be recovered by the Exchange and socialized amongst all Buyers and Sellers.



# 4.2.6.4.8. Fulfilment of Contractual liability

This contract is for physical delivery only. Members can fulfil their contractual liabilities through physical delivery / off-take and by meeting all financial obligations arising out of such physical delivery / off-take.

#### 4.2.6.4.9. Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract if according to the Exchange a Member has attempted to conclude the transaction in violation of the Rules, Byelaws and/ or Business Rules of the Exchange or with an intention of indulging in price manipulation, price rigging or price distortion or violation of any Applicable Law.

#### 4.2.6.4.10. Settlement Guarantee

Subject to the Bye-Laws, Rules and these Business Rules, the Exchange shall guarantee the settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the Exchange. The settlement guarantee of the Exchange shall be confined to the extent as may be prescribed in the Applicable laws from time to time.

## 4.2.6.4.11. Governing Law & Jurisdiction

Every Contract executed as per Rules, Bye-laws and Business Rules of the Exchange shall take effect as a Contract made in Mumbai and shall be governed by the Laws of India under the jurisdiction of the Courts of Mumbai.

# **4.2.6.4.12.** Types of Orders

The Members through their Approved Users can place the following types of Orders on the Exchange through the Trading System:

- **Normal Orders:** The Members would be able to put multiple pricequantity orders for each Contract (i.e. each timeslot).
- Block Orders (All or None type Orders): Block Order will specify one
  price and one quantity for a single time slot or combination of continuous
  time blocks i.e. same quantity, at one particular price for multiple time
  blocks, as may be notified by the Exchange from time to time. A Block
  order would consist of orders for Single time slot or group of contiguous



- time slots (e.g. 2 time blocks of 15 minutes each), or as notified by Exchange from time to time.
- Other Orders: The Exchange shall introduce other types of orders as per the requirement of the market. Details of such other possible orders shall be notified by the Exchange from time to time.

## 4.2.6.4.13. Order Validation

The bids and offers entered by the Approved Users into the Trading System would be validated by the Exchange as per various parameters of price/quantity/margins etc. decided from time to time. Only after successful validation, the Orders would be accepted by the Exchange.

Members shall be solely responsible for the accuracy of details of Orders entered into the Trading System including Orders entered on behalf of their Clients or entered by Approved Users on their behalf.

# 4.2.6.4.14. Matching Rules

Matching Rules would be as per Annexure V to the Business Rules. The Exchange also reserves its right to modify or change the matching rules as per any of the methodology prescribed in Annexure V to the Business Rules as would be felt relevant and necessary to do so, subject to the approval of the CERC.

#### 4.2.6.4.15. Reports

During and at the end of a Trading Session, the Exchange will give various reports to the Members including the 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.

## 4.2.6.4.16. Settlement

Based on the application made by the Exchange, NLDC would arrange to schedule the cleared trades which would reflect in the schedules of the respective RLDCs/SLDCs.

## 4.2.7. Month(s) Ahead Market - Operations



The Exchange shall provide Month (s) Ahead Market Contract for transacting in Conventional, Solar, Non Solar, Hydro and High-Price power with delivery on Term Ahead basis (i.e. 'T+2 and above'). The 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.

## 4.2.7.1. CONTRACT CALENDAR / PERIOD

The Exchange shall operate Month(s) Ahead Contracts on Term Ahead basis as would be prescribed in the Trading Calendar from time to time.

#### 4.2.7.2. TRADING DAYS

The Exchange shall operate on various days as may be Prescribed by the Exchange from time to time, called the Trading Days, which shall abide by the requirements of GNA Regulations 2022, as amended from time to time, for open access and scheduling procedure.

Trading Days would be prescribed in the Trading Calendar and would be intimated to the members by the Exchange from time to time.

# 4.2.7.3. AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the Month(s) Ahead Contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members by the Exchange from time to time.

The Exchange may extend, advance or reduce Trading hours by notifying the Members as and when it deems fit and necessary.

#### 4.2.7.4. TRADING CYCLE

Trading Cycle is the entire process of Trading of electricity on the exchange including but not limited to placing bids, trading, matching and scheduling. The Trading Cycle of the Exchange would be in accordance with relevant provisions of the GNA Regulations 2022 as amended from time to time for open access and scheduling procedure. The various steps in the Trading Cycle would be intimated to the Members by the Exchange from time to time.

## 4.2.7.5. TRADING PARAMETERS



# 4.2.7.5.1. Contract Specifications:

For the Month(s) Ahead Market, the detailed Contract Specifications are given in 'Annexure IA7' below. These Contract Specifications will form an integral part of these Business Rules and shall be binding on all Members and their 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.

# 4.2.7.5.2. Type of Market

Month(s) Ahead Contract will be a part of physical market product family for electricity trading available at PXIL. The market for Month(s) Ahead product will be open for trading on all days as defined by the exchange and will be notified to the participants through the issue of a Circular. This product will enable the market participants to trade for multiple day contracts on all or none basis of the month.

# 4.2.7.5.3. Trading System

For the facilitation of trading, PXIL provides a common platform to the participants for entering the buy & sell Orders.

# 4.2.7.5.4. Trading Methodology

The trading methodology followed would be as defined in Annexure V of the Business Rules.

The matching mechanism would be notified to participants in the form of a Circular from time to time

# 4.2.7.5.5. Auction Timings

This defines the specified time period during which the participants would place their buy/sell orders once the session is made available.

#### 4.2.7.5.6. Minimum Bid Volume

This defines the minimum quantity of electricity trade that needs to be entered in the trading system for it to be considered for matching.

## **4.2.7.5.7. Delivery Days**



The Delivery would be for the contract period specified above, based on the application submitted by the Exchange and approved by the Nodal RLDC and scheduled by RLDCs/SLDCs.

## 4.2.7.5.8. Delivery Period

The Delivery Period will be equally spread over the Trading Slot, as detailed in the Contract Specifications at **Annexure IA6**, from the first day of the Contract Period till the last day of the Contract Period, including both days that have been contracted.

## **4.2.7.5.9. Delivery Point:**

The delivery point shall be on the State/Regional periphery of the selling entity. Seller intending to sell contract of particular Region will have to deliver electricity on the periphery of its State and buyer has to take delivery on this periphery. The seller will have to bear all transmission charges and losses up to the periphery of the contract Region from its injection point. The buyer will bear transmission charges and losses from the periphery of the contract Region to his point of drawl and also transmission losses and charges for the contract Region. Sellers will deliver the power to their point of Regional interconnection. In case of State embedded entity, they will deliver it to the State periphery where the State gets connected to the Regional interconnection. In case of Regional embedded entity, they will deliver it to their connection with the Regional grid.

#### 4.2.7.5.10. Traded Schedule vs. Actual Schedule:

For the purpose of the Contract in the Month(s) Ahead market, the trade schedule shall be reckoned at the Delivery Point as defined in clause 4.2.7.5.9. The actual schedule at various seams including that of grid connected entities shall be worked out after incorporation of transmission losses in kind.

# 4.2.7.5.11. Transmission Charges:

The transmission charges to be paid by the buyers and sellers shall be as per GNA Regulations 2022 and Sharing Regulations, 2020 as amended from time to time.

#### 4.2.7.5.12. Transmission Losses:



The transmission losses would be charged and handled as per GNA Regulations 2022 and Sharing Regulations, 2020 as amended from time to time.

# 4.2.7.5.13. Scheduling and System Operation Charges:

The delivery point shall be at the Regional periphery of the respective Seller and Buyer. Hence, the following shall be applicable.

- a) Buyer shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Buyer is located.
- b) Seller shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Seller is located.
- c) In case both the Buyer and Seller are from the same Region then the RLDC operating charges shall be shared equally between the Buyer and the Seller.

The Scheduling and Operating charges shall be applicable based on provisions of GNA Regulations 2022, Sharing Regulations 2020 and any other Regulations notified from time to time

## 4.2.7.5.14. Fulfilment of Contractual liability

This contract is for physical delivery only. Members can fulfill their contractual liabilities through physical delivery / off-take and by meeting all financial obligations arising out of such physical delivery / off-take.

#### 4.2.7.5.15. Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract if according to the Exchange a Member has attempted to conclude the transaction in violation of the Rules, Byelaws and/ or Business Rules of the Exchange or with an intention of indulging in price manipulation, price rigging or price distortion or violation of any Applicable Law.

## 4.2.7.5.16. Settlement Guarantee

Subject to the Bye-Laws, Rules and these Business Rules, the Exchange shall guarantee the settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the Exchange. The settlement guarantee of the Exchange



shall be confined to the extent as may be prescribed in the Applicable laws from time to time.

# 4.2.7.5.17. Governing Law & Jurisdiction

Every Contract executed as per Rules, Bye-laws and Business Rules of the Exchange shall take effect as a Contract made in Mumbai and shall be governed by the Laws of India under the jurisdiction of the Courts of Mumbai.

## **4.2.7.5.18.** Types of Orders

The Members through their Approved Users can place the following types of Orders on the Exchange through the Trading System:

- Normal Orders:. A Normal Order contains price-quantity pair(s), where a
  Buyer is willing to buy all quantity upto the value specified at or below the
  quoted price and Seller is willing to sell all quantity upto the value
  specified at or above the quoted price. (i.e. each Trading slot as defined
  in the Contract specification at Annexure IG
- Block Orders (All or None type Orders): Block Order will specify one
  price and one quantity for a single time slot or combination of contiguous
  time slots i.e. same quantity, at one particular price for multiple time slots,
  as may be notified by the Exchange from time to time. A Block order
  would consist of orders for Single time slot or group of contiguous time
  slots (e.g. 2 time slots of 15 minutes each), or as notified by Exchange
  from time to time.
- Other Orders: The Exchange shall introduce other types of orders as per the requirement of the market. Details of such other possible orders shall be notified by the Exchange from time to time.

## 4.2.7.5.19. Order Validation

The bids and offers entered by the Approved Users into the Trading System would be validated by the Exchange as per various parameters of price/quantity/margins etc. decided from time to time. Only after successful validation, the Orders would be accepted by the Exchange.



Members shall be solely responsible for the accuracy of details of Orders entered into the Trading System including Orders entered on behalf of their Clients or entered by Approved Users on their behalf.

## 4.2.7.5.20. Matching Rules

Matching Rules would be as per Annexure V to the Business Rules. The Exchange also reserves its right to modify or change the matching rules as per any of the methodology prescribed in Annexure V to the Business Rules as would be felt relevant and necessary to do so subject to prior notification through issuance of Circular by the Exchange. The Exchange may introduce any other type of matching mechanism by issuance of Circular from time to time, subject to the approval of the CERC.

# 4.2.7.5.21. Reports

During and at the end of a Trading Session, the Exchange will give various reports to the Members including the 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.

## 4.2.7.5.22. Settlement

Based on the application made by the Exchange, NLDC would arrange to schedule the cleared trades which would reflect in the schedules of the respective RLDCs/SLDCs.

# 4.2.8. Any Day Single Sided Market with Reverse Auction

The Exchange shall provide Any Day Single-Sided with Reverse Auction Contract for transacting in Conventional, Solar, Non Solar, Hydro and High-Price power for delivery on Term Ahead basis (i.e. 'T+2 and above'). The 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.

## 4.2.8.1. CONTRACT CALENDAR / PERIOD

The Exchange shall operate Any Day Single Sided Contracts on Term Ahead basis as would be prescribed in the Trading Calendar from time to time or based on requirement received from market participants.



#### 4.2.8.2. TRADING DAYS

The Exchange shall operate on various days as may be Prescribed by the Exchange from time to time, called the Trading Days, which shall abide by the requirements of GNA Regulations 2022, as amended from time to time, for open access and scheduling procedure.

Trading Days would be prescribed in the Trading Calendar and would be intimated to the members by the Exchange from time to time.

#### 4.2.8.3. AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the Any Day Single Sided Contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members by the Exchange from time to time.

The Exchange may extend, advance or reduce Trading hours by notifying the Members as and when it deems fit and necessary.

## 4.2.8.4. TRADING CYCLE

Trading Cycle is the entire process of Trading of electricity on the exchange including but not limited to placing bids, trading, matching and scheduling. The Trading Cycle of the Exchange would be in accordance with relevant provisions of the GNA Regulations 2022 as amended from time to time for open access and scheduling procedure. The various steps in the Trading Cycle would be intimated to the Members by the Exchange from time to time.

## 4.2.8.5. TRADING PARAMETERS

## 4.2.8.5.1. Contract Specifications:

For the Any Day Single Sided Contract with Reverse auction, the detailed Contract Specifications is given at 'Annexure IA7' below. These Contract Specifications will form an integral part of these Business Rules and shall be binding on all Members and their 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.

# 4.2.8.5.2. Type of Market



Any Day Single Sided Contract will be a part of physical market product family for electricity trading available at PXIL. The market for Any Day Single Sided Contract will be open for trading on all days as defined by the exchange and will be notified to the participants through the issue of a Circular and/or in 'PRATYAY' system.

# 4.2.8.5.3. Trading System

For the facilitation of trading, PXIL provides a software platform 'PRATYAY' to the participants for entering the buy & sell Orders.

# 4.2.8.5.4. Trading Methodology

The trading methodology followed would be as defined in Annexure V of the Business Rules.

The matching mechanism would be notified to participants in the form of a Circular from time to time

# 4.2.8.5.5. Auction Timings

This defines the specified time period during which the participants would place their buy/sell orders once the session is made available.

# 4.2.8.5.6. Minimum Bid Volume

This defines the minimum quantity of electricity trade that needs to be entered in the trading system for it to be considered for matching.

# **4.2.8.5.7.** Delivery Days

The Delivery would be for the contract period specified above, based on the application submitted by the Exchange and approved by the Nodal RLDC and scheduled by RLDCs/SLDCs.

## 4.2.8.5.8. Delivery Period

The Delivery Period will be equally spread over the Trading Slot, as detailed in the Contract Specifications at **Annexure I A7** below, from the first day of the Contract Period till the last day of the Contract Period, including both days that have been contracted.

## **4.2.8.5.9. Delivery Point:**



The delivery point shall be on the State/Regional periphery of the selling entity. Seller intending to sell contract of particular Region will have to deliver electricity on the periphery of its State and buyer has to take delivery on this periphery. The seller will have to bear all transmission charges and losses up to the periphery of the contract Region from its injection point. The buyer will bear transmission charges and losses from the periphery of the contract Region to his point of drawl and also transmission losses and charges for the contract Region. Sellers will deliver the power to their point of Regional interconnection. In case of State embedded entity, they will deliver it to the State periphery where the State gets connected to the Regional interconnection. In case of Regional embedded entity, they will deliver it to their connection with the Regional grid.

## 4.2.8.5.10. Traded Schedule vs. Actual Schedule:

For the purpose of the Contract in the Any Day Single Sided Contract, the trade schedule shall be reckoned at the Delivery Point as defined in clause 4.2.10.5.9. The actual schedule at various seams including that of grid connected entities shall be worked out after incorporation of transmission losses in kind.

## 4.2.8.5.11. Transmission Charges:

The transmission charges to be paid by the buyers and sellers shall be as per GNA Regulations 2022 and Central Electricity Regulatory Commission (Sharing of Interstate Transmission Charges and Losses) Regulations, 2020 as amended from time to time.

## 4.2.8.5.12. Transmission Losses:

The transmission losses would be charged and handled as per GNA Regulations 2022 and Central Electricity Regulatory Commission (Sharing of Interstate Transmission Charges and Losses) Regulations, 2020 as amended from time to time.

## 4.2.8.5.13. Scheduling and System Operation Charges:

The delivery point shall be at the Regional periphery of the respective Seller and Buyer. Hence as per extant Regulation, the following shall be applicable:

a) Buyer shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Buyer is located.



- b) Seller shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Seller is located.
- c) In case both the Buyer and Seller are from the same Region then the RLDC operating charges shall be shared equally between the Buyer and the Seller.
- d) In case of intermediate region, the intermediate RLDC operating charges shall be shared equally between the Buyer and the Seller.

The Scheduling and Operating charges shall be applicable based on provisions of GNA Regulations 2022, Sharing Regulations 2020 and any other Regulations notified from time to time

# 4.2.8.5.14. Fulfilment of Contractual liability

This contract is for physical delivery only. Members can fulfill their contractual liabilities through physical delivery / off-take and by meeting all financial obligations arising out of such physical delivery / off-take.

## 4.2.8.5.15. Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract if according to the Exchange a Member has attempted to conclude the transaction in violation of the Rules, Byelaws and/ or Business Rules of the Exchange or with an intention of indulging in price manipulation, price rigging or price distortion or violation of any Applicable Law.

# 4.2.8.5.16. Settlement Guarantee

Subject to the Bye-Laws, Rules and these Business Rules, the Exchange shall guarantee the settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the Exchange. The settlement guarantee of the Exchange shall be confined to the extent as may be prescribed in the Applicable laws from time to time.

## 4.2.8.5.17. Governing Law & Jurisdiction

Every Contract executed as per Rules, Bye-laws and Business Rules of the Exchange shall take effect as a Contract made in Mumbai and shall be governed by the Laws of India under the jurisdiction of the Courts of Mumbai.



# **4.2.8.5.18.** Types of Orders

The Exchange through the Trading system will allow Members through their approved Users to submit Order in different Order types required by Buyer for each auction event.

The Exchange reserves the right to introduce different types of Order and inform the same to market participants through a Circular issued from time to time to meet Buyer's auction requirement.

#### 4.2.8.5.19. Order Validation

The bids and offers entered by the Approved Users into the Trading System would be validated by the Exchange as per various parameters of price/quantity/margins etc. decided from time to time. Only after successful validation, the Orders would be accepted by the Exchange.

Members shall be solely responsible for the accuracy of details of Orders entered into the Trading System including Orders entered on behalf of their Clients or entered by Approved Users on their behalf.

## 4.2.8.5.20. Rules for stacking

Stacking Rules for operating Reverse auction would be issued by Exchange in form of Circular from time to time. The Exchange also reserves its right to modify or change the stacking rules as per any of the methodology prescribed in Annexure V to the Business Rules as would be felt relevant and necessary to do so subject to prior notification through issuance of Circular by the Exchange.

# 4.2.8.5.21. Reports

During and at the end of a Trading Session, the Exchange will give various reports to the Members including the 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.

## 4.2.8.5.22. Settlement

Based on the application made by the Exchange, NLDC would arrange to schedule the cleared trades which would reflect in the schedules of the respective RLDCs/SLDCs.



# 4.2.9. Green Team Ahead Market - Operations

The Exchange shall list Green Term Ahead Contracts for meeting delivery requirements in Intraday, Day Ahead Contingency, Weekly, Daily, Monthly and Any Day Single-Sided Reverse Auction Contracts for all transactions that occur on day (T) and where the physical delivery of electricity is on same day or more (T or more) for meeting RPO requirements of Obligated entities. The 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.

#### 4.2.9.1. CONTRACT CALENDAR/ PERIOD

The Exchange shall operate Green Term Ahead Market (GTAM) contracts for transactions in Renewable energy as per GNA Regulations 2022, Procedure for T-GNA and as per the trading calendar to be issued from time to time.

#### 4.2.9.2. TRADING DAYS

The Exchange shall operate on various days as may be prescribed by the Exchange from time to time, called the Trading Day, which shall abide by the requirements of GNA Regulations 2022, as amended from time to time, for open access and scheduling procedure.

Trading Days would be prescribed in the Trading Calendar and would be intimated to the members by the Exchange from time to time.

## 4.2.9.3. AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members through the Trading Calendar by the Exchange from time to time.

The Exchange may extend, advance or reduce the Auction Trade Session timings as and when it deems fit and necessary by notifying the Members.

## 4.2.9.4. TRADING CYCLE

Trading Cycle is the entire process of Trading of electricity on the exchange including but not limited to placing bids, trading, matching and scheduling. The Trading Cycle of the Exchange would be in accordance with relevant provisions of the GNA



Regulations 2022 as amended from time to time for open access and scheduling procedure. The Exchange reserves the right to make amendments to this procedure by notifying it through a Circular from time to time.

#### 4.2.9.5. TRADING PARAMETERS

For the Green Term Ahead Market the detailed Contract specifications are given as 'Annexure I B1 to I B6' below. These Contract Specifications will form an integral part of these Business Rules and shall be binding on all Members and their Clients trading on the Exchange. Any Contract entered into in violation of these norms or not conforming to the Rules, Bye laws, Business Rules of the Exchange and/or other applicable laws shall be considered as void.

# 4.2.9.6. Trading System

For the facilitation of trading, PXIL provides a common platform to the participants for entering the buy & sell orders.

# 4.2.9.7. Trading Methodology

The trading methodology followed would be as defined in Annexure V of the Business Rules and the Circulars issued by the Exchange from time to time.

## 4.2.9.8. Auction Timings

This defines the specified time period during which the participants would place their buy/sell orders once the session is made available

## 4.2.9.9. Minimum Bid Volume

This defines the minimum quantity of electricity trade that needs to be entered in the trading system for it to be considered for matching.

## 4.2.9.10. Delivery Days

The Delivery would be for the contract period specified above based on the application submitted to RLDC / SLDC and approved by Nodal RLDC / SLDC and scheduled by RLDCs / SLDCs.

## 4.2.9.11. Delivery Period

The Delivery Period shall be in accordance with Contract entered by Market participants and may include any period from 00:00 hours of 1st day of the contract



period to 24:00 hours of the last day of the Contract period or as notified by the Exchange from time to time.

## 4.2.9.12. Delivery Point

The Delivery Point shall be as per the Point of connection defined for every selling entity as provided in Sharing Regulations 2020 as amended from time to time or any other Regulation notified by CERC.

## 4.2.9.13. Traded Schedule vs. Actual Schedule

For the purpose of the Contract in the Term Ahead market, the actual schedule shall be worked out after incorporation of transmission losses in kind on the traded schedule.

## 4.2.9.14. Transmission Losses

As per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulation, 2020 as amended from time to time or any other Regulation notified by CERC.

# 4.2.9.15. Transmission Charges, Scheduling Charge, System Operation Charge and any other Charge

Transmission Charges, Scheduling Charge, System Operation Charge and any other charge will be levied as per the Contract Specification and according to the provisions of GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time or any other Regulation notified by CERC.

The delivery point shall be at the Regional periphery of the respective Seller. Hence, the following shall be applicable:

- Buyer shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Buyer is located.
- b) Seller shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Seller is located.
- c) In case both the Buyer and Seller are from the same Region then the RLDC operating charges shall be shared equally between the Buyer and the Seller.
- d) In case of intermediate region, the intermediate RLDC operating charges



shall be shared equally between the Buyer and the Seller.

The Scheduling and Operating charges shall be applicable based on provisions of GNA Regulations 2022, Sharing Regulations 2020 and any other Regulations notified from time to time

#### 4.2.9.16. Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract 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:

- a) Price manipulation
- b) Price rigging
- c) Price distortion
- d) Manipulative or attempted manipulative activity
- e) Transactions that are misleading or deceptive, or are likely to mislead or deceive
- f) Any other activity as may be notified by the Exchange from time to time

# 4.2.9.17. Fulfilment of Contractual liability

Members can fulfil their contractual liabilities only through physical delivery and not by financial settlement

#### 4.2.9.18. Settlement Guarantee

Subject to the Bye-Laws, the Exchange shall guarantee the Settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the Exchange. The Settlement Guarantee of the Exchange is confined only to the extent as may be prescribed in the applicable laws from time to time.

# 4.2.9.19. Governing Law & Jurisdiction

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

# 4.2.9.20. Types of Order



The types of Order shall be informed to participants by issuance of Circular from time to time

#### 4.2.9.21. Order Validation

The bids and offers entered by the Approved Users into the trading system would be validated by the Exchange as per various parameters of Price/Quantity/Margins, etc. decided from time to time. Only after successful validation the Orders would be accepted by the Exchange. Members shall be solely responsible for the accuracy of details of Orders entered into the Trading System including Orders entered on behalf of their Clients.

## 4.2.9.22. Matching Rules

Matching Rules would be as per sub section III of the Annexure V to the Business Rules and Circulars issued by the Exchange from time to time. The Exchange reserves the right to introduce Continuous Trade Matching methodology, Collective Uniform Pricing, Reverse auction or any combination thereof for any Contract after receipt of approved from Commission. The auction type could be Double Sided Closed or Open Auction. The Exchange reserves the right to revise the Matching rule applicable for the Green Term Ahead Products among the three matching methodologies by issuing a Circular informing the market participants about the same. The Exchange also reserves its right to modify or change the matching rules as per any of the methodology prescribed in Annexure V to the Business Rules as would be felt relevant and necessary to do so, subject to the approval of the CERC.

During and at the end of a Trading Session, the Exchange shall provide various reports to the Members including the 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.

#### 4.2.9.23. Settlement

Based on the application made by the Exchange, RLDC would arrange to schedule the cleared trades that would reflect in the Day-Ahead schedules of the respective RLDCs/SLDCs.

#### 4.2.9.24. Certificate of Purchase



The Exchange shall issue a Certificate of Purchase of Renewable Energy to the Buyer identifying the quantum of Solar / Non-Solar renewable energy purchased in a transaction.

# 4.2.10. <u>Hydro bid type in Team Ahead Market - Operations</u>

The Exchange shall list Hydro bid type in Term Ahead Contracts for meeting delivery requirements in Intraday, Day Ahead Contingency, Weekly, Daily, Monthly and Any Day Single Sided Reverse Auction Contracts for all transactions that occur on day (T) and where the physical delivery of electricity is on same day or more (T or more). The 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.

#### 4.2.10.1. CONTRACT CALENDAR/ PERIOD

The Exchange shall operate Hydro bid type in Term Ahead Market (Hydro bid type in TAM) contracts for transactions in Hydro energy as per GNA Regulations 2022, Procedure for T-GNA and as per the trading calendar to be issued from time to time.

## 4.2.10.2. TRADING DAYS

The Exchange shall operate on various days as may be prescribed by the Exchange from time to time, called the Trading Day, which shall abide by the requirements of GNA Regulations 2022, as amended from time to time, for open access and scheduling procedure.

Trading Days would be prescribed in the Trading Calendar and would be intimated to the members by the Exchange from time to time.

# 4.2.10.3. AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members through the Trading Calendar by the Exchange from time to time.

The Exchange may extend, advance or reduce the Auction Trade Session timings as and when it deems fit and necessary by notifying the Members.



#### 4.2.10.4. TRADING CYCLE

Trading Cycle is the entire process of Trading of electricity on the exchange including but not limited to placing bids, trading, matching and scheduling. The Trading Cycle of the Exchange would be in accordance with relevant provisions of the GNA Regulations 2022 as amended from time to time for open access and scheduling procedure. The Exchange reserves the right to make amendments to this procedure by notifying it through a Circular from time to time.

#### 4.2.10.5. TRADING PARAMETERS

For the Hydro bid type in Term Ahead Market the detailed Contract specifications are given at 'Annexure I: C1 to C6' below. These Contract Specifications will form an integral part of these Business Rules and shall be binding on all Members and their Clients trading on the Exchange. Any Contract entered into in violation of these norms or not conforming to the Rules, Bye laws, Business Rules of the Exchange and/or other applicable laws shall be considered as void.

## 4.2.10.6. Trading System

For the facilitation of trading, PXIL provides a common platform to the participants for entering the buy & sell orders.

#### 4.2.10.7. Trading Methodology

The trading methodology followed would be as defined in Annexure V of the Business Rules and the Circulars issued by the Exchange from time to time.

## 4.2.10.8. Auction Timings

This defines the specified time period during which the participants would place their buy/sell orders once the session is made available

# 4.2.10.9. Minimum Bid Volume

This defines the minimum quantity of electricity trade that needs to be entered in the trading system for it to be considered for matching.

## 4.2.10.10. Delivery Days

The Delivery would be for the contract period specified above based on the application submitted to RLDC / SLDC and approved by Nodal RLDC / SLDC and scheduled by RLDCs / SLDCs.



# 4.2.10.11. Delivery Period

The Delivery Period shall be in accordance with Contract entered by Market participants and may include any period from 00:00 hours of 1st day of the contract period to 24:00 hours of the last day of the Contract period or as notified by the Exchange from time to time.

## 4.2.10.12. Delivery Point

The Delivery Point shall be as per the Point of connection defined for every selling entity as provided in Sharing Regulations 2020 as amended from time to time or any other Regulation notified by CERC.

#### 4.2.10.13. Traded Schedule vs. Actual Schedule

For the purpose of the Contract in the Term Ahead market, the actual schedule shall be worked out after incorporation of transmission losses in kind on the traded schedule.

#### 4.2.10.14. Transmission Losses

As per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulation, 2020 as amended from time to time or any other Regulation notified by CERC.

# 4.2.10.15. Transmission Charges, Scheduling Charge, System Operation Charge and any other Charge

Transmission Charges, Scheduling Charge, System Operation Charge and any other charge will be levied as per the Contract Specification and according to the provisions of Sharing Regulation, 2020 and GNA Regulations 2022 as amended from time to time or any other Regulation notified by CERC.

The delivery point shall be at the Regional periphery of the respective Seller. Hence, the following shall be applicable:

- a) Buyer shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Buyer is located.
- b) Seller shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Seller is located.
- c) In case both the Buyer and Seller are from the same Region then the RLDC



operating charges shall be shared equally between the Buyer and the Seller.

d) In case of intermediate region, the intermediate RLDC operating charges shall be shared equally between the Buyer and the Seller

The Scheduling and Operating charges shall be applicable based on provisions of GNA Regulations 2022, Sharing Regulations 2020 and any other Regulations notified from time to time

#### 4.2.10.16. Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract 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:

- a) Price manipulation
- b) Price rigging
- c) Price distortion
- d) Manipulative or attempted manipulative activity
- e) Transactions that are misleading or deceptive, or are likely to mislead or deceive
- f) Any other activity as may be notified by the Exchange from time to time

## 4.2.10.17. Fulfilment of Contractual liability

Members can fulfil their contractual liabilities only through physical delivery and not by financial settlement

#### 4.2.10.18. Settlement Guarantee

Subject to the Bye-Laws, the Exchange shall guarantee the Settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the Exchange. The Settlement Guarantee of the Exchange is confined only to the extent as may be prescribed in the applicable laws from time to time.

## 4.2.10.19. Governing Law & Jurisdiction

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



# 4.2.10.20. Types of Order

The types of Order shall be informed to participants by issuance of Circular from time to time

#### 4.2.10.21. Order Validation

The bids and offers entered by the Approved Users into the trading system would be validated by the Exchange as per various parameters of Price/Quantity/Margins, etc. decided from time to time. Only after successful validation the Orders would be accepted by the Exchange. Members shall be solely responsible for the accuracy of details of Orders entered into the Trading System including Orders entered on behalf of their Clients.

## 4.2.10.22. Matching Rules

Matching Rules would be as per sub section III of the Annexure V to the Business Rules and Circulars issued by the Exchange from time to time. The Exchange shall introduce such type of Price discovery mechanism based on approved received from Hon'ble Commission for each Contract. The auction type could be Double Sided / Single sided and/or Closed / Open Auction. The Exchange also reserves its right to modify or change the matching rules as per any of the methodology prescribed in Annexure V to the Business Rules as would be felt relevant and necessary to do so, subject to the approval of the CERC.

During and at the end of a Trading Session, the Exchange shall provide various reports to the Members including the 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.

# 4.2.10.23. Settlement

Based on the application made by the Exchange, RLDC would arrange to schedule the cleared trades that would reflect in the Day-Ahead schedules of the respective RLDCs/SLDCs.

## 4.2.10.24. Certificate of Purchase

The Exchange shall issue a Certificate of Purchase of Hydro Energy to the Buyer identifying the quantum of Hydro energy purchased in a transaction.



# 4.2.11. <u>Hydro Green Team Ahead Market - Operations</u>

The Exchange shall list Hydro Green Term Ahead Contracts for meeting delivery requirements in Intraday, Day Ahead Contingency, Weekly, Daily, Monthly and Any Day Single Sided Reverse Auction Contracts for all transactions that occur on day (T) and where the physical delivery of electricity is on same day or more (T or more) for meeting HPO requirements of Obligated entities. The 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.

## 4.2.11.1. CONTRACT CALENDAR/ PERIOD

The Exchange shall operate Hydro Green Term Ahead Market Contracts for transactions in Hydro energy as per 'Procedure for T-GNA' issued under provisions of GNA Regulation 2022, and as per the trading calendar to be issued from time to time.

#### **4.2.11.2. TRADING DAYS**

The Exchange shall operate on various days as may be prescribed by the Exchange from time to time, called the Trading Day, which shall abide by the requirements of GNA Regulations 2022, as amended from time to time, for open access and scheduling procedure.

Trading Days would be prescribed in the Trading Calendar and would be intimated to the members by the Exchange from time to time.

#### 4.2.11.3. AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members through the Trading Calendar by the Exchange from time to time.

The Exchange may extend, advance or reduce the Auction Trade Session timings as and when it deems fit and necessary by notifying the Members.

## 4.2.11.4. TRADING CYCLE

Trading Cycle is the entire process of Trading of electricity on the exchange including but not limited to placing bids, trading, matching and scheduling. The Trading Cycle of



the Exchange would be in accordance with relevant provisions of the GNA Regulations 2022 as amended from time to time for open access and scheduling procedure. The Exchange reserves the right to make amendments to this procedure by notifying it through a Circular from time to time.

#### 4.2.11.5. TRADING PARAMETERS

For the Hydro Green Term Ahead Market the detailed Contract specifications are given at 'Annexure I: D1 to D6' below. These Contract Specifications will form an integral part of these Business Rules and shall be binding on all Members and their Clients trading on the Exchange. Any Contract entered into in violation of these norms or not conforming to the Rules, Bye laws, Business Rules of the Exchange and/or other applicable laws shall be considered as void.

# 4.2.11.6. Trading System

For the facilitation of trading, PXIL provides a common platform to the participants for entering the buy & sell orders.

# 4.2.11.7. Trading Methodology

The trading methodology followed would be as defined in Annexure V of the Business Rules and the Circulars issued by the Exchange from time to time.

## 4.2.11.8. Auction Timings

This defines the specified time period during which the participants would place their buy/sell orders once the session is made available

#### 4.2.11.9. Minimum Bid Volume

This defines the minimum quantity of electricity trade that needs to be entered in the trading system for it to be considered for matching.

# 4.2.11.10. **Delivery Days**

The Delivery would be for the contract period specified above based on the application submitted to RLDC / SLDC and approved by Nodal RLDC / SLDC and scheduled by RLDCs / SLDCs.

## 4.2.11.11. Delivery Period



The Delivery Period shall be in accordance with Contract entered by Market participants and may include any period from 00:00 hours of 1st day of the contract period to 24:00 hours of the last day of the Contract period or as notified by the Exchange from time to time.

# **4.2.11.12.** Delivery Point

The Delivery Point shall be as per the Point of connection defined for every selling entity as provided in Sharing Regulations 2020 as amended from time to time or any other Regulation notified by CERC.

#### 4.2.11.13. Traded Schedule vs. Actual Schedule

For the purpose of the Contract in the Term Ahead market, the actual schedule shall be worked out after incorporation of transmission losses in kind on the traded schedule.

#### 4.2.11.14. Transmission Losses

As per GNA Regulations 2022, Sharing Regulation, 2020 as amended from time to time or any other Regulation notified by CERC.

# 4.2.11.15. Transmission Charges, Scheduling Charge, System Operation Charge and any other Charge

Transmission Charges, Scheduling Charge, System Operation Charge and any other charge will be levied as per the Contract Specification and according to the provisions of Sharing Regulations, 2020 and GNA Regulations 2022 as amended from time to time or any other Regulation notified by CERC.

The delivery point shall be at the Regional periphery of the respective Seller. Hence, the following shall be applicable:

- a) Buyer shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Buyer is located.
- b) Seller shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Seller is located.
- c) In case both the Buyer and Seller are from the same Region then the RLDC operating charges shall be shared equally between the Buyer and the Seller.



d) In case of intermediate region, the intermediate RLDC operating charges shall be shared equally between the Buyer and the Seller.

The Scheduling and Operating charges shall be applicable based on provisions of GNA Regulations 2022, Sharing Regulations 2020 and any other Regulations notified from time to time

#### 4.2.11.16. Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract 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:

- a) Price manipulation
- b) Price rigging
- c) Price distortion
- d) Manipulative or attempted manipulative activity
- e) Transactions that are misleading or deceptive, or are likely to mislead or deceive
- f) Any other activity as may be notified by the Exchange from time to time

# 4.2.11.17. Fulfilment of Contractual liability

Members can fulfil their contractual liabilities only through physical delivery and not by financial settlement

#### 4.2.11.18. Settlement Guarantee

Subject to the Bye-Laws, the Exchange shall guarantee the Settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the Exchange. The Settlement Guarantee of the Exchange is confined only to the extent as may be prescribed in the applicable laws from time to time.

# 4.2.11.19. Governing Law & Jurisdiction

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

# 4.2.11.20. Types of Order



The types of Order shall be informed to participants by issuance of Circular from time to time

#### 4.2.11.21. Order Validation

The bids and offers entered by the Approved Users into the trading system would be validated by the Exchange as per various parameters of Price/Quantity/Margins, etc. decided from time to time. Only after successful validation the Orders would be accepted by the Exchange. Members shall be solely responsible for the accuracy of details of Orders entered into the Trading System including Orders entered on behalf of their Clients.

# 4.2.11.22. Matching Rules

Matching Rules would be as per sub section III of the Annexure V to the Business Rules and Circulars issued by the Exchange from time to time. The Exchange shall introduce such type of Price discovery mechanism based on approved received from Hon'ble Commission for each Contract. The auction type could be Double Sided / Single sided and/or Closed / Open Auction. The Exchange also reserves its right to modify or change the matching rules as per any of the methodology prescribed in Annexure V to the Business Rules as would be felt relevant and necessary to do so, subject to the approval of the CERC.

During and at the end of a Trading Session, the Exchange shall provide various reports to the Members including the 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.

#### 4.2.11.23. Settlement

Based on the application made by the Exchange, RLDC would arrange to schedule the cleared trades that would reflect in the Day-Ahead schedules of the respective RLDCs/SLDCs.

## 4.2.11.24. Certificate of Purchase

The Exchange shall issue a Certificate of Purchase of Hydro Energy to the Buyer identifying the quantum of Hydro energy purchased in a transaction.

## 4.2.12. High Price Bilateral Market - Operations



The Exchange shall list High Price Day Ahead Market Contract for meeting delivery requirements in Intraday, Day Ahead Contingency, Daily, Weekly, Monthly and Any Day Single Sided Reverse Auction Contracts for all transactions that occur on day (T) and where the physical delivery of electricity is on same day or more ('T' or more) meeting their power requirements

The 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.

#### 4.2.12.1. CONTRACT CALENDAR/ PERIOD

The Exchange shall operate High Price Bilateral Market Contracts as per 'Procedure for T-GNA' issued under provisions of GNA Regulation 2022, and as per the trading calendar to be issued from time to time.

## 4.2.12.2. TRADING DAYS

The Exchange shall operate on various days as may be prescribed by the Exchange from time to time, called the Trading Day, which shall abide by the requirements of GNA Regulations 2022, as amended from time to time, for open access and scheduling procedure.

Trading Days would be prescribed in the Trading Calendar and would be intimated to the members by the Exchange from time to time.

#### 4.2.12.3. AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members through the Trading Calendar by the Exchange from time to time.

The Exchange may extend, advance or reduce the Auction Trade Session timings as and when it deems fit and necessary by notifying the Members.

## 4.2.12.4. TRADING CYCLE

Trading Cycle is the entire process of Trading of electricity on the exchange including but not limited to placing bids, trading, matching and scheduling. The Trading Cycle of the Exchange would be in accordance with relevant provisions of the GNA



Regulations 2022 as amended from time to time for open access and scheduling procedure. The Exchange reserves the right to make amendments to this procedure by notifying it through a Circular from time to time.

#### 4.2.12.5. TRADING PARAMETERS

For High-Price Bilateral Market the detailed Contract specifications are given at 'Annexure I: E1 to E2' below for introducing Intra Day and Day Ahead Contingency Contracts. These Contract Specifications will form an integral part of these Business Rules and shall be binding on all Members and their Clients trading on the Exchange. Any Contract entered into in violation of these norms or not conforming to the Rules, Bye laws, Business Rules of the Exchange and/or other applicable laws shall be considered as void.

# 4.2.12.6. Trading System

For the facilitation of trading, PXIL provides a common platform to the participants for entering the buy & sell orders.

## 4.2.12.7. Trading Methodology

The trading methodology followed would be as defined in Annexure V of the Business Rules and the Circulars issued by the Exchange from time to time.

## 4.2.12.8. Auction Timings

This defines the specified time period during which the participants would place their buy/sell orders once the session is made available

#### 4.2.12.9. Minimum Bid Volume

This defines the minimum quantity of electricity trade that needs to be entered in the trading system for it to be considered for matching.

# 4.2.12.10. **Delivery Days**

The Delivery would be for the contract period specified above based on the application submitted to RLDC / SLDC and approved by Nodal RLDC / SLDC and scheduled by RLDCs / SLDCs.

# 4.2.12.11. Delivery Period



The Delivery Period shall be in accordance with Contract entered by Market participants and may include any period from 00:00 hours of 1st day of the contract period to 24:00 hours of the last day of the Contract period or as notified by the Exchange from time to time.

# 4.2.12.12. Delivery Point

The Delivery Point shall be as per the Point of connection defined for every selling entity as provided in Sharing Regulations 2020 as amended from time to time or any other Regulation notified by CERC.

## 4.2.12.13. Traded Schedule vs. Actual Schedule

For the purpose of the Contract in the Term Ahead market, the actual schedule shall be worked out after incorporation of transmission losses in kind on the traded schedule.

#### 4.2.12.14. Transmission Losses

As per GNA Regulations 2022, Sharing Regulation, 2020 as amended from time to time or any other Regulation notified by CERC.

# 4.2.12.15. Transmission Charges, Scheduling Charge, System Operation Charge and any other Charge

Transmission Charges, Scheduling Charge, System Operation Charge and any other charge will be levied as per the Contract Specification and according to the provisions of Sharing Regulations, 2020 and GNA Regulations 2022 as amended from time to time or any other Regulation notified by CERC.

The delivery point shall be at the Regional periphery of the respective Seller. Hence, the following shall be applicable:

- a) Buyer shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Buyer is located.
- b) Seller shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Seller is located.
- c) In case both the Buyer and Seller are from the same Region then the RLDC operating charges shall be shared equally between the Buyer and the Seller.



d) In case of intermediate region, the intermediate RLDC operating charges shall be shared equally between the Buyer and the Seller.

The Scheduling and Operating charges shall be applicable based on provisions of GNA Regulations 2022, Sharing Regulations 2020 and any other Regulations notified from time to time

#### 4.2.12.16. Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract 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:

- g) Price manipulation
- h) Price rigging
- i) Price distortion
- j) Manipulative or attempted manipulative activity
- k) Transactions that are misleading or deceptive, or are likely to mislead or deceive
- I) Any other activity as may be notified by the Exchange from time to time

# 4.2.12.17. Fulfilment of Contractual liability

Members can fulfil their contractual liabilities only through physical delivery and not by financial settlement

#### 4.2.12.18. Settlement Guarantee

Subject to the Bye-Laws, the Exchange shall guarantee the Settlement of all the trades done on the Exchange in accordance with the Bye-Laws of the Exchange. The Settlement Guarantee of the Exchange is confined only to the extent as may be prescribed in the applicable laws from time to time.

# 4.2.12.19. Governing Law & Jurisdiction

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

# 4.2.12.20. Types of Order



The types of Order shall be informed to participants by issuance of Circular from time to time

#### 4.2.12.21. Order Validation

The bids and offers entered by the Approved Users into the trading system would be validated by the Exchange as per various parameters of Price/Quantity/Margins, etc. decided from time to time. Only after successful validation the Orders would be accepted by the Exchange. Members shall be solely responsible for the accuracy of details of Orders entered into the Trading System including Orders entered on behalf of their Clients.

# 4.2.12.22. Matching Rules

Matching Rules would be as per sub section III of the Annexure V to the Business Rules and Circulars issued by the Exchange from time to time. The Exchange shall introduce such type of Price discovery mechanism based on approved received from Hon'ble Commission for each Contract. The auction type could be Double Sided / Single sided and/or Closed / Open Auction. The Exchange also reserves its right to modify or change the matching rules as per any of the methodology prescribed in Annexure V to the Business Rules as would be felt relevant and necessary to do so, subject to the approval of the CERC.

During and at the end of a Trading Session, the Exchange shall provide various reports to the Members including the 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.

#### 4.2.12.23. Settlement

Based on the application made by the Exchange, RLDC would arrange to schedule the cleared trades that would reflect in the Day-Ahead schedules of the respective RLDCs/SLDCs.

## 4.2.12.24. Certificate of Purchase

The Exchange shall issue a Certificate of Purchase of Hydro Energy to the Buyer identifying the quantum of Hydro energy purchased in a transaction.

## 4.2.13. Tertiary Reserve Ancillary Services - Operations



The Exchange shall list Tertiary Reserve Ancillary Services Contract for meeting delivery requirement as provided under Central Electricity Regulatory Commission (Ancillary Services) Regulations, 2022, ('AS Regulation 2022'), as amended from time to time.

There shall be two types of Contracts, i.e. Day Ahead AS Market Contract and Real Time AS Market Contract for bidding to provide TRAS-Up and TRAS-Down services. All entities eligible to participate in TRAS under provision of Regulation 14 of AS Regulation 2022 shall be termed as TRAS providers. The entities shall offer TRAS services in compliance to 'Detailed Procedure for Tertiary Reserve Ancillary Service (TRAS)' (herein after 'Detailed Procedure') issued by Nodal Agency.

The terms and conditions applicable for participation in TRAS is:

- a. Member / Client: All entities registered with Nodal Agency in compliance to 'Detailed Procedure shall be register in AS segment as Member/Client, as the case may be
- b. The Member / Client eligible to participate in TRAS segment shall ensure that the quantum bid in TRAS service should be distinct and non-overlapping with quantum bid in energy Contracts for each time block

Few terms applicable for participant in TRAS segment and as referred in AS Regulations 2022, PMR 2021 and other Regulation/Order issued by Hon'ble Commission are:

- i. "Ancillary Service" or "AS" in relation to power system operation, means the service necessary to support the grid operation in maintaining power quality, reliability and security of the grid and includes Primary Reserve Ancillary Service, Secondary Reserve Ancillary Service, Tertiary Reserve Ancillary Service, active power support for load following, reactive power support, black start and such other services as defined in the Grid Code;
- ii. "AS capacity obligation" is the capacity signaled for despatch by the Nodal Agency under Secondary Reserve Ancillary Service or the capacity procured by the Nodal Agency under TRAS;
- iii. "Commitment charge" means the amount payable to the TRAS Provider for the quantum of TRAS-Up cleared in the Day Ahead AS Market or the Real Time AS Market, as the case may be, but not instructed for despatch;



- iv. "Deviation and Ancillary Service Pool Account" means the Regional Deviation Pool Account Fund referred in DSM Regulations or any such Account as may be specified by the Commission;
- v. "Energy-Down bid" means the bid in Rs./MWh for the offered quantum submitted by the TRAS-Down Provider to pay to the concerned Deviation and Ancillary Service Pool Account;
- vi. "Energy-Up bid" means the bid in Rs./MWh for the offered quantum submitted by the TRAS-Up Provider;
- vii. "Tertiary Reserve Ancillary Service" or "TRAS" means the Ancillary Service comprising TRAS-Up and TRAS-Down and consists of spinning reserve or non-spinning reserve, which responds to despatch instructions from the Nodal Agency;
- viii. "TRAS-Down" means a TRAS that reduces active power injection or increases drawal or consumption, as the case may be, in response to despatch instructions of the Nodal Agency:
- ix. "TRAS-Down Provider" means an entity which provides TRAS-Down in accordance with the AS Regulations 2022;
- x. "TRAS-Up" means a TRAS that increases active power injection or decreases drawal or consumption, as the case may be, in response to despatch instructions of the Nodal Agency;
- xi. "TRAS-Up Provider" means an entity which provides TRAS-Up in accordance with the CERC AS Regulations;

The particulars of the proposed contract i.e. Day Ahead AS Market Contract and Real Time AS Market Contract as under:

#### 4.2.13.1. CONTRACT CALENDAR/ PERIOD

The Exchange shall operate Tertiary Reserve Ancillary Services ('TRAS') Contract on collective basis as per the trading calendar to be issued from time to time.

#### **4.2.13.2. TRADING DAYS**

The Exchange shall operate on various days as may be prescribed by the Exchange from time to time, called the Trading Day, which shall abide by the requirements of Central Electricity Regulatory Commission (Ancillary Services) Regulations 2022



(hereinafter referred as "AS Regulation 2022"), as amended from time to time, for operation of Tertiary Reserve Ancillary Service.

Trading Days would be prescribed in the Trading Calendar and would be intimated to the members by the Exchange from time to time.

#### 4.2.13.3. AUCTION TRADE SESSION

Auction Trade Sessions are specific times within the Trading Days during which the contracts would be available for Trading on the Exchange. The Auction Trade Session timings would be notified to the Members through the Trading Calendar by the Exchange from time to time.

The Exchange may extend, advance or reduce the Auction Trade Session timings as and when it deems fit and necessary by notifying the Members.

#### 4.2.13.4. TRADING CYCLE

Trading Cycle is the entire process of Trading of electricity on the exchange including but not limited to placing bids, trading and scheduling. The Trading Cycle of the Exchange would be in accordance with relevant provisions of the AS Regulation 2022 as amended from time to time. The various steps in the Trading Cycle would be intimated to the Members by the Exchange from time to time.

The Exchange reserves the right to make amendments to this procedure by notifying it through a Circular from time to time.

#### 4.2.13.5. TRADING PARAMETERS

For the Day Ahead AS Market Contract and Real Time AS Market Contract the detailed Contract specifications are given as Annexure I F (1) and Annexure I F (2) below. The Contract specification will form an integral part of these Business Rules and shall be binding on all Members and their Clients trading on the Exchange. Any Contract entered into in violation of these norms or not conforming to the Bye laws, Rules, Business Rules of the Exchange and/or other applicable laws shall be considered as void.

#### 4.2.13.6. Trading System

For the facilitation of transactions, PXIL provides a common platform to the participants for entering the buy & sell orders.



## 4.2.13.7. Trading Methodology

The trading methodology followed would be as per Regulation 17 of AS Regulation 2022 and 'Detailed Procedure for Tertiary Reserve Ancillary Services' issued by Grid-Controller of India limited from time to time.

## 4.2.13.8. Auction Timings

This defines the specified time period during which the participants would place their buy/sell orders once the session is made available

#### 4.2.13.9. Minimum Bid Volume

This defines the minimum quantity of electricity trade that needs to be entered in the trading system for it to be considered for matching.

## 4.2.13.10. Delivery Day

The Delivery would be for the contract period specified by Nodal Agency under provision of AS Regulation 2022 and scheduled by NLDC/RLDCs/SLDCs.

## 4.2.13.11. Delivery duration

The Delivery duration shall be:

- a. Day Ahead AS Market: 96 time block of 15-minute duration each covering the time period of 00:00 to 24:00 hrs of next day
- b. Real Time AS Market: 2 time block of 15-minute duration each or 1 time block of 15-minute duration

#### 4.2.13.12. Delivery Point

The Delivery Point shall be as per the Point of connection defined for every participating entity as provided in AS Regulation 2022, Sharing Regulations 2020, IEGC 2023 as amended from time to time or any other Regulation notified by CERC.

#### 4.2.13.13. Traded Schedule vs. Actual Schedule

For the purpose of the Contract in Day Ahead AS Market and Real Time AS Market, the trade schedule shall be reckoned at the delivery point. The scheduling and despatch of TRAS shall be under provision of Regulation 18 of AS Regulation 2022.

#### 4.2.13.14. Transmission Losses



No transmission charges or transmission losses or transmission deviation charges shall be payable under provision of Regulation 22 of AS Regulation 2022.

## 4.2.13.15. Scheduling Charge, System Operation Charge and any other Charge

Scheduling Charge, System Operation Charge and any other charge to be paid by TRAS providers will be levied as per the Contract Specification and according to the provisions of AS Regulation 2022 and 'Detailed Procedure for Tertiary Reserve Ancillary Services' issued by Grid-Controller of India limited as issued from time to time or any other Regulation notified by CERC.

#### 4.2.13.16. Invalidation of a Traded Contract

The Exchange may invalidate a matched Contract 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:

- a) Price manipulation
- b) Price rigging
- c) Price distortion
- d) Manipulative or attempted manipulative activity
- e) Transactions that are misleading or deceptive, or are likely to mislead or deceive
- f) Any other activity as may be notified by the Exchange from time to time

## 4.2.13.17. Fulfilment of Contractual liability

This contract is for physical delivery only. Members can fulfil their contractual liabilities through physical delivery / off-take and by meeting all financial obligations arising out of such physical delivery / off-take based on despatch instructions provided by Nodal Agency.

## 4.2.13.18. Settlement Guarantee

Subject to the Bye-Laws, the Exchange shall guarantee the Settlement of all the trades done on the Exchange in accordance with AS Regulation 2022, as amended from time to time and the Bye-Laws of the Exchange. The Settlement Guarantee of the Exchange is confined only to the extent as may be prescribed in the applicable laws from time to time.



## 4.2.13.19. Governing Law & Jurisdiction

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

## 4.2.13.20. Types of Order

The Members through their Approved Users can place the following types of Orders on the Exchange in 'PRATYAY' system. As provided in Detailed Procedure, the 'PRATYAY' system will allow Single bid types of order for TRAS-UP and TRAS Down bidding as detailed under:

- a. The 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.
- b. For TRAS Up the bids would be monotonically increasing bid
- c. For TRAS Down the bids would be monotonically decreasing bid.
- d. Order Carry Forward (OCF) option: The time block wise Order Carry Forward (OCF) option will be available for eligible TRAS providers to transfer their uncleared single bids from Day Ahead Energy Market and High Price Day Ahead Energy Market to AS-DAM segment for TRAS-Up bid only. No uncleared block bids from DAM and HP-DAM will be transferred to AS-DAM. Similarly, no OCF provision will be available for TRAS-Down bids in AS-DAM and AS-RTM
- e. Other Orders: The Exchange shall introduce other types of bids as per the
  Detailed Procedure. Details of such other possible bid types shall be notified
  by the Exchange from time to time.

## 4.2.13.21. Order Validation

The bids entered by the Approved Users into the trading system would be validated by the Exchange as per provisions under AS Regulation 2022 and 'Detailed Procedure for Tertiary Reserve Ancillary Services' as amended from time to time. Only after successful validation the bids would be accepted by the Exchange. Members shall be



solely responsible for the accuracy of details of bids entered into the 'PRATYAY' System including bids entered on behalf of their Clients.

## 4.2.13.22. Matching Rules

Matching Rules would be as per Regulation 17 of AS Regulation 2022 as amended from time to time and as per directives issued by Hon'ble Commission.

During and at the end of a Trading Session, the Exchange shall provide various reports to the Members including the 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.

#### 4.2.13.23. Settlement

Accounting and Settlement of TRAS transaction shall be under provision of Regulation 21 of AS Regulation 2022.



## 5. Clearing and Settlement of Funds

#### 5.1. Clearing Banks

The Exchange shall designate banks as Clearing Banks for transfer of funds between Members(s) or Clients, as applicable and the Exchange. Exchange reserves right to include or exclude any banks as Clearing Bank.

The empanelled Clearing Bank(s) shall act as an agent of the Exchange or Clearing Agency for collection and payment of funds towards Settlement obligations, margins and such other dues.

#### 5.2. Members or Clients accounts with Clearing banks

All Members or Clients, as applicable, eligible for Clearing would open a Settlement account with any of the designated Clearing Banks.

#### 5.3. Settlement account

The Member or the Client, as applicable, will not have cheque book facility for issuing cheque to any third party or outsiders. The Member can only issue cheque for transfer of money from this account to its Client account in the same clearing 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, operating charges, transmission charges, taxes, duties, surcharge, cess and other levy applicable from time to time, 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 Member will not use the Client's funds for meeting his own obligation. The Members or the Client, as applicable, shall authorize the banks to block the funds in the Settlement account to the extent of the pay in obligation of the Member or the Client, as applicable, till the time the obligation has been fulfilled by the Member or the Client. The Exchange may provide a facility to Member and/or Client for depositing the money either directly from their bank account or with the assistance from the Bank, FI, PFI, or NBFC through any financial instruments as may be decided by the Exchange for settlement obligation in a designated common account of the Exchange. The details of the account would be notified by the Exchange from time to time. .



#### 5.4. Client Account

In addition to the Settlement Account, Trader Member will have to open a Client Account in the same bank as that of the Settlement Account. The Trader Member can deposit all cheques, cash, and other payments received from the Client and from this account it should issue cheques to its Clients towards their receivable amount. The Trader Member may have cheque book facility in this account and it may also be entitled to issue transfer instructions to the bank for transferring money from this account to the Settlement account to meet its pay in or Margin obligations.

## 5.5. Exchange's account with Clearing Banks

The Exchange shall maintain its account with all the Clearing Banks and all the monies received from the Member or Client, as applicable, towards Pay-in and margin, shall be used appropriately for Settlement and/or margin enhancement.

## 5.6. Change in Clearing Banks

In case a Trader / Proprietary or Self-Clearing Member wants to close a Settlement account with one designated Clearing Bank and to open a Settlement account with another designated Clearing Bank the Member shall follow procedure as per the circular issued by the Exchange.

#### 5.7. Clearing holiday

The Exchange shall notify the Clearing holidays from time to time.

#### 5.8. Clearing House

Clearing House means the Entity identified and approved by Exchange for facilitating Settlement of trades and all functions incidental to Clearing of trades done or executed on the Exchange and shall mean the Exchange if function of such Settlement or Clearing of trades is performed by the Exchange itself or through its agency.

## 5.9. Functions of Clearing House

The Clearing House will collect deposits from the Members, effect pay in and pay out and monitor 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. Save as except if it is scheduled otherwise by the Exchange funds Settlement shall be carried out as per timeliness specified by the Exchange.

# 5.10. Lien on Member's Deposits & Margins

A Member or Client, as applicable, is liable to clear all the dues against its membership and Trading liability irrespective of whether such liability is generated on its own account or on behalf of its Clients. When a Member or a Client, as applicable, defaults in making such payment to the Clearing House or to the Exchange account as applicable all deposits, Margins, funds payout and other assets of such defaulter Member or 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 Member or its Clients. No Client or any other person shall have any claim any charge or right on any such deposit, margins under any circumstances.

#### 5.11. Notices and directions

All Members or Client, as applicable, shall comply with the instructions, resolutions, orders, notices, directions and decisions of the Relevant Authority in all matters connected with the operations of the Clearing House.

#### 5.12. 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 Contracts made available by Exchange from time to time.

#### 5.13. Liability of the Exchange

Notwithstanding to the provisions of the Bye-Laws, no liability shall attach either to the Exchange, its officials, or to any of the Committees or any Member of the Committees by reason of anything done or omitted to be done by the Clearing House in the course of its operations.

## 5.14. False or misleading statements

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



## 5.15. Bank holiday

Bank holidays shall be informed by the Exchange based on the RBI guidelines.

#### 5.16. Pay-in from the Buying Members

Pay-in from the Buying Members or Buying Client, as applicable, as per the final obligation report shall be carried out as per the timelines specified by the Exchange. Clearing Members or Clients, as applicable, shall instruct their Clearing Bank to provide sufficient funds in their Settlement account or fund the Exchange account, as applicable, towards their pay-in obligation including operating charges, transmission charges, taxes, duties, surcharge, cess and other levy applicable from time to time.

If there is any shortage in meeting monetary obligations by a Clearing Member or Client, as applicable relating to debits into a Settlement account, the Clearing Bank shall forthwith report such instances of shortage to the officer of the Exchange or Clearing Agency designated for the purpose in a mutually agreed mode of communication.

Non-fulfillment of either the whole or part of the Settlement obligations will be treated as a violation of the Rules, Bye-Laws and Business Rules and will attract penal charges as stipulated by Exchange from time to time.

Clearing Member or Client, as applicable shall also pay transmission and Operating charges to the Exchange as per the Procedure Prescribed by the Exchange from time to time.

## 5.17. Payout to the Selling Members

Payout as per the final obligation report shall be carried out as per the timeliness specified by the Exchange. As per Exchange's instruction the Clearing Bank shall credit the Selling Member's Settlement account or the Client's registered Bank account, as applicable, after deducting various charges including but not limited to transmission charges, operating charges, taxes, duties, surcharge, cess and other levy applicable from time to time.

In case of unwinding of trade, the buyer Member or Client, as applicable, shall be refunded amount towards trade value net of any charges which may have been incurred by the Exchange.

#### Settlement of Members Obligations for Members having Settlement bank account



## **5.17.1.** Pay in

The Exchange shall first debit the Member's ledger with the Exchange for pay-in subject to the Minimum Cash Margin (refer point no. 1.3). In case, the funds in the Member's ledger with the Exchange is short, The exchange shall debit the free amount available in the Member's ledger with the Exchange and then debit the available cash

in the Settlement account.

#### **5.17.2.** Payout

The Exchange shall credit the Member's Settlement bank account for pay-out subject to the Minimum Cash Margin (refer point no. 1.3).

Netted obligations amount credited or debited to Members bank account for pay-in and payout:

Currently, the funds transfer for the pay-in and payout from and to the Settlement account is done for each charge heads viz cost of power, transmission charges, application charges, exchange transaction charges, funds withdrawal, margin call etc. separately and hence there are numerous bank transactions for the settlement.

In PRATYAY, these transactions for the settlement date shall be netted and a single bank transaction for the netted amount shall be done.

The details (components) of the transactions will be available in the Ledger report provided in the system.

#### Illustration:

Suppose for a Clearing Member the following obligations are to be settled:

			Pay-in	Payout	Net
S no	Particulars	Due date	Amount	Amount	amount
			(Rs.)	(Rs.)	(Rs.)
1	Cost of power weekly bought	01-01-2020	10,00,000		
2	СТИ	01-01-2020	57,890		



S no	Particulars	Due date	Pay-in Amount (Rs.)	Payout Amount (Rs.)	Net amount (Rs.)
3	STU	01-01-2020	10,330		
4	Application RLDC	01-01-2020	5,000		
5	Operating charges	01-01-2020	2,000		
6	Cost of power intraday - sold	01-01-2020		50,000	
7	Operating charges	01-01-2020	2,000		
8	Total		10,77,220	50,000	10,27,220

In PRATYAY, the net amount Rs. 10, 27,220 shall be debited from the Clearing Members ledger as Pay-in is greater than Payout for the settlement date. In case the Payout amount is greater than the Pay-in amount, the netted amount shall be credited to Clearing Members settlement bank account. However, the bank statement will show the netted amount.

#### 5.18. Exchange Fees

The Exchange shall charge a transaction fee on the transactions registered with the Exchange and the same shall in compliance to provisions of CERC (Power Market) Regulations, 2021. 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. Transaction fees will be exclusive of all taxes, duties, surcharge, cess and any other levy applicable from time to time. Such taxes, duties, surcharge, cess and any other levy if applicable will be billed separately either on periodic basis or on daily basis and will be recovered from the Settlement account/ registered bank account of the Member or Client, as applicable.

Any fees, tax or levy if applicable, may be collected with retrospective effect or from the date as may be directed by the Relevant Authority and/or Applicable Laws from time to time.

#### 5.19. Risk Management

**5.19.1.**A Member or Client, as applicable, is allowed to transact only when it maintains the requisite Margin, including any additional Margin, as may be Prescribed, for



the type of Contracts. Such Margin has to be deposited upfront to enable the Member or Client, as applicable, to bid, clear and/or schedule power. Members or Clients, as applicable, may bring in the required margins in their Settlement Accounts and instruct the Clearing bank to transfer to or fund the Exchange Account and inform the same to the Exchange.

In case the Member or the Client, as applicable, have insufficient margin during the process of transaction at any time, except at the time of bid submission, the Exchange has the right to debit the settlement account and credit the Exchange account or cancel the trades and levy penalties as may be Prescribed.

- **5.19.2.**The Exchange may block the amount from the available/existing margin deposits. The Margin that may be blocked, including but not limited to, is as under:
  - **5.19.2.1.** Pre-bid margin: Pre-bid margin is applied at the time of order entry.
  - 5.19.2.2. Pre-Trade margin: Pre Trade Margin would be verified before matching process is initiated. All the orders for which pre trade margin validation fails would be cancelled and no match would be done for such orders.
  - **5.19.2.3.** Post-Trade margin: Post-trade margin is applied on the trade (matching).
  - **5.19.2.4.** Delivery margin: Delivery Margin is applied on pending delivery records and delivery date slab wise different margin % could be defined.

Charge Margin: The transmission, operating, application and any other applicable statutory charges margin can be made applicable at any stage of trade processing i.e. pre-bid, pre-trade, post trade, application creation, and application response.



## 6. MEMBER CLIENT RELATIONSHIP

- **6.1.** The Member Client obligations detailed herein will apply mutatis mutandis to different categories of Members as may be applicable in relation to their rights and responsibilities as permitted or Prescribed by the Relevant Authority or Applicable Laws from time to time.
- 6.2. Every Client of the Member shall be allocated a unique Client Code. The Exchange would enable the Clients after receiving all the necessary details in the required format. If the Member wants to trade on his own behalf a unique Client Code would be allocated.
- 6.3. Every Member shall enter into an agreement with its Clients as specified in Annexure II before allocating the Client Code. Such agreement shall include clauses specified by the Exchange from time to time based on the categorization of Clients made by the Exchange from time to time. A Member intending to trade on its own account as Client need not sign such agreement.
- 6.4. The Member's responsibility shall not in any way be reduced due to non-execution of agreement with the Client. The Member will be free to add more clauses in the specified agreement; however, no additional clause should in any way dilute the content or purpose of the clause stated in the specified agreement by the Exchange.
- **6.5.** When establishing a relationship with a new Client, Trader Member / Facilitator Member must take reasonable steps to assess the background, genuineness, financial soundness and Trading objectives of such Client.

#### **6.6.** The Member shall obtain

- From all Corporate Clients an approved copy of the Board resolution permitting Trading in Electricity Contracts
- A copy of Power Purchase or Sale Agreement(s) with a grid connected entity from Trader Clients.
- Any other relevant documents



- **6.7.** Member shall make the Clients aware of the precise nature of the Member's liability for business to be conducted, including any limitations on that liability and the capacity in which the Member acts and the Client's liability thereon.
- 6.8. The Member shall make the Client aware of the risk associated with the business in Electricity Trading including any limitations on the liability 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 specified in the Annexure III. The Risk Disclosure Document shall be duly signed by the Client and maintained and retained by the Member in its records for such period as the Exchange may specify.
- 6.9. The Member shall provide extracts of relevant provisions governing the rights and obligations of Clients as Clients of Trading Members as Prescribed in the Bye-laws, Rules and Business Rules, relevant manuals, notifications, circulars, any additions or amendments thereto etc. of the Exchange, or of any Applicable laws, to the extent it governs the relationship between Members and Clients at no extra cost to Clients.
- **6.10.** The Member shall also bring to the notice of his Clients any indictments, penalties etc. imposed on him by the Exchange or any other regulatory authority.
- **6.11.** No Member or person associated with the Member shall guarantee a Client against a loss in any Trading on the Exchange affected by the Member with or for such Client.
- 6.12. The Member shall not recommend to the Client a sale or purchase Electricity Contracts traded on the Exchange, unless he has reasonable grounds to believe that such recommendation is suitable for the Client on the basis of the facts, if any, disclosed by the Client, whether in writing or orally, with regard to the Clients' financial soundness and Trading objectives.
- 6.13. The Member shall make adequate disclosures of relevant material information in dealing with the Client including the latest System/ Bid Area Prices or any relevant announcement from the Exchange relating to margin, Trading restrictions as to price, quantity or where the Member is the counter party to a trade executed on the Trading system with the Client.



- **6.14.** The Member shall not furnish any false or misleading information or advice with a view to inducing the Clients to do business on the Exchange and which will enable the Trader Member / Facilitator Member to gain thereby.
- **6.15.** The Members who have Clients registered under them shall explain the Trading System and Order matching process to the Client.
- **6.16.** The Trader Member / Facilitator Member shall provide the Client with a Contract Note or such other transaction details/notes for the trade executed in the specified format as per Annexure- IV or in such format as Prescribed by the Exchange from time to time.
- 6.17. The Member shall at all times keep the monies of the Client in the Client 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.
- **6.18.** 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.

## 6.19. Access to the Trading System

- **6.19.1.** Every Client can take a direct access to the Trading System by becoming an Approved User of that Member and take the unique Trader Code (to be used as login id) and a password from their Member and get it enabled from the Exchange.
- 6.19.2. The Exchange will allocate financial limits to each of the Members based on the deposits and margins placed by the respective Members or arranged to be placed on behalf of such Member with the Exchange. These limits would determine the total value of Orders which Member and its Clients can place through the Trading System.



6.19.3. The Members in turn will allocate financial limits to their Clients, if any, on which basis such Clients would be allowed to put in Orders in the Trading System. Members should allocate the limits based on the deposits made by the Client with the Member.

## 6.20. Client Authorisation to the Member for Putting in Trades

- **6.20.1.** The Member should take an undertaking from the Client in the specified format, issued through a Circular, if the Client desires the Member to submit Orders on his behalf.
- 6.20.2. If the Member is placing the Orders on behalf of the Client and where the Client requires an Order to be placed or any of his Order to be modified after the Order has entered the system but before the end of Auction Trade Session, the Member may, if it so desires, obtain Order placement/modification details in writing from the Client. The Member shall accordingly provide the Client with the relevant Order confirmation/ modification slip or copy thereof, forthwith, if so required by the Client. Similarly where the Client requires any of his Orders to be cancelled after the Order has been entered in the system but before the end of Auction Trade Session, the Member may, if it so desires, obtain the Order cancellation details in writing from the Client. The Member shall accordingly provide the Client with the relevant Order cancellation details, forthwith, if so required by the Client.
- **6.20.3.** The Member shall not accumulate Client's Orders. The Member shall place forthwith all Orders on the Trading System
- **6.20.4.** The Member shall act promptly in accordance with instructions provided by the Client unless it has discretion as to timing, in which case it must exercise its judgment as to the best moment.
- **6.20.5.** The Member shall collect adequate deposits from its Client before entertaining any Order from it.



#### 7. SURVEILLANCE

- 7.1. The Exchange shall constitute a Market Surveillance Committee, the constitution, duties, rights and functions of which shall be in lines with the Power Market Regulations and/or Applicable laws as modified / altered by the Commission from time to time
- 7.2. The Exchange shall have the right to take appropriate actions in such cases to ensure market integrity and to avoid market abuses; the Exchange will use various on-line and off-line surveillance tools including but not limited to recording of all conversations through telephone lines with the personnel of the Exchange.
- **7.3.** CERC shall have the right to carry out checks at any time to ensure that the surveillance mechanism at the Exchange is in effective operation and pass appropriate Orders.
- **7.4.** The Exchange will monitor bid movement, market behaviour, bid rigging, bid manipulation and other market abuses. Any unwarranted change in bid pattern or trend will be brought under the notice of the Relevant Authority and suitable action as required in the public interest will be taken.

#### 7.5. 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 issued by SLDCs under CERC Regulations, the Exchange will validate such Orders either through software or manually 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. When the bids/orders are validated at the submission stage, the disqualified orders may automatically get rejected by the Trading System. Approved Users are required to check the order status in Trading System after submission of order.



## 7.6. Correlation with Deviation Settlement Mechanism (DSM)

The trend in the DSM rate and the prices in the Exchange may be compared for any major differences. In case of individual Member, its trend of Trading on the Exchange may also be compared with his DSM obligations. Further, in case of continuous and heavy default on DSM. payment by any Member, the Exchange has authority and discretion to suspend the Member, and /or impose any additional penalties that the Exchange may consider fit to impose, among other things. Any entity or the principal or subsidiary or sister concern of an entity defaulting in payment of the transmission charges, DSM charges, and the fees and charges for the National Load Despatch Centre, Regional Load Despatch Centres and State Load Despatch Centres may be barred by the Commission from transacting through the Exchange.



#### 8. INSPECTION

## 8.1. Inspection Authority

- **8.1.1.** 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 documents of the Members for any of the purposes
  - a) The Inspecting authority appointed by the Exchange may be either its own officials or outside professionals.
  - b) 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.
  - c) 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.
  - d) 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.

#### **8.1.2.** The purposes of the inspection could be, namely :

- a) to ensure that the books of accounts and other books are being maintained in the manner required;
- b) to ensure that the provisions of Applicable law thereunder are being complied with;
- c) to ensure that various provisions of Rules, Bye Laws, Business Rules and any other Circulars of the Exchange issued thereunder are being complied with:



- d) 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;
- e) to investigate Suo-motu, for any reason where circumstances so warrant an inspection into the affairs of the Member in public interest;
- 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;
- g) to comply with any of the directives issued in this behalf by any regulating authority including Government of India.

#### 8.2. Notice

- **8.2.1.** Before undertaking any inspection, the Exchange shall give a reasonable notice to the Member for that purpose.
- **8.2.2.** 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.
- **8.2.3.** 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.

#### 8.3. Obligations of a Member on Inspection

- **8.3.1.** 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.
- **8.3.2.** 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 computerised 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.

- **8.3.3.** 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.
- **8.3.4.** 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.
- **8.3.5.** 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.
- **8.3.6.** The inspecting authority shall have access to accounts and other records relating to the Member or such access as authorised 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.

## 8.4. Submission of Report

- **8.4.1.** The inspecting authority shall, as soon as possible submit an inspection report to the Exchange.
- **8.4.2.** 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.
  - a) 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.
- b) 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.
- c) 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.

#### 8.5. Collection and Dissemination of Information

- **8.5.1.** The Exchange may call upon the Members to furnish such information and /or explanation with regard to any constitution, dealings, Settlement, account and/or other related matters.
- **8.5.2.** 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.
- **8.5.3.** 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.



#### 9. Force Majeure

- 9.1. The Exchange shall be absolved from and shall not be liable for any failure to perform its obligations in case of Force Majeure event arising from acts of nature (including fire, flood, earthquake, storm, hurricane or other natural disaster), war, invasion, act of foreign enemies, hostilities (whether war is declared or not), civil war, rebellion, revolution, insurrection, military or usurped power or confiscation, terrorist activities, nationalisation, government sanction, blockage, embargo, labour dispute, strike, lockout or interruption/failure of Electricity or interruption/failure of any communication services/links [including telephone, internet, VSAT etc.], or any other circumstances beyond its control.
- 9.2. The Exchange including its buyers and sellers, shall keep each of the National Load Despatch Centre, Regional Load Despatch Centres and State Load Despatch Centres indemnified at all times and shall undertake to indemnify, defend and save the National Load Despatch Centre, Regional Load Despatch Centres and State Load Despatch Centres against any claim for damages, losses, and actions, including those relating to injury to or death of any person or damage to property of any person, demands, suits, recoveries, costs and expenses, attorney fees, against the third parties, arising out of or resulting from or attributable to the transactions at the Exchange.
- 9.3. The Exchange, including its buyers and sellers, shall keep each of the National Load Despatch Centre, Regional Load Despatch Centres and State Load Despatch Centres indemnified at all times and shall undertake to indemnify, defend and save the National Load Despatch Centre, Regional Load Despatch Centres and State Load Despatch Centres harmless from any and all damages, losses, claims and actions arising out of disputes among buyers and sellers, as well as with power Exchange inclusive of confidentiality issues.

## 10. Conflict between Rules, Bye Laws and Business Rules

In event of any conflict between Business Rules and Bye Laws, the contents of Bye Laws shall supersede and in the event of any conflict between Rules and Bye Laws or Rules and Business Rules, the Rules shall supersede. Without prejudice to the generality of above, in



case of any ambiguity or any confusion with regard to any of the provisions of Business Rules, the clarification given by Exchange shall be binding.



# 11. Annexure I: Contract Specifications

# **Annexure A1**

# **PXIL Integrated Day Ahead Electricity Market Contract Specifications**

# 1. Basic Contract Specification

Contract Name	Integrated Day Ahead Market Contract		
Trading System	PRATYAY		
	The NoC issued by SLDC to a Renewable energy plant shall		
	specify the quantum (in MW) permitted for sale		
Selling entity	The NoC issued by SLDC to a Discom shall specify the		
	quantum (in MW) of Renewable energy, i.e. Solar / Non-Solar /		
	Hydro permitted for sale		
Trading Methodology	Double Sided Closed Bid Auction with Uniform Market Clearing		
Trading Methodology	Price for all buyers and sellers		
Auction Timings	10:00 to 12:00 Hrs (Day 'T')		
No. of Contracts per	96 Contracts of 15 minutes duration each for next day (Day		
day	'T+1')		
Minimum Bid Volume	0.1 MW or as specified by Exchange from time to time		
Minimum Volume	0.01 MW		
Quotation Step	0.01 10100		
Minimum Value	Rs. 1 per MWh		
Quotation step	ixs. I per ivivvii		
Delivery Point	As described in 4.2.1.4.3 of these Business Rules		
	Inter-State Transmission System: As Per GNA Regulations		
	2022 and Sharing Regulations 2020 as amended from time to		
Transmission charges	time and relevant orders of Commission		
Transmission charges	State Transmission System: As per the concerned State		
	Electricity Regulatory Commission's Regulations as amended		
	from time to time and relevant orders of Commission		
Transmission Losses	Payable in kind from delivery point to its grid connection point.		
Settlement Price(s)	The Market Clearing prices of the respective Bid Zones for		
	matching in Renewable segment and Conventional segment		
Pre - Bid Margin	20% of the bid amount or seven days trade average, whichever		



	is higher	
Dro. Trada Margin	100% of the provisional matched trade obligation based on	
Pre - Trade Margin	Available Transfer Capability (ATC) for buyers only	
Post – Trade Margin	100% of the Final matched trade obligation value for buyers only	

#### 2. Order feature

In case of multiple orders placed by participants for DAS, each order for the same time slot respectively shall be cleared on incremental basis. This means that all the orders qualifying for matching among the orders which are in favor of the Market Clearing Price (MCP), all the Orders independent of each other will be cleared as per the matching rules prescribed in the Business Rules.

#### Illustration:

Members can submit multiple Orders for different quantities at different rates. If the buyers submits the Orders as follows:

Price (Rs. / MWh)	2,000	5,000	7,000
Quantity	200	70	50

The above order entry implies the following:

Buyer will buy quantity of 50 If the MCP is Rs. 7,000 or below but greater than Rs. 5,000 Buyer will buy quantity of 50 + 70 (120), if the MCP is Rs. 5,000 or below but greater than Rs. 2,000

Buyer will buy quantity of 50 + 70 + 200 (320), if the MCP is Rs. 2,000 or below.

If the seller submits the Orders as follows:

Price (Rs. / MWh)	7,000	5,000	2,000
Quantity	200	60	50

The above order entry implies the following:

Seller will sell quantity of 50 If the MCP is Rs. 2,000 or above but less than Rs. 5,000 Seller will sell quantity of 50 + 60 (110), if the MCP is Rs. 5,000 or above but less than Rs. 7,000



Seller will sell quantity of 50 + 60 + 200 (310), if the MCP is Rs. 7,000 or above.

## 3. Risk Management:

A Member or the Client, as applicable, is allowed to Bid (buy) and/or its power will be scheduled only when it maintains the following margin deposit:

## 3.1. Pre-Bid Margin:

The margin deposited by the Member or the Client will be applicable as Prescribed from time to time. Currently it shall be 20% of the Value of bid or seven days trade average, whichever is higher

## 3.2. Margin Call:

The Member or the Client shall be given a margin call on the acceptance of the bid by the system which shall be equivalent to the bid quantity multiplied by average area price of the last seven days or average of last seven days trade obligation of the Member or as decided by the Exchange and this margin call will also include transmission, operating and such other charges as may be applicable. The Member has to make good the margin call before the closure of bid session.

#### 3.3. Pre-trade Margin:

This shall be 100% of the provisional matched trade obligation based on Available Transfer Capability (ATC) as informed by NLDC including applicable charges or as Prescribed. The Member has to ensure that sufficient margin is available at the time of trade matching which shall be equivalent to the matched trade value and other applicable charges. After receiving the ATC for the Exchange from the NLDC and after ensuring availability of margin of the buyer Member or Client, as applicable, the Exchange processes the final bid matching solution. During this process, the Exchange may reject (fully or partially) the bid of the Buyers, who do not have sufficient pre-trade margin in their account. Once the Pre-trade margin is applied, Pre-bid margin would be released.

#### 3.4. Post-trade Margin:

This shall be 100% of the Final matched trade obligation value. In case a Member or the Client, as applicable, fails to maintain sufficient applicable margins, the Exchange may cancel the allocation of its trades and transaction would not be processed for scheduling. 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.

# 4. Trading Cycle for Integrated Day Ahead Market

On Day – T (Day of Trading)

<u>Timeline</u>	<u>Activity</u>	
	The Auction Trade Session would run from 10:00 to 11:00 hrs on all	
	seven (7) days of the week except for the Exchange declared	
	holidays. During this session Members (through their Approved	
10:00 to 11:00 Hrs	Users) would be allowed to place bids for buying or selling of	
	Electricity (Renewable and/or Conventional) on the Trading System.	
	No fresh bids or revision of bids would be allowed by the system	
	after the gate closure at 11:00 Hrs	
	Provisional Trade matching – Renewable and Conventional	
	segments	
	The Orders received in Renewable segment would be matched by	
	the Exchange to identify Contract for each 15 minutes for next day	
	by aggregating the supply and demand bids and discovering the	
	Unconstrained Market Clearing Price (MCP) and the Unconstrained	
	Market Clearing Volume (MCV) based on this matching.	
11:00 to 11:45 Hrs	The Uncleared Orders from Renewable segment will then be	
	combined with Order received for matching in Conventional	
	segment.	
	Contract for each 15minutes for next day would be determined by	
	aggregating the supply and demand bids and discovering the	
	Unconstrained Market Clearing Price (MCP) and the Unconstrained	
	Market Clearing Volume (MCV) based on this matching in	
	Conventional segment	
	NLDC Verification	
	The Exchange would send the details of the Electricity Flows (as	
11:45 to 12:15 Hrs	obtained through the unconstrained market solution) on various	
	corridors as specified by NLDC. NLDC would check the flows	
	provided by the Exchange and in case of congested corridors, if	



	any, convey to the Exchange the revised Available Transmission		
	Capacity (ATC) on these corridors		
	Final bid matching process – Renewable and Conventional		
	<u>segments</u>		
	At 12:15 Hrs the Exchange shall verify funds available in the		
	Settlement Accounts / Margin of all provisionally selected Exchange		
	Members. Those Members who have not brought sufficient funds		
	(Pre-trade margin) may be provided a time window by Exchange at		
	its discretion to bring in the requisite margin. In case the Members		
	are unable to make good the shortfall such bids would be deleted		
	from the Order book, in such a case, new Members/clients may get		
	selected in the bid matching process, which were not selected		
12:15 to 13:00 Hrs	earlier but have sufficient funds in their Settlement Account.		
	Based on the ATC and funds made available by the Members, the		
	Exchange will re-run the bid matching process and declare results of		
	Renewable segment and Conventional segment at 13:00 Hrs.		
	Application to NLDC – Renewable and Conventional segments		
	The Exchange would send the Application for Scheduling to NLDC		
	after re-working the market solution based on the constraints		
	provided by NLDC and funds made available by the Members		
	and/or Clients. The Exchange shall make application to NLDC by		
	13:00 hrs and issue Obligation Report to the Members		
13:00 to 13:30	Declaration of result to market participants		

The clearance/curtailment advice issued by National Load Despatch Centre to the Exchange at 12:15 hrs shall be on good faith basis. The clearance/curtailment advice by the National Load Despatch Centre shall be binding and National Load Despatch Centre, Regional Load Despatch Centres and State Load Despatch Centres shall not have any financial liability on account of inability, for any reason whatsoever, to achieve the complete matching between the advice of National Load Despatch Centre issued at 12:15 hrs and the final schedules issued at 13:00 hrs.

## 5. Settlement



The Exchange may prescribe the pay in and pay out timings for Settlement of trades done on the Exchange from time to time.

# 5.1. Pay-in of Funds by Buying Members:

Buying Member / Client would have to bring in funds by the pay in time, specified by the Exchange/Clearing Corporation, as per the final obligation report for the respective value of trades cleared on Day T. Final obligations for the buyer Member / Client shall include trade value, operating charges, transmission charges, taxes, duties, surcharge, cess and other levy applicable from time to time. Upon doing the Pay-in on Pay-in day, the blocked margins of the buying Members would be unblocked i.e. would be available as Trading margins.

## 5.2. Pay-out of funds to Selling Member

On the Pay-out Day the Exchange would pay-out funds to the Selling Member / Client as per the Final Obligation Report for the respective value of trades cleared on Day T. Pay-out will be made after deducting transmission charges, operating charges, taxes, duties, surcharge, cess and other levy applicable from time to time.

Pay-in Day ('T')			
After Obligation creation	Pay-in of Funds by Buying Member / Client for Cost of Power		
(by 17:00 hrs)			
Pay-out Day (T+1)			
After 11:00 hrs	Pay-out of cost of power funds by the Exchange to Selling		
Alter 11.00 ms	Member / Client		
Pay-in Day ('T+2')			
By 17:00 hrs Pay-in of ISTS Charges by buying Member/Client			

## 5.3. Penalty for contractual obligation:

Any default in providing the requisite margin by the buyer within the scheduled time shall be treated as termination of Contract and will have the following effects.

- a. The Transmission corridor booked for the Contract shall be cancelled by PXIL
- b. The Seller will be compensated by an amount equivalent to the bid security put up by Buyer discounting application fee to nodal RLDC and Penalty as at
- **c.** Exchange shall levy penalties on the Buyers for default in provision of margin to the extent as specified by the Relevant Authority from time to time.

#### Traded Schedule vs. Actual Schedule

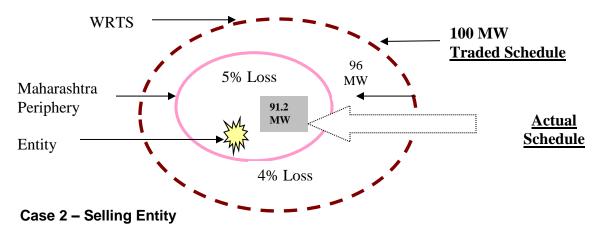


Illustration

# Case 1 – Buying Entity

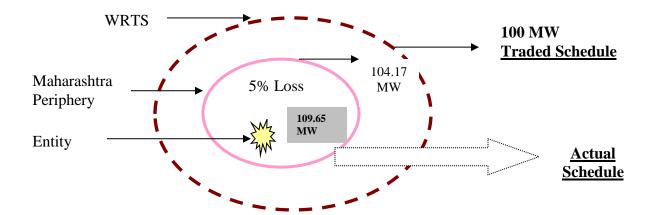
Location – Maharashtra

Quantum of Purchase on the Exchange - 100 MW



Location - Maharashtra

Quantum of Sale on the Exchange – 100 MW





# Annexure A2 PXIL Real time Market Electricity Market Contract Specifications

## 1. Basic Contract Specification

Product Name	Real time Market Contract
Trading System	PXIL
Trading Methodology	Double Sided Closed Bid Auction with Uniform Market Clearing
	Price for all buyers and sellers
Auction Timings	As per GNA Regulations 2022, the auction shall be held at two
	different 15-minute time blocks of each hour of the day
	commencing at hh:15 hrs and hh:45 hrs.
	The timeline for auction and delivery of contract shall be on
	rolling basis, the details are given below.
No. of Contracts per	96 Contracts of 15 minutes duration each
day	
Minimum Bid Volume	0.1 MW or as specified by Exchange from time to time
Minimum Volume	0.01 MW
Quotation Step	
Minimum Value	Rs. 1 per MWh
Quotation step	
Delivery Point	As described in 4.2.6.4.3 of these Business Rules
Transmission charges	Inter-State Transmission System: As Per GNA Regulations
	2022 and Sharing Regulations 2020 as amended from time to
	time and relevant orders of Commission
	State Transmission System: As per the concerned State
	Electricity Regulatory Commission's Regulations/ GNA
	Regulations 2022 as amended from time to time and relevant
	orders of Commission.
Transmission Losses	Payable in kind from delivery point to its grid connection point.
Settlement Price(s)	The Market Clearing prices of the respective Bid Zones

# 2. Auction Trade Session and Delivery duration

The timelines for trading sessions and delivery durations shall be as per GNA Regulations 2022. The window for delivery during first two time blocks of the 1st hour of the Day (D) i.e.



from 00:00 to 00:30 hrs shall open during the period 22:45 to 23:00 hrs of the previous day (D-1).

The auction process would be conducted during even time blocks of the hour. The timelines for auction and delivery would be as provided in the **Table 1** below.

**Table 1: RTM Auction and delivery timelines** 

RTM Auction	Matching, Submission of RTM transaction details to NLDC and Auction Results to the Participants	Inform details of RTM transaction to respective SLDC	Delivery of Power
22:45 to 23:00 hrs	23:00 to 23:15 hrs	23:15 to 23:30 hrs	00:00 to 00:30 hrs
23:15 to 23:30 hrs	23:30 to 23:45 hrs	23:45 to 24:00 hrs	00:30 to 01:00 hrs
23:45 to 00:00 hrs	00:00 to 00:15 hrs	00:15 to 00:30 hrs	01:00 to 01:30 hrs
00:15 to 00:30 hrs	00:30 to 00:45 hrs	00:45 to 01:00 hrs	01:30 to 02:00 hrs
10:15 to 10:30 hrs	10:30 to 10:45 hrs	10:45 to 11:00 hrs	11:30 to 12:00 hrs
10:45 to 11:00 hrs	11:00 to 11:15hrs	11:15 to 11:30 hrs	12:00 to 12:30 hrs
21:45 to 22:00 hrs	22:00 to 22:15 hrs	22:15 to 22:30 hrs	23:00 to 23:30 hrs
22:15 to 22:30 hrs	22:30 to 22:45 hrs	22:45 to 23:00 hrs	23:30 to 24:00 hrs

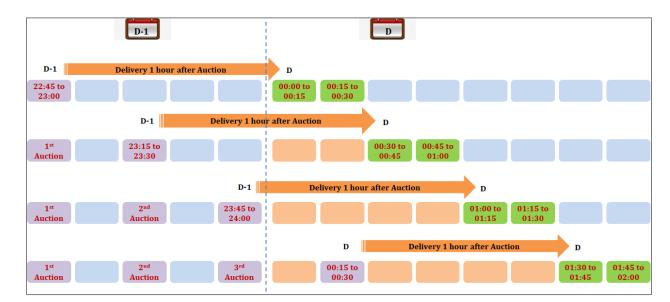
The deliveries for the six-time time blocks of the day i.e. from 00:00 hours onwards to 01:30 hours of the day (D), the auction would be conducted a day prior to delivery (D-1).

Based on the matching of bids for each auction session, the delivery could cover any time block of 15-minute or both the time blocks during the delivery period of 30-minute (i.e. 00:00 to 00:15 and/or 00:15 to 00:30 for 30-minute delivery period of 00:00 to 00:30 hrs).

The Exchange shall provide 'Good till Cancelled' queuing type wherein the order shall be carried over for remaining auction sessions till they are modified or cancelled by the participants. The 'Good till Cancelled' queuing type provided by the Exchange will facilitate the participants to submit bids for all the delivery time periods, however the bids would be considered for auction as per the timelines for each trading session as illustrated in the Table 1 above.



The auction timelines and the related delivery periods are illustrated in the Figure 1 below:



**Figure 1: RTM Auction and Delivery Timelines** 

# 3. Trading cycle for Real Time Market

The bidding window shall be open for 15-minute duration as per Clause 2 above. Post closure of the bidding window, the trade cycle shall comprise of following activities:

## a) Matching and Schedule information session:

Post closure of bidding window, the trade cycle for RTM would be scheduled during the next 15-minute time block:

Time (in minutes)	Trade cycle activity
First 5 minutes	Provisional matching of bids by Power exchange followed by submission of scheduling request to NLDC
6 <sup>th</sup> to 9 <sup>th</sup> minute  NLDC shall confirm the actual transmission capacity available final matching of Order by the Power exchange	
9 <sup>th</sup> to 15 <sup>th</sup> minute	Final matching of bids based on transmission capacity information received from NLDC.  Power exchange to submit scheduling request to NLDC based on results obtained in final matching of bids.



Time (in minutes)	Trade cycle activity	
	Power Exchange to declare the Area Clearing Price and obligation to the participants	

All the above activities shall be completed 45 minutes prior to start of delivery. The Exchange reserves its right to adjust the above activity cycle as felt necessary so as to complete the activities during the 15-minute period.

- b) Schedule intimation session to SLDC: The Power Exchange shall send break-up of each point of injection and each point of drawl within the State to respective SLDCs during the next 15-minute time block i.e., 30 minutes prior to start of delivery covering information for 30 minutes duration.
- Delivery Session: Delivery for which schedules were issued during the Matching & scheduling information session shall be fulfilled by buyers and sellers as per their obligation

#### 4. Cancellation of RTM schedule by NLDC

Under extreme circumstances including but not limited to failure of communication and/or any such other reason e.g., data transfer failure, if the final cleared trades are not received by NLDC from the Power Exchange or if information regarding transmission margin is not received by Power Exchange then, the schedules for such RTM session (s) shall be made zero (0) by NLDC. Information regarding zero (0) schedules in a particular RTM session as communicated by NLDC to Power Exchange by the end of two (2) time blocks from completion of auction i.e. 30 minute prior to start of delivery.

The Power Exchange shall inform the respective SLDCs during the next 15-minute time block regarding decision of NLDC having communicated zero (0) schedule for the particular RTM session. During this time block, the Power Exchange shall inform the Buyer and Seller of such session regarding decision of NLDC for schedule being made zero (0) for the particular RTM session. The Buyer and Seller shall abide by such decision of NLDC of schedule being made zero (0).

## 5. Margin

The payment security mechanism shall be as follows:-



Buyers will have to make available the 105% Margins of the bid value before submission of bids. The margins may be in the form of Bank Guarantee, FD, Cash or Bank Limit or any other such instrument as may be notified by the exchange from time to time. For the unmatched trades, the margin will be released to the Buyer.

Bids will not get executed in case sufficient margins are not maintained by the Members. In case of any default in payment Deposits/Margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected for other products by the Exchange till such time may also be impounded. Exchange reserves its right to change the margin requirements from time to time as felt necessary.

#### 6. Settlement

Settlement may be done multiple times in a day for the multiple contracts valid, on the days prescribed by the Exchange from time to time. Buyer will make payment on T + 1 day by 11:00 hrs and the Seller will receive the payment on T+2 day after 11:00 hrs. Exchange reserves its right to change the settlement cycle from time to time as felt necessary.

#### 7. T-GNA from relevant LDCs

Both the Buyer and Seller agree to provide all the details or enter into any agreement as may be required by the concerned RLDC/SLDC for providing T-GNA.

## 8. Generator to purchase power in Real Time Market

In case of forced outage, the Generator shall have an option to purchase power in Real Time Market. In such case, the Generator shall submit an Undertaking as per "Procedure for Scheduling Collective Transactions in the Real Time Market" for Exchange to enable the Generator to submit its bid for purchase of power in RTM.

#### 9. Transaction Fee

Transaction Fee for Real Time Market contract will be prescribed by Exchange from time to time. Transaction fee will be collected as per the Settlement Cycle applicable to this product. Exchange reserves its right to revise the same as required from time to time.

#### 10. Deviation Settlement Mechanism charges

The Schedule and Despatch of power shall be coordinated with respective RLDCs/ SLDCs as per the relevant provisions of Indian Electricity Grid Code, various statutory regulations/orders of RLDCs and RPCs and CERC. In the event Buyer or Seller does not adhere to the schedule prepared and adopted by NLDC / RLDC / SLDC and any instance of non-adherence to the adopted schedule results in Deviation Settlement Mechanism of



power, that in turn results in Deviation Settlement Mechanism charge, the same shall be borne by Buyer or Seller, as the case may be, for that respective contract.

## 11. Power Supply & Scheduling

The evacuation of power is subject to technical and transmission corridor constraints and Force Majeure conditions. Scheduling and dispatch of the power shall be coordinated by PXIL with NLDC / RLDC as per relevant provisions of IEGC and the decision of NLDC / RLDC shall be binding on Buyer and Seller.

### 12. Force Majeure

The delivery of power from Seller to Buyer shall be subject to "Force Majeure" conditions, as defined below.

"Force Majeure" means any event or circumstance or combination of events or circumstances, direct and/or indirect, which is or are beyond the control of a Party and that results in or causes the failure of that Party (the "non-performing party") to perform any of its obligations under this Agreement, and includes: -

- Act of strike, war, invasion, armed conflict, blockade, revolution, riot, insurrection or civil commotion, terrorism, sabotage, fire, explosion or criminal damage;
- b) Act of God, including lightning, cyclone, typhoon, flood, tidal wave, earthquake, landslide, epidemic or similar cataclysmic event;
- The expropriation or compulsory acquisition by any Government or Governmental agency;
- Technical problems or authenticity of certificates from Central Agency.
- e) Change of Law
- f) Regulatory intervention in the matter of power trading as also orders from CERC / SERCs / Appellate Tribunal for Electricity/ High Courts/ Supreme Court or any other Statutory Authority particularly related to trading in power, open access and grid code. This will also include regulations / orders already issued but yet to be conclusively enforced.

Where a non-performing party is unable to perform its obligations under this Agreement by reason of Force Majeure, the non-performing party shall notify the other party as soon as practicable of the occurrence of Force Majeure, identifying the nature of the event or



circumstance of Force Majeure, the expected duration of such Force Majeure, the particular obligations of the non-performing party which are affected by such Force Majeure and the period for which such obligations are expected to be so affected.

The obligations of the Parties under this Agreement shall be suspended only to the extent that:

- a) Such suspension is of no greater scope and no longer duration than is required by the effects of the relevant event or circumstance of Force Majeure; and
- b) The non-performing Party uses all reasonable efforts to remedy, as soon as practicable, its inability to perform the affected obligations.

Force Majeure conditions for minimum prescribed period of time as may be agreed by the Exchange in consultation with Regulator.

#### 13. Indemnification

Both Buyer and Seller (referred to as 'Parties' and individually as 'Party') shall indemnify, defend and hold harmless the other, its directors, members of the Board, partners, assigns, trustees, agents, officers and employees, against all claims, demand, judgments and associated costs and expense, related to property damage, bodily injuries or death suffered by third parties resulting from breach of its obligation by such Party under this Agreement except to the extent that any such claim has arisen due to a negligent act or omission, breach of contract or breach of statutory duty on the part of the other Party, its contractors, servants or agents.

Both the Parties agree to indemnify PXIL, CERC, NLDC/RLDCs/SLDCs against any claim for damages, losses and actions, including those relating to any injury to or to death of any person or damage to any property of any person demands, suits, recoveries, costs and expenses, attorney fees, against the third parties, arising out of or resulting from or attributable to the transactions on the Exchange.

#### 14. Dispute Resolution

If any dispute or difference of any kind whatsoever ("Dispute") shall arise between the Parties in connection with or arising out of this Agreement or out of the breach, termination or invalidity of the Agreement hereof, the resolution of the same shall be in accordance with the Bye laws of the Exchange.

#### 15. Notices and Correspondence



All notices and correspondence must be delivered personally, by registered or certified mail or facsimile to PXIL at the following addresses mentioned: *Power Exchange India Limited, Sumer Plaza, 9th floor, Unit no - 901, Marol Maroshi Road, Andheri (East), Mumbai-400 059, India.* 



## **Annexure A3**

## **PXIL Intra Day Electricity Market Contract Specifications**

## 1) Basic Contract Specifications

Type of Market	Intra Day
Trading System	'PRATYAY' system
	Firm Delivery Contract
Type of Contract	Delivery of power is the essence of Contract, trade once
	executed shall be sent for scheduling
Trading Methodology	Continuous matching mechanism as per Annexure V of
Trading Methodology	Business Rules
	1. Fill And Kill (FAK)
	2. Fill Or Kill (FOK)
Types of Order*	3. Limit Orders
	The Exchange reserves the right to introduce other Order
	types by issuing a Circular from time to time
	00:15 Hours to 23:30 hours (Day T is the trading day for
	entering bids in pre-defined sessions) as Prescribed.
Auction Timings*	The market shall remain closed for technical reasons from
Auction minings	23:30 till 00:15 Hrs of next day, The Exchange reserves
	the right to revise the auction timings by issuing a Circular
	from time to time
	10 Time blocks ahead to 24:00 Hrs of the Trading Day (T)
Duration of Contracts*	As per the GNA Regulations 2022, Procedure for T-GNA
Duration of Contracts	as amended from time to time and instructions provided
	by RLDC / SLDC.
Minimum Bid Volume*	1 MW
Minimum Volume Quotation	0.01 MW or 10 kW
Step*	
Minimum Value Quotation	Rs. 1 per MWh
step*	
Delivery Point	As described in 4.2.4.4.8 of these Business Rules
Transmission charges	The transmission charges to be paid by the buyers and
Transmission charges	sellers for Exchange Transactions would be as laid down



	under the GNA Regulations 2022 and Sharing
	Regulations 2020, as amended from time to time and
	would be payable to the Exchange in cash.
Transmission Losses	Payable in kind from delivery point to its grid connection
	point.
Settlement Price(s)	The price discovered during the Continuous matching
Octionent i noc(s)	session.
	105% of the bid value from buyers or as defined by the
Pre-Bid Margin*	Exchange from time to time. No pre-bid margin is required
	from the Seller.
	100% of the total trade value and applicable charges
	(Charge margin) or margin amount from the buyers and
	no post-bid margin from the seller or as Prescribed. The
Post-trade Margin*	Margin shall be recomputed on Application Acceptance
Post-trade Margin	or/and Real time curtailment. Once the Post-trade margin
	is applied, Pre-bid margin would be released. Once the
	pay-in for the trade is fulfilled, Post-trade margin would be
	released.
	Transaction fee payable to the Exchange by the Buyer
Transaction fees*	and Seller shall be informed through Circular.
Transaction roos	Exchange reserves the right to revise the transaction fee
	by issuing a Circular from time to time.

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

## 2) Auction Trade Session

The Auction Trade Session timings would be notified to the Members by the Exchange from time to time.

3) Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021

## **Annexure A4**



## **PXIL Day Ahead Contingency Electricity Market Contract Specifications**

## 1. Basic Contract Specifications

Type of Market	Day Ahead Contingency
Trading System	PRATYAY trading system
	Firm Delivery Contract
Type of Contract	Delivery of power is essence of Contract. Trade once
	executed shall be sent for Scheduling
	Continuous matching mechanism as per Annexure V of
Trading Methodology	Business Rules
	1. Fill And Kill (FAK)
	2. Fill Or Kill (FOK)
Types of Order*	3. Limit Order
	The Exchange reserves the right introduce other Order
	types by issuing a Circular from time to time
	13:00 to 23:30 Hrs (Day T is the trading day for entering
Auction timing	bids in different sessions or as decided by Exchange from
	time to time)
Duration of Contracts	Multiples of 15 minutes contracts for next day delivery
Duration of Contracts	(T+1)
Minimum Bid Volume*	1 MW or as allowed by CERC from time to time
Minimum Volume Quotation Step*	0.01 MW/10 kW
Minimum Value Quotation step*	Rs. 1 per MWh
	The delivery point shall be on the state/regional periphery
Delivery Point	of the selling entity
	Regional Transmission Charges
	As per Sharing Regulations 2020 as amended from time
Transmission charges	to time
	State Transmission System
	As per concerned State Electricity Regulatory
	Commission Regulations / GNA Regulations 2022, as
	amended from time to time



Transmission Losses	As per the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time. STU loss, if applicable, to both Buyer and Seller
Application Fees, Scheduling and Operating charges	The application fees, scheduling and operating charges along with taxes, if any, submitted by the Exchange to the RLDC / SLDC shall be equally shared between the Buyer and Seller Buyer shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Buyer is located.  Seller shall bear the operating charges to be paid to the RLDC of the region and SLDC of the state in which Seller is located.  In case both the Buyer and Seller are from the same Region then the RLDC operating charges shall be shared equally between the Buyer and the Seller. In case of intermediate region, the intermediate RLDC operating charges shall be shared equally between the Buyer and the Seller
Settlement Price(s)	The price discovered during the Continuous matching session.
Pre- Bid Margin* (at the time of bidding)	105% of the bid value from buyers or as defined by the Exchange from time to time. The Exchange reserves the right to modify margin by issuance of Circular from time to time
Post-Trade Margin* (after matching & Before Application to Load Despatch Centre)	For Buyers  100% of the total trade value and applicable charges (Charge margin) or margin amount from the buyers and no post-bid margin from the seller or as Prescribed. The Margin shall be recomputed on Application Acceptance and/or Real time curtailment. Once the Post-trade margin is applied, Pre-bid margin would be released. Once the pay-in for the trade is fulfilled, Post-trade margin would be



	released.
	For Sellers
	5% of the total trade value and applicable charges
	(Charge margin) or margin from Sellers or as Prescribed.
	In case of insufficient post trade margin, the same will be
	adjusted from the next pay-out of the Sellers and it shall
	be adjusted along with payment of obligation on Pay-out
	Day The margins may be in the form of Bank Guarantee,
	FD, Cash or Bank limit or any such instrument as may be
	notified by the exchange from time to time. For the
	unmatched trades, the margin will be released to the
	Buyer. Bids will not be executed in case sufficient margins
	are not maintained by the Members. In case of any default
	in payment, Deposits / Margins placed with the Exchange
	will be invoked to make good the default in payment. All
	other forms of margin
	Transaction fee payable to the Exchange by the Buyer
Transaction for at	and Seller shall be informed through Circular.
Transaction fees*	Exchange reserves the right to revise the transaction fee
	by issuing a Circular from time to time.
	right to amond those parameters by issuing a Circular from

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

## 2. Auction Trade Session

The Auction Trade Session timings would be notified to the Members by the Exchange from time to time.

 Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021



## **Annexure A5**

## **PXIL Daily Electricity Market Contract Specifications**

## 1. Basic Contract Specifications

Type of Market	Daily (Batch Auction)
Trading System	PRATYAY
Type of Contract	Firm Delivery Contract
Delivery Period*	Contracts as placed by the participant for the delivery
	period and time for any number of days from 'T+2' to 'T +
	90' Days
Trading Methodology and Price	Double Sided Open Bidding with Uniform Price Step
discovery	Auction
	Normal Order
	2. Block Order
Order Type*	The Exchange reserves the right to introduce new Order
	type by issuing a Circular from time to time
	00:00 to 24:00 Hours
	The Exchange shall notify the start and end time for all
Auction Timings*	auction days for submission of Order by issuing Circular
	from time to time. After completion of end time no
	modification / revision to the Orders will be allowed
Describes of Occupants	15 minutes or multiples thereof as notified by Exchange
Duration of Contracts*	from time to time
M	Buyer: 1 MW or as specified by Exchange
Minimum Bid Volume*	Seller: 0.1 MW or as specified by Exchange
Minimum Volume Quotation Step*	1 MW or as specified by Exchange
Minimum Value Quotation step*	Rs. 1 per MWh
Delivery Point	As described in 4.2.5.5.4 of these Business Rules
Transmission charges	The transmission charges to be paid by the buyers and
	sellers for Exchange transactions would be as laid down
	under the GNA Regulations 2022, and Sharing
	Regulations 2020, as amended from time to time and
	would be payable to the Exchange as per procedure



	notified in Circular from time to time
	The losses would be handled as per the GNA Regulations
Transmission Losses	2022 and Sharing Regulations 2020, as amended from
	time to time.
	No revision of Obligation issued by Exchange is allowed.
	Any revision by System Operator on account of reasons
Revision of Schedule	other than force majeure or constraints in transmission
	corridor shall be treated as default by the Buyer/Selling
	entity who is responsible for such an event
	Traded Price * Quantity scheduled by Load Dispatch
	Centre at delivery point.
Cattlement Drice(a)	In case of revision in schedule, the final price settlement
Settlement Price(s)	shall be based on revised scheduled quantity.
	The traded price shall be the Uniform prices discovered
	during the auction session
	a. <u>Pre-bid Margin</u>
	Sellers: Nil
	Buyers: Rs. 40/MWh
	The System at the receipt of the bids will check for Pre-
	bid margin and will not accept Bids if sufficient margin is
	not available. The pre-bid margin will be released when
	Post-trade Margin is applied.
	b. Post- Trade margin
Margin*	Seller: 10% of total trade value
Margin	Buyer:
	i. Post trade margin of 15% of total cost of power for
	the Contract
	ii. Delivery margin at 100% of total cost of power for
	3 calendar days and 5% of cost of power for the
	cost of power for the remaining days
	The applicable margin shall be higher of Post-trade
	margin or Delivery margin.
	The Margin shall be recomputed on Application



Acceptance or/and Real time curtailment. In case of insufficient margin, application for Scheduling shall not be forwarded and if forwarded, application for cancellation shall be sent to RLDC/ SLDC. Further penalty shall be levied as prescribed. Once the Post-trade margin is applied, Pre-bid margin would be released. c. Charge Margin The margin would be applied at the time of application creation or as prescribed. Charge margin would be applicable either on Buyer or Seller or both. The margin shall be recomputed on application acceptance, once the pay-in for trade is fulfilled towards charges, charge margin would be released The Exchange reserves the right to revise the Pre-bid margin, Post-trade margin, Delivery margin and Charge margin applicable to Buyer and/or Seller by issuing a Circular from time to time The margins may be in the form of Bonk Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by Exchange from time to time. Matching and/or transaction will not be executed in case sufficient margins are not maintained by Members. In case of any default in payment, deposits/margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected for other Contracts by the Exchange till such time may also be impounded. On Application Charges in Pay-in from Buyer acceptance day On Delivery (D) day Cost of Power pay-in from Buyer Pay-in\* Charges Pay-in from Seller On first D +1 day

All Pay-in will be done to the Exchange by 11:00 hours



Pay-out*	On D+1: Cost of power pay-out to the Seller. All pay-outs will be done after 11:00 hours
Transaction fees*	Transaction fee payable to the Exchange by the Buyer and Seller shall be informed through Circular.
	Exchange reserves the right to revise the transaction fee
	by issuing a Circular from time to time.

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

## 2. Trading slots and Auction Trade Session

The Trading slots are those time periods during which the contracted quantity has to be delivered for the entire Contract Period. The Any Day(s) product can be traded over any or all of the Trading slots. The Trading slots and Auction Trade session will be notified by Exchange through Trading Calendar.

## **Trading slots**

Slot	Hours
Round the Clock	00:00 to 24:00 Hours
Morning Peak	06:00 to 10:00 Hours
Evening Peak	18:00 to 22:00 Hours
Day off Peak	10:00 to 18:00 Hours
Night off Peak	00:00 to 06:00 hours and 22:00 to 24:00 hours
Round the Clock	00:00 to 24:00 Hours
15 minutes or multiples	15 minutes or multiples or any combination thereof
Thereof	based on request received from market participants
	prior to start of Auction session on Daily basis
The Trading Slots would be Prescribed by the Exchange from Time to Time	

## **Auction Trade Session**

The Daily auction Trade session for the operational day of the Exchange shall be notified from time to time

3. Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021





## **Annexure A6**

## **PXIL Weekly Electricity Market Contract Specifications**

## 1. Basic Contract Specifications

Type of Market	Weekly (Batch Auction)
Trading System	PRATYAY
Trading Methodology and Price	Double Sided Open Bidding with Uniform Price Step
discovery	Auction
Auction Timings*	12:00 to 17:00 hours on Auction days
Auction Days*	Monday to Friday of the Week
Addition Days	(the transacting week is designated as 'Week 0')
	Normal Order
Order type*	2. Block Order
Order type	The Exchange may introduce any other Order type by
	issuance of Circular from time to time
	15 minutes or multiples thereof from Monday 00:00 Hours
Duration of Contracts*	to Sunday 24:00 Hours of the Week for any number of
	Weeks from 'Week 1' to 'Week12' on rolling basis
Minimum Bid Volume*	Buyer: 1 MW or as specified by Exchange
	Seller: 0.1 MW or as specified by Exchange
Minimum Volume Quotation	1 MW or as specified by the Exchange
Step*	
Minimum Value Quotation	Rs. 1 per MWh
step*	
Delivery Point	The delivery point shall be on the state/regional periphery
	of the selling entity
	The transmission charges to be paid by the buyers and
	sellers for Exchange transactions would be as laid down
	under the GNA Regulations 2022 and Sharing
Transmission charges	Regulations 2020 as amended from time to time, as
	amended from time to time and would be payable to the
	Exchange as per procedure notified in Circular from time
	to time
Transmission Losses	The losses would be handled as per the GNA Regulations



	2022 and Sharing Regulations 2020, as amended from
	time to time.
	No revision of Obligation issued by Exchange is allowed.
	Any revision by System Operator on account of reasons
Revision of Schedule	other than force majeure or constraints in transmission
	corridor shall be treated as default by the Buyer/Selling
	entity who is responsible for such an event
	As per Matching Rules of Exchange –
	Traded Price * Quantity scheduled by Load Dispatch
	Centre at delivery point.
Settlement Price(s)	In case of revision in schedule, the final price settlement
	shall be based on revised scheduled quantity. The
	traded price shall be the Uniform prices discovered during
	the auction session
	a. Pre-bid Margin
	Sellers: Nil
	Buyers: Rs. 40/MWh
	The System at the receipt of the bids will check for Pre-
	bid margin and will not accept Bids if sufficient margin is
	not available. The pre-bid margin will be released when
	Post-trade Margin is applied.
	b. Post- Trade margin
	Seller: 10% of total trade value
Margin*	Buyer:
	i. Post trade margin of 15% of total cost of power for
	the Contract
	ii. Delivery margin at 100% of total cost of power for
	3 calendar days and 5% of cost of power for the
	cost of power for the remaining days
	The applicable margin shall be higher of Post-trade
	margin or Delivery margin.
	The Margin shall be recomputed on Application
	Acceptance or/and Real time curtailment. In case of



insufficient margin, application for Scheduling shall not be forwarded and if forwarded, application for cancellation shall be sent to RLDC/ SLDC. Further penalty shall be levied as prescribed.

Once the Post-trade margin is applied, Pre-bid margin would be released. The Post-trade margin will be released on Payment of obligation on 'Pay-in' during last three days of Contract on daily basis

### c. Charge Margin

The margin would be applied at the time of Application creation or as Prescribed. Charge margin applicability is specific to a product and would be applicable either on buy side, sell side or both. The Margin shall be recomputed on Application Acceptance. Once the pay-in is fulfilled towards charges, charge margin would be released.

The Exchange reserves the right to revise the Pre-bid margin, Post-trade margin, Delivery margin and Charge margin applicable to Buyer and/or Seller by issuing a Circular from time to time

The margins may be in the form of Bonk Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by Exchange from time to time.

Matching and/or transaction will not be executed in case sufficient margins are not maintained by Members. In case of any default in payment, deposits/margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected for other Contracts by the Exchange till such time may also be impounded.

Pay-in\*

On Application Charges in Pay-in from Buyer acceptance day

On Delivery (D) day Cost of Power pay-in from Buyer



	On first D +1 day	Charges Pay-in from Seller				
	All Pay-in will be done to the Exchange by 11:00 hrs					
Pay-out*	On D+1: Cost of power pay-out to the Seller. All pay-outs					
r ay-out	will be done after 11:00 hrs					
	Transaction fee payable to the Exchange by the Buyer					
Transaction fees*	and Seller shall be informed through Circular.					
Transaction rees	Exchange reserves the right to revise the transaction fee					
	by issuing a Circular from time to time.					

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

## 2. Trading slots and Auction Trade Session

The Trading slots are those time periods during which the contracted quantity has to be delivered for the entire Contract Period. The Weekly product can be traded over any or all of the Trading slots. The Trading Hour slots and Auction Trade session will be notified by Exchange through Trading Calendar.

## **Trading Hour slots**

Slot	Hours				
Round the Clock	00:00 to 24:00 Hours				
Morning Peak	06:00 to 10:00 Hours				
Evening Peak	18:00 to 22:00 Hours				
Day off Peak	10:00 to 18:00 Hours				
Night off Peak	Nigh-off peak - 00:00 to 06:00 hours and 22:00 to				
	24:00 hours				
15 Minutes or Multiple thereof	15 minutes or multiples or any combination thereof				
	based on request received from market participants				
	prior to start of Auction session on Daily basis				
The Time Slots would be Prescribed by the Exchange from Time to Time					

## **Auction Trade Session**

The Weekly Auction trade session shall be conducted on rolling basis, wherein auction shall be allowed Daily from Monday to Friday for delivery commencing from 'Week 1' to



'Week 12'. Matching of Orders would be undertaken on daily basis after the closure of auction window on each day. Uncleared Order would be carried forward to the next day based on consent provided by market participants; all Uncleared Order(s) after declaration of auction results for Friday's trading session shall be deleted.

An illustration of rolling auction session for different dates of trading days and delivery days is as under:

Consider the month of July 2022, for trade days 4<sup>th</sup> July to 9<sup>th</sup> July, the delivery duration permitted are 11<sup>th</sup> July 2022 to 2<sup>nd</sup> October 2022.

Week No	July – 2022								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
					1	2	3		
W0	4	5	6	7	8	9	10		
W1	11	12	13	14	15	16	17		
W2	18	19	20	21	22	23	24		
W3	25	26	27	28	29	30	31		
			Augus	st – 2022					
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
W4	1	2	3	4	5	6	7		
W5	8	9	10	11	12	13	14		
W6	15	16	17	18	19	20	21		
W7	22	23	24	25	26	27	28		
W8	29	30	31						
			Se	p-22					
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
W8				1	2	3	4		
W9	5	6	7	8	9	10	11		
W10	12	13	14	15	16	17	18		
W11	19	20	21	22	23	24	25		
W12	26	27	28	29	30				
			0	ct-22					
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
W12						1	2		
	3	4	5	6	7	8	9		
	10	11	12	13	14	15	16		
	17	17 18 19 20 21 22 23							



24	25	26	27	28	29	30
31						

The trading days and transaction duration in Weekly Contract shall be rolled over by resetting the first day of transaction in Weekly Contract on Monday of next week.

 Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021



## <u>Annexure A7</u> <u>Annexure A7 - PXIL Month (s) Ahead Electricity Market Contract</u>

## 1. Basic Contract Specification

Type of Market	Month (s) Ahead Contract
Trading System	PRATYAY
Type of Contract	Firm Delivery Contract
	The monthly period shall be from start of next Calendar
Delivery period	month (M1) up to end of month (M3) with duration of
	minimum one calendar month
Trading Methodology and Price discovery	Double Sided Open Bidding with Uniform Clearing Price
	Auction Days will be made available to market participants
	for transacting in Monthly basis as under:
	a. From First Day of zero Month (M0)
	b. To
Augtion doug*	<ul> <li>For Delivery in near Month (M1) ten(10) days prior</li> </ul>
Auction days*	to end of zero Month (M0)
	<ul> <li>For Delivery in mid-Month (M2) five(5) days prior to</li> </ul>
	end of zero Month (M0)
	<ul><li>For Delivery in far-Month (M3) on last day of zero</li></ul>
	Month (M0)
	12:00 to 17:00 Hours on daily basis
Auction Timings*	(the Exchange reserves the right to revise the auction time
	for single or multiple days in one or more days in advance)
Dunation of Contracts*	15 minutes or multiples thereof as notified by Exchange
Duration of Contracts*	from time to time
	Normal Order
	2. Block Order
	3. Other types of Order
Order types*	The Exchange reserves the right to modify and/or
	introduce other types of Order and inform the same to
	market participants through a Circular issued from time to
	time
Minimum Bid Volume*	Buyer: 1 MW or as specified by Exchange



	Seller: 0.1 MW or as specified by Exchange		
Minimum Volume	1 MW or as specified by Exchange to meet Buyers		
Quotation Step*	requirement		
Minimum Value Quotation Step*	Rs. 1 per MWh		
Quotation otep	The delivery point shall be on the State / Regional		
Delivery Point	periphery of the selling entity		
	The transmission charges to be paid by the buyers and		
	sellers for Exchange transactions would be as laid down		
Transmission charges	under the GNA Regulations 2022 and Sharing Regulations		
Ĭ	2020 as amended from time to time, would be payable to		
	the Exchange as per procedure notified in Circular from		
	time to time		
	The losses would be handled as per the GNA Regulations		
Transmission Losses	2022 and Sharing Regulations 2020, as amended from		
	time to time.		
	The delivery point shall be at the Regional periphery of the		
	Selling entity. The following operating charges shall be		
	applicable.		
	Buyer shall bear the operating charges to be paid to the		
	RLDC of the region and SLDC of the state in which Buyer		
	is located.		
	Seller shall bear the operating charges to be paid to the		
	RLDC of the region and SLDC of the state in which Seller		
Operating Charges	is located.		
	In case both the Buyer and Seller are from the same		
	Region then the RLDC operating charges shall be shared		
	equally between the Buyer and the Seller.		
	In case of intermediate region, the intermediate RLDC		
	operating charges shall be shared equally between the		
	Buyer and the Seller. Such charges shall be recovered by		
	the Exchange and socialized amongst all Buyers and		
	Sellers whose trades are successful.		
Revision of Schedule	No revision of Obligation issued by Exchange is allowed.		



	Any revision by System Operator on account of reasons			
	other than force majeure or constraints in transmission			
	corridor shall be treated as default by the Buyer/Selling			
	entity who is responsible for such an event			
	Traded Price * Quantity scheduled by Load Dispatch			
	Centre at delivery point.			
Cattlement Drice(s)	In case of revision in schedule, the final price settlement			
Settlement Price(s)	shall be based on revised scheduled quantity.			
	The traded price shall be the Uniform price discovered			
	during the auction session			
	a. Pre-bid Margin			
	Sellers: Nil			
	Buyers: Rs. 40/MWh			
	The System at the receipt of the bids will check for Pre-bid			
	margin and will not accept Bids if sufficient margin is not			
	available. The pre-bid margin will be released when Post-			
	trade Margin is applied.			
	b. Post-trade Margin			
	Seller: 10% of total trade value			
	Buyer:			
Margin*	i. Post trade margin of 15% of total cost of power for			
iviargin	the Contract			
	ii. Delivery margin at 100% of total cost of power for 3			
	calendar days and 5% of cost of power for the cost			
	of power for the remaining days			
	The applicable margin shall be higher of Post-trade margin			
	or Delivery margin.			
	The Margin shall be recomputed on Application			
	The Margin shall be recomputed on Application			
	The Margin shall be recomputed on Application Acceptance and/or Real time curtailment.			
	Acceptance and/or Real time curtailment.			
	Acceptance and/or Real time curtailment.  In case of insufficient margin, application for Scheduling			
	Acceptance and/or Real time curtailment.  In case of insufficient margin, application for Scheduling shall not be forwarded and if forwarded, application for			



	Once the Post-trade margin is applied, Pre-bid margin				
	would be released.				
	The Post-trade margin will	be released on Payment of			
	obligation on 'Pay-in' Day.				
	c. Charge Margin				
	This margin would be ap	pplied at the time of Application			
	creation or as Prescribed. Charge margin applicability				
	would be applicable either on buy side, sell side or both.				
	The Margin shall be recomputed on Application				
	acceptance. Once the pa	y-in is fulfilled towards charges,			
	charge margin would be re	eleased.			
	The Exchange reserves	the right to revise the Pre-bid			
	margin, Post-trade margi	n, Delivery margin and Charge			
	margin applicable to Buy	yer and/or Seller by issuing a			
	Circular from time to time				
	The margins may be in the	ne form of Bonk Guarantee, FD,			
	Cash or Bank limit or a	ny such instrument as may be			
	notified by Exchange from time to time.				
	Matching and/or transaction will not be executed in case				
	sufficient margins are not	maintained by Members. In case			
	of any default in payment,	deposits/margins placed with the			
	Exchange will be invoked	d to make good the default in			
	payment. All other forms	s of margin collected for other			
	Contracts by the Exchar	nge till such time may also be			
	impounded.				
	On Application	Charges in Pay-in from			
	acceptance day	Buyer			
Dov.in*	On Delivery (D) day	Cost of Power pay-in			
Pay-in*		from Buyer			
	On first D +1 day	Charges Pay-in from			
		Seller			
	All Pay-in will be done to the Exchange by 11:00 hrs				
Pay-out*	On D+1: Cost of power page	y-out to the Seller. All pay-outs			



	will be done after 11:00 hrs		
Transaction fees*	Transaction fee payable to the Exchange by the Buyer and		
	Seller shall be informed through Circular.		
	Exchange reserves the right to revise the transaction fee		
	by issuing a Circular from time to time.		

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

## 2. Trading slots and Trade session

## 2.1. Trading slots

The Trading slots are those time periods during which the contracted quantity has to be delivered for the entire Contract Period. The Month(s) Ahead product can be traded over any or all of the Trading slots. The Trading slots and Auction Trade session will be notified by Exchange through Trading Calendar.

Slot	Hours
Round the Clock	00:00 to 24:00 Hours
Morning Peak	06:00 to 10:00 Hours
Evening Peak	18:00 to 22:00 Hours
Day off Peak	10:00 to 18:00 Hours
Night off Peak	00:00 to 06:00 hours and 22:00 to 24:00 hours
15 minutes or multiples thereof	15 minutes or multiples or any combination
	thereof, based on request received from market
	participants prior to start of trading session for
	Contract
The Trading slots would be presc	ribed by the Exchange from time to time

#### 2.2. Trade Session

Trading hours are specific times within the Trading Days during which the Month(s) Ahead Contracts would be available for Trading on the Exchange. The Exchange may extend, advance or reduce the trading hour timings as and when it deems fit and necessary by notifying the Members.

## 3. Delivery periods



- 3.1. The Delivery period shall be the same as the Order placed by the participants.
  Month(s) Ahead Contracts are Contracts, wherein Members and Participants can choose the Delivery Period (hours in a day as well as days of delivery in a month), as per their requirement and enter Order(s).
- 3.2. Upon submission of the Order and its acceptance by the system, a Contract is automatically created and made available for trading.
  Illustration: In Month(s) Ahead Contracts, Orders for a delivery period can match with opposite Orders of the same delivery period. However, depending on counterpart liquidity in the Order book, partial quantity may get matched.

Illustration-1: For a buy Order for time slot 10:00 to 16:00 Hrs for delivery dates 01/07/2022 to 20/07/2022, matching for full/partial quantum will occur only if a sell order during such time slot 10:00 to 16:00 Hours for such delivery dates 01/07/2022 to 20/07/2022 is entered in the system.

If a seller's timeslot were to be 11:00 to 19:00 Hours for the same 20 days, then matching will take place for common time slot of 11:00 to 16:00 Hours

Illustration-2: For a buy Order for time slot 10:00 to 16:00 Hours for delivery dates 01/07/2022 to 20/07/2022, matching for full/partial quantum will occur only if a sell order during such time slot 10:00 to 19:00 Hours for during such delivery dates 01/07/2022 to 20/07/2022 is entered in the system.

If a seller's timeslot were to be 09:00 to 20:00 Hours for the period 11/07/2022 to 25/07/2022, then the matching will take place for common time slot of 10:00 to 16:00 Hours for the common delivery dates of 11/07/2022 to 20/07/2022.

The other terms and conditions are as given below.

## 4. Application for Scheduling

Application for Scheduling shall be submitted to the Nodal RLDC as specified in the Trading and Delivery Calendar and as per the "Procedure for T-GNA' issued by NLDC. The month in which the application is submitted is considered as the first month.

#### 4.1. One Month Ahead transaction



Consider the month of July 2022 as 'Month M0', under the One Month Ahead contract, the application for transacted quantum to be submitted to Nodal RLDC shall provide delivery of power during near Month i.e. 'Month M1' i.e. August 2022.

July – 2022 ('Zero Month M0')							
Mon	Tue	Wed	Thu	Fri	Sat	Sun	
				1	2	3	
4	5	6	7	8	9	10	
11	12	13	14	15	16	17	
18	19	20	21	22	23	24	
25	26	27	28	29	30	31	
	Aug	ust - 2022	('Near Mo	nth M1'	)		
Mon	Tue	Wed	Thu	Fri	Sat	Sun	
1	2	3	4	5	6	7	
8	9	10	11	12	13	14	
15	16	17	18	19	20	21	
22	23	24	25	26	27	28	
29	30	31					

#### (Note:

- Days marked in green indicate the days when application is considered by RLDC for advance scheduling
- 2) Days marked in pink indicate the duration which is assessed by RLDC for processing application for advance scheduling
- 3) Days marked in white indicate days which are not considered by RLDC for processing application for advance scheduling)

When the transaction executed between Buyer / Seller in the month of July 2022 is submitted to nodal RLDC 10-days prior to end of the month then such transaction will be processed by Nodal RLDC under Advance Reservation for second month.

When the application for delivery during the month of August 2022 is submitted in the last 10-days of July 2022 i.e. from 22<sup>nd</sup> to 31<sup>st</sup> July 2022, then such application will be processed by Nodal RLDC under "First-Come-First-Serve" category.

#### 4.2. Two Month Ahead transaction

Consider the month of July 2022 as 'Month M1', under the Two Month Ahead transaction, the application for transacted quantum to be submitted to Nodal RLDC shall provide delivery of power during the third month i.e. September 2022.



	July – 2022 ('Zero Month M0')						
Mon	Tue	Wed	Thu	Fri	Sat	Sun	
				1	2	3	
4	5	6	7	8	9	10	
11	12	13	14	15	16	17	
18	19	20	21	22	23	24	
25	26	27	28	29	30	31	
	Septe	ember – 202	22 ('Mid M	onth M	2')		
Mon	Tue	Wed	Thu	Fri	Sat	Sun	
			1	2	3	4	
5	6	7	8	9	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	
26	27	28	29	30			

### (Note:

- 1) Days marked in green indicate the days when application is considered by RLDC for advance scheduling
- 2) Days marked in pink indicate the duration which is assessed by RLDC for processing application for advance scheduling
- 3) Days marked in white indicate days which are not considered by RLDC for processing application for advance scheduling)

When the transaction executed between Buyer / Seller is submitted to nodal RLDC 5-days prior to closure of the month then such transaction will be processed by Nodal RLDC under Advance Reservation for third month.

## 4.3. Three Month Ahead transaction

Consider the month of July 2022 as 'Month M1', under the Three Month Ahead transaction, the application for transacted quantum to be submitted to Nodal RLDC shall provide delivery of power during the fourth month i.e. October 2022.

July – 2022 ('Zero Month M0')						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



October – 2022 ('Far Month M3')						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

(Note:

- 1) Days marked in green indicate the days when application is considered by RLDC for advance scheduling
- 2) Days marked in pink indicate the duration which is assessed by RLDC for processing application for advance scheduling)

When the transaction executed between Buyer / Seller is submitted to nodal RLDC prior to close of the month then such transaction will be processed by Nodal RLDC under Advance Reservation for fourth month

## 4.4. Matching

- 4.4.1. Matching of Orders will be undertaken at 17:00 hrs as under
  - 4.4.1.1. 10-days prior to end of 'Month 0' i.e. on 20<sup>th</sup> / 21<sup>st</sup> of 'Month M0' for submission of application under 'Advance Reservation' for One Month Ahead delivery
  - 4.4.1.2. Daily matching during remaining days of 'Month M0' after completion of activities in 4.4.1.1 above i.e. from 21<sup>st</sup> / 22<sup>nd</sup> of the 'Month M0' for submission of application under 'First Come First Serve' for One Month Ahead delivery. The uncleared Order at the end of the day would be carried forward to the next day
  - 4.4.1.3. 5-days prior to end of 'Month M0' i.e. on 25<sup>th</sup> / 26<sup>th</sup> of 'Month M0' for submission of application under 'Advance Reservation' for Two Month Ahead delivery
  - 4.4.1.4. On last day of 'Month M0' for submission of application under 'Advance Reservation' for Three Month Ahead delivery

The day (s) for activities under 4.4.1 above shall be dependent on calendar applicable for 'Month M0,' the Exchange may from time to time amend the above based on year / calendar applicable for the month.

4.4.2. After close of Bidding session on last day of 'Month M0', all uncleared Orders will be deleted from the system



5. Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021



## **Annexure A8**

# <u>Annexure A8 - PXIL Any Day Single Sided with Reverse Auction Electricity Market</u> <u>Contract</u>

## 1. Basis Contract Specification

Type of Market	Any Day Single Sided Contract			
Trading System	PRATYAY			
Type of Contract	Firm Delivery Contract			
	Contracts as requisitioned by the Buyer for the delivery			
Delivery period*	period and time (day(s) and time slot(s))for any number of			
	days from 'T+2' to 'T + 90' Days			
	Reverse Auction:			
	Buyer to specify its requirement in terms of quantum (MW)			
	and the period of delivery including time slot(s) on all days.			
Bidding and Auction	Seller to submit their Offers providing quantum (MW) and			
process	Price in Rs. / MWh against the requisition made by Buyer			
	in the Auction window. The auction process shall be			
	undertaken as two (2) stage process i.e. the Initial Price			
	Offer (IPO) stage and Reverse Auction			
Price discovery and	Reverse Auction for Buyer's requisition as per Annexure V			
Trading methodology	of Business Rules			
	00:00 to 24:00 Hours, or,			
Auction Timings*	As notified by Exchange from time to time for single or			
	multiple days in one or more days in advance			
	Price in Rs. / MWh above which no Offer can be submitted			
Ceiling Price	by a Seller			
	15 minutes or multiples thereof as notified by Exchange			
Duration of Contracts*	from time to time			
	Buyer: 1 MW for each Reverse auction event			
Minimum Bid Volume*	Seller: 0.1 MW or as specified by Buyer enabling			
	submission of Offer to participate in Reverse auction event			
Minimum Volume	1 MW or as specified by Exchange to meet Buyers			
Quotation Step*	requirement			
Minimum Value Rs. 1 per MWh				



Quotation Step*			
Delivery Deint	The delivery point shall be on the State / Regional		
Delivery Point	periphery of the selling entity		
	The transmission charges to be paid by the buyers and		
	sellers for Exchange transactions would be as laid down		
Transmission charges	under the GNA Regulations 2022 and Sharing Regulations		
	2020 as amended from time to time, would be payable to		
	the Exchange in cash		
	The losses would be handled as per the GNA Regulations		
Transmission Losses	2022 and Sharing Regulations 2020, as amended from		
	time to time.		
	The delivery point shall be at the Regional periphery of the		
	Selling entity. The following operating charges shall be		
	applicable.		
	Buyer shall bear the operating charges to be paid to the		
	RLDC of the region and SLDC of the state in which Buyer		
	is located.		
	Seller shall bear the operating charges to be paid to the		
	RLDC of the region and SLDC of the state in which Seller		
0 " 0	is located.		
Operating Charges	In case both the Buyer and Seller are from the same		
	Region then the RLDC operating charges shall be shared		
	equally between the Buyer and the Seller.		
	In case of intermediate region as per extant Regulation, the		
	intermediate RLDC operating charges shall be shared		
	equally between the Buyer and the Seller. Such charges		
	shall be recovered by the Exchange and socialized		
	amongst all Buyers and Sellers whose trades are		
	successful.		
	No revision of Obligation issued by Exchange is allowed.		
Revision of Schedule	Any revision by System Operator on account of reasons		
Revision of Schedule	other than force majeure or constraints in transmission		
	corridor shall be treated as default by the Buyer/Selling		



	entity who is responsible for such an event			
	Traded Price * Quantity scheduled by Load Dispa			
	Centre at delivery point.			
	In case of revision in schedule, the final price settlement			
Settlement Price(s)	shall be based on revised scheduled quantity.			
	The traded price shall be the prices discovered during the			
	Reverse auction session applicable for Seller's offered			
	quantum			
	a. Pre-bid margin			
	Sellers: Rs. 40/MWh			
	Buyers: Non-refundable fee of Rs. 1 lacs for initiating			
	reverse auction (this fee will be adjusted in the additional			
	margins to be collected from buyer after the successful			
	execution of the Contract)			
	The System at the receipt of the bids will check for Pre-bid			
	margin and will not accept Bids if sufficient margin is not			
	available. The Pre-bid margin will be released when Post-			
	trade margin / Delivery margin is applied.			
	b. Post-trade margin			
	Seller: 10% of total trade value			
Margin*	Buyer:			
	i. Post trade margin of 15% of total cost of power for			
	the Contract			
	ii. Delivery margin at 100% of total cost of power for 3			
	calendar days and 5% of cost of power for the cost			
	of power for the remaining days			
	The applicable margin shall be higher of Post-trade margin			
	or Delivery margin.			
	The Margin shall be recomputed on Application			
	Acceptance or/and Real time curtailment.			
	In case of insufficient post trade margin, Application for			
	Scheduling shall not be forwarded and if forwarded,			
	Application for cancellation shall be sent to RLDC/ SLDC.			



	Further penalty shall be levied as prescribed.				
	Once the Post-trade m	Once the Post-trade margin is applied, Pre-bid margin			
	would be released.	would be released.			
	c. Charge Margin	c. Charge Margin			
	This margin would be a	This margin would be applied at the time of Application			
	creation or as Prescribed. Charge margin applicability				
	would be applicable either on buy side, sell side or both.				
	The Margin shall be	The Margin shall be recomputed on Application			
	acceptance. Once the p	acceptance. Once the pay-in is fulfilled towards charges,			
	charge margin would be	charge margin would be released.			
	The margins may be in	The margins may be in the form of Bank Guarantee, FD,			
	Cash or Bank limit or	Cash or Bank limit or any such instrument as may be			
	notified by Exchange from	notified by Exchange from time to time.			
	Matching and/or transac	Matching and/or transaction will not be executed in case			
	sufficient margins are no	sufficient margins are not maintained by Members. In case			
of any default in payment, deposits/margins placed wit					
	Exchange will be invoked to make good the default in				
payment. All other forms of margin collected for					
	Contracts by the Exchange till such time may also be				
	impounded.				
	On Application	Charges in Pay-in from			
	acceptance day	Buyer			
	On Delivery (D) day	Cost of Power pay-in			
Pay-in*		from Buyer			
	On first D +1 day	Charges Pay-in from			
		Seller			
	All Pay-in will be done to the Exchange by 11:00 hrs				
D	On D+1: Cost of power pay-out to the Seller. All pay-outs				
Pay-out*	will be done after 11:00 hrs				
Transaction force*	Transaction fee payable to the Exchange by the Buyer				
Transaction fees*	and Seller shall be inform	and Seller shall be informed through Circular			
The Exchange reserves the right to amend these parameters by issuing a Circular from					

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time



## 2. Trading slots and Auction Trade session

## 2.1. Trading slots

The trading slots are those time periods during which the contracted quantity has to be delivered by the Seller for the entire Contract period. The trading slots and Auction Trade session will be notified by Exchange based on requirement submitted by Buyer.

## 2.2. Auction Trade Session

The Any Day Single Sided Auction Trade session for the operational day of the Exchange shall be notified from time to time

3. Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(3) of CERC (Power Market) Regulations, 2021



# <u>Annexure I B1 - PXIL Green Intra Day Solar / Non Solar Electricity Market Contract Specifications</u>

# 1. Contract Specification

Type of Market	Intra Day – Solar / Non Solar (Separate sessions shall be operated for transaction in Solar or Non Solar)			
Selling Entity	Solar or Non Solar power for participating in respective session. 'RE Hybrid energy project' shall be considered as Non Solar selling entity			
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.			
Revision in Schedule	No revision in Obligation issued by Exchange is allowed			
Trading Methodology	Continuous matching mechanism as per Annexure V of Business Rules			
Types of Order*	1 Fill and Kill (FAK) 2 Fill or Kill (FOK) 3 Limit orders The Exchange reserves the right to introduce other Order types by issuing a Circular from time to time			
Auction Days*	As specified in Exchange Circular from time to time			
Auction Timings*	00:15 hours to 23:30 hours. The market shall remain closed for technical reasons from 23:30 hrs till 00:15 hours of next day (Day T is the trading day for entering bids in pre-defined sessions as decided by the Exchange)  The Exchange reserves the right to revise the auction timings by			



	issuing a Circular from time to time		
	10 time blocks ahead up to 24:00 hours of the Trading Day (T) with contracts for every 15-minute duration		
Duration of Contracts*	The start of delivery period shall be as per GNA Regulations 2022, Procedure for Scheduling of Bilateral Transactions and direction received from RLDC and its amendment from time to time		
Minimum Bid Volume*	0.1 MW / 100 kW		
Minimum Volume Quotation Step*	0.01 MW		
Minimum Value Rs. 1 per MWh			
Delivery Point	The delivery point shall be regional periphery of selling entity		
Transmission Charges	1) Regional Transmission Charges  As per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulation, 2020 as amended from time to time.  2) State Transmission System  As per concerned State Electricity Regulatory Commission Regulations / GNA Regulations 2022 as amended from time to time		
Transmission Losses	As per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulation, 2020 as amended from time to time.  STU loss if applicable to both Buyer and sellers  Seller shall bear the Scheduling & Operating charges up to the delivery point. Buyer shall bear the Scheduling & Operating charges including 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		
Application Fees &	The application fees & operating charges along with taxes, if		



Operating Charges	any, submitted by the Exchange to the RLDC (s) / SLDC (s),
	shall be equally shared between the Buyer and Seller
	The Exchange reserves the right to change the above provisions
	by issuing a Circular from time to time.
	The price discovered during the Continuous matching session.
Settlement Price	The Exchange reserves the right to modify and/or introduce any
	other matching mechanism by issuance of Circular
	Buyers will have to make available the 105% margin of the bid
	value before submission of bids. No pre-bid margin is required
Pre bid Margin*	from Seller.
	The Exchange reserves the right to amend the quantum of pre-
	bid margin from time to time
	For Buyers
	100% of the total trade value and applicable charges (Charge
	margin) or margin amount from the buyers and no post-bid
	margin from the seller or as Prescribed.
	The Margin shall be recomputed on Application Acceptance
Post-Trade Margin*	and/or Real time curtailment. Once the Post-trade margin is
Post-Trade Margin* (after	applied, Pre-bid margin would be released. Once the pay-in for
matching & Before Application to Load	the trade is fulfilled, Post-trade margin would be released.
Application to Load Dispatch Centre)	For Sellers
	5% of the total trade value and applicable charges (Charge
	margin) or margin from Sellers or as Prescribed.
	In case of insufficient post trade margin, the same will be
	adjusted from the next pay-out of the Sellers and it shall be
	adjusted along with payment of obligation on Pay-out Day
	Transaction fee payable to the Exchange by the Buyer and
	Seller shall be informed through Circular.
Transaction Fee*	Exchange reserves the right to revise the transaction fee by
	issuing a Circular from time to time.

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time



2. Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021



# Annexure I B2 - PXIL Green Day Ahead Contingency Solar / Non Solar Electricity Market Contract

# 1. Contract Specification

Type of Market	Day Ahead Contingency – Solar / Non Solar (Separate sessions shall be operated for transaction in Solar or Non Solar) (Batch Auction)				
Selling Entity	Solar or Non Solar power for participating in respective session. 'RE Hybrid energy project' shall be considered as Non Solar selling entity				
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.				
Trading Methodology	Continuous matching mechanism as per Annexure V of Business Rules				
Type of Order*	1 Fill and Kill (FAK) 2 Fill or Kill (FOK) 3 Limit orders The Exchange reserves the right to introduce other Order types by issuing a Circular from time to time				
Auction Days*	On daily basis or as specified in Exchange Circular from time to time				
Auction Timings*	15:00 hours to 23:00 hours (Day T is the trading day for entering bids in pre-defined sessions as decided by the Exchange from time to time)				
Duration of Contracts	96 contracts of 15-min duration each for next day Delivery (T + 1)				



Minimum Bid Volume*	0.1 MW / 100 kW			
Minimum Volume Quotation Step*	0.01 MW			
Minimum Value Quotation step*	Rs. 1 per MWh			
Delivery Point	The delivery point shall be regional periphery of selling entity			
Transmission Charges	1) Regional Transmission Charges  As per Sharing Regulations, 2020 as amended from time to time.  2) State Transmission System  As per concerned State Electricity Regulatory Commission Regulations / GNA Regulation 2022 as amended from time to time			
Transmission Losses	As per Sharing Regulations, 2020 as amended from time to time.  STU loss, if applicable, to both Buyer and sellers  Seller shall bear the Scheduling & Operating charges up to the delivery point. Buyer shall bear the Scheduling & Operating charges including 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			
Application Fees & Operating charges	The application fees & operating charges along with taxes, if any, submitted by the Exchange to the RLDC (s) / SLDC (s), shall be equally shared between the Buyer and Seller The Exchange reserves the right to change the above provisions by issuing a Circular from time to time.			
Settlement Price	The price discovered during the Continuous matching session.  The Exchange reserves the right to modify and/or introduce any other matching mechanism by issuance of Circular			
Pre bid margin*	Pre bid margin at the time of bidding will be 105% of the bid value from Buyers. No pre-bid margin is required from the			



	Seller.
	The Exchange reserves the right to modify margin by issuance of Circular from time to time
Post-Trade Margin* (after matching & Before Application to Load Dispatch Centre)	For Buyers  100% of the total trade value and applicable charges (Charge margin) or margin amount from the buyers and no post-bid margin from the seller or as Prescribed.  The Margin shall be recomputed on Application Acceptance and/or Real time curtailment. Once the Post-trade margin is applied, Pre-bid margin would be released. Once the pay-in for the trade is fulfilled, Post-trade margin would be released.  For Sellers  5% of the total trade value and applicable charges (Charge margin) or margin from Sellers or as Prescribed. In case of insufficient post trade margin, the same will be adjusted from the next pay-out of the Sellers and it shall be adjusted alongwith payment of obligation on Pay-out Day  The margins may be in the form of Bank Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by the exchange from time to time. For the unmatched trades, the margin will be released to the Buyer.  Bids will not be executed in case sufficient margins are not maintained by the Members. In case of any default in payment, Deposits / Margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected for other products by the Exchange till such time may also be impounded. Exchange reserves its right to change the margin requirements from time to time as felt necessary.
Transaction Fee*	Transaction fee payable to the Exchange by the Buyer and Seller shall be informed through Circular.  Exchange reserves the right to revise the transaction fee by



issuing a Circular from time to time.

2. Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time



# Annexure I B3 - PXIL Green Daily Solar / Non Solar Electricity Market Contract

# 1. Basic Contract Specifications

Type of Market	Daily Solar / Non Solar on Term Ahead basis (Separate sessions shall be operated for transaction in Solar or Non Solar) (Batch Auction)				
Selling Entity	Solar or Non Solar power for participating in respective session. 'RE Hybrid energy project' shall be considered as Non Solar selling entity				
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.				
Contracts Available for Trading	Delivery shall be in 'MW' for each time block for intended duration  Seller and Buyer shall place Orders in 'MW' for intended duration, the Orders shall be matched, the time block wise matched quantum in 'MW' shall be submitted to RLDC for scheduling. Based on approved quantum information received from RLDC, the Exchange shall issue obligations as under:  a) Seller – Time block wise quantum of power in 'MW' scheduled for injection by RLDC  b) Buyer – the quantum of energy purchased in 'MWh' and the time block wise drawl in 'MW' scheduled by RLDC				
Trading Methodology	Double Sided Open Bidding with Uniform Price Step Auction				
Delivery Period*	Contracts as placed by the participant for the delivery period and time for any number of days from 'T+2' to 'T + 90' Days				
Type of Order*	Normal Order     Block Order				



	The Exchange reserves the right to introduce new Order type by issuing a Circular from time to time				
Duration of Contracts*	15 minutes or multiples thereof as notified by Exchange from time to time				
Auction Timings*	00:00 to 24:00 Hours  The Exchange shall notify the start and end time for all auction days for submission of Order by issuing Circular from time to time.  After completion of end time no modification / revision to the Orders will be allowed				
Minimum Bid Volume*	Buyer: 1 MW or as specified by Exchange Seller: 0.1 MW or as specified by Exchange				
Minimum Volume Quotation Step*	0.01 MW				
Minimum Value Quotation step*	Rs. 1 per MWh				
Delivery Point	The delivery point shall be regional periphery of selling entity				
Transmission Charges	1) Regional Transmission Charges  As per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulation, 2020 as amended from time to time.  2) State Transmission System  STU Charges if applicable to both Buyer and sellers  As per concerned State Electricity Regulatory Commission Regulations / GNA Regulations 2022 as amended from time to time				
As per Central Electricity Regulatory Commission (Sharin State Transmission Charges and Losses) Regulation, amended from time to time.  Transmission Losses  STU loss if applicable to both Buyer and Seller Seller shall bear the Scheduling & Operating charges delivery point. Buyer shall bear the Scheduling & charges including from Delivery point up to their point of delivery point of delivery point up to their point of delivery point up to the delivery point u					



	The charges shall be applied on the quantum of power scheduled at Seller's Regional Periphery			
Application Fees & Operating charges	The application fees & operating charges along with taxes, if any, submitted by the Exchange to the RLDC (s) / SLDC (s), shall be equally shared between the Buyer and Seller  The Exchange reserves the right to change the above provisions by issuing a Circular from time to time.			
Revision of Schedule	No revision of Obligation issued by Exchange is allowed.  Any revision by System Operator on account of reasons other than force majeure or constraints in transmission corridor shall be treated as default by the Buyer/Selling entity who is responsible for such an event			
Settlement Price	Traded Price * Quantity scheduled by Load Dispatch Centre at delivery point.  In case of revision in schedule, the final price settlement shall be based on revised scheduled quantity.  The traded price shall be the Uniform prices discovered during the auction session			
Margin*	<ul> <li>a. Pre-bid Margin</li> <li>Sellers: Nil</li> <li>Buyers: Rs. 40/MWh</li> <li>The System at the receipt of the bids will check for Pre-bid margin and will not accept Bids if sufficient margin is not available. The pre-bid margin will be released when Post-trade Margin is applied</li> <li>b. Post-bid Margin</li> <li>Seller: 10% of total trade value</li> <li>Buyer: <ol> <li>Post trade margin of 15% of total cost of power for the Contract</li> <li>Delivery margin at 100% of total cost of power for 3 calendar days and 5% of cost of power for the cost of power</li> </ol> </li> </ul>			



for the remaining days

The applicable margin shall be higher of Post-trade margin or Delivery margin.

The Margin shall be recomputed on Application Acceptance or/and Real time curtailment.

In case of insufficient margin, application for Scheduling shall not be forwarded and if forwarded, application for cancellation shall be sent to RLDC/ SLDC. Further penalty shall be levied as prescribed. Once the Post-trade margin is applied, Pre-bid margin would be released.

#### c. Charge Margin

The margin would be applied at the time of application creation or as prescribed. Charge margin would be applicable either on Buyer or Seller or both. The margin shall be recomputed on application acceptance, once the pay-in for trade is fulfilled towards charges, charge margin would be released

The Exchange reserves the right to revise the Pre-bid margin, Posttrade margin, Delivery margin and Charge margin applicable to Buyer and/or Seller by issuing a Circular from time to time

The margins may be in the form of Bonk Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by Exchange from time to time.

Matching and/or transaction will not be executed in case sufficient margins are not maintained by Members. In case of any default in payment, deposits/margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected for other Contracts by the Exchange till such time may also be impounded.

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On Application	Charges in Pay-in from Buyer
acceptance day	
On Delivery (D) day	Cost of Power pay-in from Buyer



	On first D +1 day Charges Pay-in from Seller  All Pay-in will be done to the Exchange by 11:00 hrs				
Pay-out*	On D+1: Cost of power pay-out to the Seller. All pay-outs will be done after 11:00 hrs				
Transaction fees*	Transaction fee payable to the Exchange by the Buyer and Seller shall be informed through Circular.  Exchange reserves the right to revise the transaction fee by issuing a Circular from time to time.				

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

### 2. Trading slots and Auction Trade Session

The Trading slots are those time periods during which the contracted quantity has to be delivered for the entire Contract Period. The Daily Contract can be traded over any or all of the Trading slots. The Trading slots and Auction Trade session will be notified by Exchange through Trading Calendar.

### **Trading slots**

Slot	Hours	
Round the Clock	00:00 to 24:00 Hours	
Morning Peak	06:00 to 10:00 Hours	
Evening Peak	18:00 to 22:00 Hours	
Day off Peak	10:00 to 18:00 Hours	
Night off Peak	00:00 to 06:00 hours and 22:00 to 24:00 hours	
Round the Clock	00:00 to 24:00 Hours	
15 minutes or multiples	15 minutes or multiples or any combination thereof	
Thereof	based on request received from market participants	
	prior to start of Auction session on Daily basis	
The Trading Slots would be Prescribed by the Exchange from Time to Time		

 Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021



# <u>Annexure I B4 - PXIL Green Weekly Solar / Non Solar Electricity Market Contract Specifications</u>

# 1. Basic Contract specification

Type of Market	Weekly Solar/ Non Solar on a Term Ahead basis (Separate sessions shall be operated for transaction in Solar or Non Solar) (Batch Auction)		
Selling Entity	Solar or Non Solar power for participating in respective session. 'RE Hybrid energy project' shall be considered as Non Solar Selling entity		
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.		
Trading Methodology	Double Sided Open Bidding with Uniform Price Step Auction		
Type of Order*	Normal Order     Block Order  The Exchange may introduce any other Order type by issuance of Circular from time to time		
Auction Days*	Monday to Friday of the Week (the transacting week is designated as 'Week 0')		
Auction timing*	12:00 to 17:00 hours on all Auction days		
Contract Available for Trading*	15 minutes or multiples thereof from Monday 00:00 Hours to Sunday 24:00 Hours of the Week for any number of Weeks from 'Week 1' to 'Week12' on rolling basis Seller and Buyer shall place Orders in 'MW' for intended duration, the Orders shall be matched, the time block wise matched quantum in 'MW' shall be submitted to RLDC for scheduling. Based on		



	approved quantum information received from RLDC, the Exchange shall issue obligations as under:  a) Seller – Time block wise quantum of power in 'MW' scheduled for injection by RLDC  b) Buyer – The quantum of energy purchased in 'MWh' and the time block wise drawl in 'MW' scheduled by RLDC			
Duration of Contracts	From 00:00 hours of Monday to 24:00 hours of Sunday of the Week for any number of Weeks from 'Week1' to 'Week12'  The Seller shall inject power (in 'MW') to be scheduled on daily basis or multiples thereof  96 Time Block Contracts for upcoming week delivery (Monday to Sunday)			
Minimum Bid Volume*	Buyer: 1 MW or as specified by Exchange Seller: 0.1 MW or as specified by Exchange			
Minimum Volume Quotation Step*	1 MW or as specified by the Exchange			
Minimum Value Quotation step*	Rs. 1 per MWh			
Delivery Point	The delivery point shall be regional periphery of selling entity			
Transmission Charges	1) Regional Transmission Charges  As per Sharing Regulations, 2020 as amended from time to time.  2) State Transmission System  STU Charges if applicable to both Buyer and Seller  As per concerned State Electricity Regulatory Commission Regulations / GNA Regulations 2022 as amended from time to time			
Transmission Losses	As per Sharing Regulations, 2020 as amended from time to time.			



Application Fees Operating charges  & Shall be equally shared between the Buyer and Seller The Exchange reserves the right to change the abortovisions by issuing a Circular from time to time.  Revision of Schedule  No revision of Obligation issued by Exchange is allowed. Schedule is allowed. any revision by System Operator account of reasons other than force majeure or constraints transmission corridor shall be treated as default by Buyer/Selling entity who is responsible for such an event  Traded Price * Quantity scheduled by Load Dispatch Central delivery point.  In case of revision in schedule, the final price settlement is be based on revised scheduled quantity. The traded price shall be the Uniform prices discovered durithe auction session  a. Pre-bid Margin Sellers: Nil Buyers: Rs. 40/MWh		STU loss if applicable to both Buyer and Seller Seller shall bear the Scheduling & Operating charges up to the delivery point. Buyer shall bear the Scheduling & Operating charges including 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
Schedule is allowed. any revision by System Operator account of reasons other than force majeure or constraints transmission corridor shall be treated as default by Buyer/Selling entity who is responsible for such an event  Traded Price * Quantity scheduled by Load Dispatch Centre delivery point.  In case of revision in schedule, the final price settlement so be based on revised scheduled quantity.  The traded price shall be the Uniform prices discovered due the auction session  a. Pre-bid Margin Sellers: Nil Buyers: Rs. 40/MWh	• •	The Exchange reserves the right to change the above
delivery point.  In case of revision in schedule, the final price settlement s be based on revised scheduled quantity.  The traded price shall be the Uniform prices discovered due the auction session  a. Pre-bid Margin Sellers: Nil Buyers: Rs. 40/MWh	Revision of Schedule	Schedule is allowed. any revision by System Operator on account of reasons other than force majeure or constraints in transmission corridor shall be treated as default by the
Sellers: Nil Buyers: Rs. 40/MWh	Settlement Price	In case of revision in schedule, the final price settlement shall be based on revised scheduled quantity.  The traded price shall be the Uniform prices discovered during
Margin* margin and will not accept Bids if sufficient margin is	Margin*	Sellers: Nil Buyers: Rs. 40/MWh The System at the receipt of the bids will check for Pre-bid margin and will not accept Bids if sufficient margin is not available. The pre-bid margin will be released when Post-trade Margin is applied.  b. Post-Trade margin



#### Buyer:

- Post trade margin of 15% of total cost of power for the Contract
- Delivery margin at 100% of total cost of power for 3 calendar days and 5% of cost of power for the cost of power for the remaining days

The applicable margin shall be higher of Post-trade margin or Delivery margin.

The Margin shall be recomputed on Application Acceptance or/and Real time curtailment. In case of insufficient margin, application for Scheduling shall not be forwarded and if forwarded, application for cancellation shall be sent to RLDC/SLDC. Further penalty shall be levied as prescribed.

Once the Post-trade margin is applied, Pre-bid margin would be released. The Post-trade margin will be released on Payment of obligation on 'Pay-in' during last three days of Contract on daily basis

#### c. Charge Margin

The margin would be applied at the time of Application creation or as Prescribed. Charge margin applicability is specific to a product and would be applicable either on buy side, sell side or both. The Margin shall be recomputed on Application Acceptance. Once the pay-in is fulfilled towards charges, charge margin would be released.

The Exchange reserves the right to revise the Pre-bid margin, Post-trade margin, Delivery margin and Charge margin applicable to Buyer and/or Seller by issuing a Circular from time to time

The margins may be in the form of Bonk Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by Exchange from time to time.

Matching and/or transaction will not be executed in case



	sufficient margins are not maintained by Members. In case of any default in payment, deposits/margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected for other Contracts by the Exchange till such time may also be impounded.			
Pay-in*	On Application acceptance day On Delivery (D) day On first D +1 day All Pay-in will be done	Charges in Pay-in from Buyer  Cost of Power pay-in from Buyer  Charges Pay-in from Seller  to the Exchange by 11:00 hrs		
Pay-out*	On D+1: Cost of power pay-out to the Seller. All pay-outs will be done after 11:00 hrs			
Transaction Fee*	Transaction fee payable to the Exchange by the Buyer and Seller shall be informed through Circular. Exchange reserves the right to revise the transaction fee by issuing a Circular from time to time.			

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

### 2. Trading Hour slots and Auction Trade Session

The Trading Hour slots are those time periods during which the contracted quantity has to be delivered for the entire Contract Period. The Weekly product can be traded over any or all of the Trading Hour slots. The Trading Hour slots and Auction Trade session will be notified by Exchange through Trading Calendar.

### **Trading Hour slots**

Slot	Hours
Round the Clock	00:00 to 24:00 Hours
Morning Peak	06:00 to 10:00 Hours
Evening Peak	18:00 to 22:00 Hours
Day off Peak	10:00 to 18:00 Hours



Night off Peak	Nigh-off peak - 00:00 to 06:00 hours and 22:00 to	
	24:00 hours	
15 Minutes or Multiple thereof	15 minutes or multiples or any combination thereof	
	based on request received from market participants	
	prior to start of Auction session on Daily basis	
The Time Slots would be Prescribed by the Exchange from Time to Time		

#### **Auction Trade Session**

The Weekly Auction trade session shall be conducted on rolling basis, wherein auction shall be allowed Daily from Monday to Friday for delivery commencing from 'Week 1' to 'Week 12'. Matching of Orders would be undertaken on daily basis after the closure of auction window on each day. Uncleared Order would be carried forward to the next day based on consent provided by market participants, all uncleared Order after declaration of auction results for Friday's trading session shall be deleted.

An illustration of rolling auction session for different dates of trading days and delivery days is as under:

Consider the month of July 2022, for trade days 4<sup>th</sup> July to 9<sup>th</sup> July, the delivery duration permitted are 11<sup>th</sup> July 2022 to 2<sup>nd</sup> October 2022.

Week No	July – 2022						
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2	3
W0	4	5	6	7	8	9	10
W1	11	12	13	14	15	16	17
W2	18	19	20	21	22	23	24
W3	25	26	27	28	29	30	31
			Augus	st - 2022			
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
W4	1	2	3	4	5	6	7
W5	8	9	10	11	12	13	14
W6	15	16	17	18	19	20	21
W7	22	23	24	25	26	27	28
W8	29	30	31				
	September – 2022						



	Mon	Tue	Wed	Thu	Fri	Sat	Sun
W8				1	2	3	4
W9	5	6	7	8	9	10	11
W10	12	13	14	15	16	17	18
W11	19	20	21	22	23	24	25
W12	26	27	28	29	30		
			Octob	er - 2022			
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
W12						1	2
	3	4	5	6	7	8	9
	3 10	4 11	5 12	6 13	7 14	8 15	9 16
					-		
	10	11	12	13	14	15	16

The trading days and transaction duration in Weekly Contract shall be rolled over by resetting the first day of transaction in Weekly Contract on Monday of next week.

3. Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021



# <u>Annexure I B5 - PXIL Green Month (s) Ahead Solar / Non Solar Electricity Market</u> <u>Contract</u>

# 1. Basic Contract Specification

	Month(s) Ahead Contract Solar / Non Solar on Term
Type of Market	Ahead basis (Separate sessions shall be operated for
	transaction in Solar or Non Solar) (Batch Auction)
	Solar or Non Solar power for participating in respective
Selling entity	session. 'RE Hybrid energy project' shall be considered as
	Non Solar selling entity
Trading System	PRATYAY
	Firm Delivery Contract
Type of Contract	Delivery of power is the essence of contract. Trade once
	executed shall be sent for scheduling
	Delivery shall be in 'MW' for each time block for intended
	duration
	Seller and Buyer shall place Orders in 'MW' for intended
	duration, the Orders shall be matched, the time block wise
	matched quantum in 'MW' shall be submitted to RLDC for
Contracts available for	scheduling. Based on approved quantum information
trading	received from RLDC, the Exchange shall issue obligations
	as under:
	a) Seller – Time block wise quantum of power in 'MW'
	scheduled for injection by RLDC
	b) Buyer – the quantum of energy purchased in 'MWh' and
	the time block wise drawl in 'MW' scheduled by RLDC
	The monthly period shall be from start of next Calendar
Delivery period	month (M1) up to end of month (M3) with duration of
	minimum one calendar month
Trading Methodology and Price discovery	Double Sided Open Bidding with Uniform Clearing Price
	Auction Days will be made available to market participants
Auction days*	for transacting in Monthly basis as under:



	a. From First Day of zero Month (M0)
	b. To
	<ul> <li>For Delivery in near Month (M1) ten(10) days prior</li> </ul>
	to end of zero Month (M0)
	<ul> <li>For Delivery in mid-Month (M2) five(5) days prior to</li> </ul>
	end of zero Month (M0)
	<ul> <li>For Delivery in far-Month (M3) on last day of zero</li> </ul>
	Month (M0)
	12:00 to 17:00 Hours on daily basis
Auction Timings*	(the Exchange reserves the right to revise the auction time
	for single or multiple days in one or more days in advance)
	15 minutes or multiples thereof as notified by Exchange
Duration of Contracts*	from time to time
	Normal Order
	2. Block Order
	3. Other types of Order
Order types*	The Exchange reserves the right to modify and/or
C. ac. types	introduce other types of Order and inform the same to
	market participants through a Circular issued from time to
	time
	Buyer: 1 MW or as specified by Exchange
Minimum Bid Volume*	Seller: 0.1 MW or as specified by Exchange
Minimum Volume Quotation	1 MW or as specified by Exchange to meet Buyers
Step*	requirement
Minimum Value Quotation	Rs. 1 per MWh
Step*	
Delivery Point	The delivery point shall be on the State / Regional
Donvory i onk	periphery of the selling entity
	The transmission charges to be paid by the buyers and
	sellers for Exchange transactions would be as laid down
Transmission charges	under the GNA Regulations 2022 and Sharing Regulations
	2020 as amended from time to time, would be payable to
	the Exchange as per procedure notified in Circular from
	time to time



	The losses would be handled as per the GNA Regulations
Transmission Losses	2022 and Sharing Regulations 2020, as amended from
	time to time.
	The delivery point shall be at the Regional periphery of the
	Selling entity. The following operating charges shall be
	applicable.
	Buyer shall bear the operating charges to be paid to the
	RLDC of the region and SLDC of the state in which Buyer
	is located.
	Seller shall bear the operating charges to be paid to the
	RLDC of the region and SLDC of the state in which Seller
Operating Charges	is located.
	In case both the Buyer and Seller are from the same
	Region then the RLDC operating charges shall be shared
	equally between the Buyer and the Seller.
	In case of intermediate region, the intermediate RLDC
	operating charges shall be shared equally between the
	Buyer and the Seller. Such charges shall be recovered by
	the Exchange and socialized amongst all Buyers and
	Sellers whose trades are successful.
	No revision of Obligation issued by Exchange is allowed.
	Any revision by System Operator on account of reasons
Revision of Schedule	other than force majeure or constraints in transmission
	corridor shall be treated as default by the Buyer/Selling
	entity who is responsible for such an event
	Traded Price * Quantity scheduled by Load Dispatch
	Centre at delivery point.
Settlement Price(s)	In case of revision in schedule, the final price settlement
	shall be based on revised scheduled quantity.
	The traded price shall be the Uniform prices discovered
	during the auction session
Margin*	a. <u>Pre-bid Margin</u>
	Sellers: Nil



Buyers: Rs. 40/MWh

The System at the receipt of the bids will check for Pre-bid margin and will not accept Bids if sufficient margin is not available. The pre-bid margin will be released when Post-trade Margin is applied.

#### b. Post-trade Margin

Seller: 10% of total trade value

Buyer:

- i. Post trade margin of 15% of total cost of power for the Contract
- ii. Delivery margin at 100% of total cost of power for 3 calendar days and 5% of cost of power for the cost of power for the remaining days

The applicable margin shall be higher of Post-trade margin or Delivery margin.

The Margin shall be recomputed on Application Acceptance and/or Real time curtailment.

In case of insufficient margin, application for Scheduling shall not be forwarded and if forwarded, application for cancellation shall be sent to RLDC/ SLDC. Further penalty shall be levied as prescribed.

Once the Post-trade margin is applied, Pre-bid margin would be released.

The Post-trade margin will be released on Payment of obligation on 'Pay-in' Day.

#### c. Charge Margin

This margin would be applied at the time of Application creation or as Prescribed. Charge margin applicability would be applicable either on buy side, sell side or both. The Margin shall be recomputed on Application acceptance. Once the pay-in is fulfilled towards charges, charge margin would be released.

The Exchange reserves the right to revise the Pre-bid



	margin, Post-trade margi	n, Delivery margin and Charge		
		yer and/or Seller by issuing a		
	Circular from time to time	, , ,		
		ne form of Bonk Guarantee, FD,		
		ny such instrument as may be		
	notified by Exchange from	·		
	Matching and/or transaction will not be executed in case			
	sufficient margins are not maintained by Members. In case			
	of any default in payment, deposits/margins placed with the			
	Exchange will be invoked to make good the default in			
	payment. All other forms of margin collected for other			
	Contracts by the Exchange till such time may also be			
	impounded.			
	On Application	Charges in Pay-in from		
	acceptance day	Buyer		
Dov. in*	On Delivery (D) day	Cost of Power pay-in		
Pay-in*		from Buyer		
	On first D +1 day	Charges Pay-in from		
		Seller		
	All Pay-in will be done to the Exchange by 11:00 hrs			
D (*	On D+1: Cost of power pa	y-out to the Seller. All pay-outs		
Pay-out*	will be done after 11:00 hrs			
	Transaction fee payable to	the Exchange by the Buyer and		
_ , , ,	Seller shall be informed th	rough Circular.		
Transaction fees*	Exchange reserves the rig	ht to revise the transaction fee		
	by issuing a Circular from	time to time.		
*Th - Fb				

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

# 2. Trading slots and Trade session

# 2.1. Trading slots

The Trading slots are those time periods during which the contracted quantity has to be delivered for the entire Contract Period. The Month(s) Ahead product can be traded over



any or all of the Trading slots. The Trading slots and Auction Trade session will be notified by Exchange through Trading Calendar.

Slot	Hours
Round the Clock	00:00 to 24:00 Hours
Morning Peak	06:00 to 10:00 Hours
Evening Peak	18:00 to 22:00 Hours
Day off Peak	10:00 to 18:00 Hours
Night off Peak	00:00 to 06:00 hours and 22:00 to 24:00 hours
15 minutes or multiples thereof	15 minutes or multiples or any combination
	thereof, based on request received from market
	participants prior to start of trading session for
	Contract
The Trading slots would be presc	ribed by the Exchange from time to time

#### 2.2. Trade Session

Trading hours are specific times within the Trading Days during which the Month(s) Ahead Contracts would be available for Trading on the Exchange. The Exchange may extend, advance or reduce the trading hour timings as and when it deems fit and necessary by notifying the Members.

#### 3. Delivery periods

- 3.1. The Delivery period shall be the same as the Order placed by the participants.

  Month(s) Ahead Contracts are Contracts, wherein Members and Participants can choose the Delivery Period (hours in a day as well as days of delivery in a month), as per their requirement and enter Order(s).
- 3.2. <u>Upon submission of the Order and its acceptance by the system, a Contract is automatically created and made available for trading.</u>

Illustration: In Month(s) Ahead Contracts, Orders for a delivery period can match with opposite Orders of the same delivery period. However, depending on counterpart liquidity in the Order book, partial quantity may get matched.

Illustration-1: For a buy Order for time slot 10:00 to 16:00 Hrs for delivery dates 01/07/2022 to 20/07/2022, matching for full/partial quantum will occur only if a sell



order during such time slot 10:00 to 16:00 Hours for such delivery dates 01/07/2022 to 20/07/2022 is entered in the system.

If a seller's timeslot were to be 11:00 to 19:00 Hours for the same 20 days, then matching will take place for common time slot of 11:00 to 16:00 Hours

Illustration-2: For a buy Order for time slot 10:00 to 16:00 Hours for delivery dates 01/07/2022 to 20/07/2022, matching for full/partial quantum will occur only if a sell order during such time slot 10:00 to 19:00 Hours for during such delivery dates 01/07/2022 to 20/07/2022 is entered in the system.

If a seller's timeslot were to be 09:00 to 20:00 Hours for the period 11/07/2022 to 25/07/2022, then the matching will take place for common time slot of 10:00 to 16:00 Hours for the common delivery dates of 11/07/2022 to 20/07/2022.

The other terms and conditions are as given below.

#### 4. Application for Scheduling

Application for Scheduling shall be submitted to the Nodal RLDC as specified in the Trading and Delivery Calendar and as per the "Procedure for T-GNA" issued by NLDC. The month in which the application is submitted is considered as the first month.

#### 4.1. One Month Ahead transaction

Consider the month of July 2022 as 'Month M0', under the One Month Ahead contract, the application for transacted quantum to be submitted to Nodal RLDC shall provide delivery of power during near Month i.e. 'Month M1' i.e. August 2022.

July – 2022 ('Zero Month M0')						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
	August – 2022 ('Near Month M1')					
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21



22	23	24	25	26	27	28
29	30	31				

(Note:

- 1) Days marked in green indicate the days when application is considered by RLDC for advance scheduling
- 2) Days marked in pink indicate the duration which is assessed by RLDC for processing application for advance scheduling
- 3) Days marked in white indicate days which are not considered by RLDC for processing application for advance scheduling)

When the transaction executed between Buyer / Seller in the month of July 2022 is submitted to nodal RLDC 10-days prior to end of the month then such transaction will be processed by Nodal RLDC under Advance Reservation for second month.

When the application for delivery during the month of August 2022 is submitted in the last 10-days of July 2022 i.e. from 22<sup>nd</sup> to 31<sup>st</sup> July 2022, then such application will be processed by Nodal RLDC under "First-Come-First-Serve" category.

#### 4.2. Two Month Ahead transaction

Consider the month of July 2022 as 'Month M1', under the Two Month Ahead transaction, the application for transacted quantum to be submitted to Nodal RLDC shall provide delivery of power during the third month i.e. September 2022.

	July – 2022 ('Zero Month M0')					
Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
	September – 2022 ('Mid Month M2')					
Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		



(Note:

- 1) Days marked in green indicate the days when application is considered by RLDC for advance scheduling
- 2) Days marked in pink indicate the duration which is assessed by RLDC for processing application for advance scheduling
- 3) Days marked in white indicate days which are not considered by RLDC for processing application for advance scheduling)

When the transaction executed between Buyer / Seller is submitted to nodal RLDC 5-days prior to closure of the month then such transaction will be processed by Nodal RLDC under Advance Reservation for third month.

#### 4.3. Three Month Ahead transaction

Consider the month of July 2022 as 'Month M1', under the Three Month Ahead transaction, the application for transacted quantum to be submitted to Nodal RLDC shall provide delivery of power during the fourth month i.e. October 2022.

July – 2022 ('Zero Month M0')						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
	Oct	ober – 2022	('Far Mo	nth M3"	)	
Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1116		Oat	Suii
		1700			1	2
3	4	5	6	7		
3 10	4 11				1	2
		5	6	7	1 8	9
10	11	5 12	6 13	7 14	1 8 15	2 9 16

(Note:

- Days marked in green indicate the days when application is considered by RLDC for advance scheduling
- 2) Days marked in pink indicate the duration which is assessed by RLDC for processing application for advance scheduling)



When the transaction executed between Buyer / Seller is submitted to nodal RLDC prior to close of the month then such transaction will be processed by Nodal RLDC under Advance Reservation for fourth month

#### 5. Matching

- 5.1. Matching of Orders will be undertaken at 17:00 hrs as under
  - 5.1.1. 10 days prior to end of 'Month M0' i.e. on 20<sup>th</sup> / 21<sup>st</sup> for submission of application under 'Advance Reservation' for One Month Ahead delivery i.e. 'Month M1'
  - 5.1.2. Daily matching for remaining days of 'Month M0' i.e. after 20<sup>th</sup> / 21<sup>st</sup> on completion of activities under Clause 5.1.1 above for submission of application under 'First Come First Serve' for One Month Ahead delivery. The Uncleared Order at the end of the day would be carried forward to the next day
  - 5.1.3. 5 days prior to end of 'Month M0' i.e. on 25<sup>th</sup> / 26<sup>th</sup> for submission of application under 'Advance Reservation' for Two Month Ahead delivery i.e. 'Month M2'
  - 5.1.4. On last day of 'Month M0' for submission of application under 'Advance Reservation' for Three Month Ahead delivery i.e. 'Month M3'
  - The day (s) for activities under 5.1 above shall be dependent on calendar applicable for 'Month M0,' the Exchange may from time to time amend the above based on year / calendar applicable for the month.
- 5.2. After close of Bidding session on last day of 'Month M0', all Uncleared Orders will be deleted from the system
- 6. Other terms and conditions of the contract shall be as per Annexure VI Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021



# Annexure I B6 - PXIL Green Any Day Single Sided Solar / Non Solar Electricity Market Contract

# 1. Basic Contract Specification

	Any Day Single Sided Contract
Type of Market	(Separate sessions shall be operated for transaction in
	Solar or Non Solar)
	Solar for Non Solar power for participating in respective
0 11:	Reverse auction session.
Selling entity	'RE Hybrid energy project shall be considered as Non
	Solar selling entity
	Firm Delivery Contract
Type of Contract	Delivery of power is the essence of contract. Trade once
	executed shall be sent for scheduling.
	Delivery shall be in 'MW' for each time block for intended
	duration
	Seller and Buyer shall place Orders in 'MW' for intended
	duration, the Orders shall be matched, the time block wise
	matched quantum in 'MW' shall be submitted to RLDC for
Contract available for	scheduling. Based on approved quantum information
trading	received from RLDC, the Exchange shall issue obligations
	as under:
	a) Seller – Time block wise quantum of power in 'MW'
	scheduled for injection by RLDC
	b) Buyer – the quantum of energy purchased in 'MWh' and
	the time block wise drawl in 'MW' scheduled by RLDC
	Contracts as requisitioned by the Buyer for the delivery
Delivery period*	period and time (day(s) and time slot(s))for any number of
	days from 'T+2' to 'T + 90' Days
	Reverse Auction:
Bidding and Auction	Buyer to specify its requirement in terms of quantum (MW)
process	and the period of delivery including time slot(s) on all days.
	Seller to submit their Offers providing quantum (MW) and



	Price in Rs. / MWh against the requisition made by Buyer
	in the Auction window. The auction process shall be
	undertaken as two (2) stage process i.e. the Initial Price
	Offer (IPO) stage and Reverse Auction
Price discovery and	Reverse Auction for Buyer's requisition as per Annexure V
Trading methodology	of Business Rules
	00:00 to 24:00 Hours, or,
Auction Timings*	As notified by Exchange from time to time for single or
	multiple days in one or more days in advance
0 :: 0 :	Price in Rs. / MWh above which no Offer can be submitted
Ceiling Price	by a Seller
D (	15 minutes or multiples thereof as notified by Exchange
Duration of Contracts*	from time to time
	Buyer: 1 MW for each Reverse auction event
Minimum Bid Volume*	Seller: 0.1 MW or as specified by Buyer enabling
	submission of Offer to participate in Reverse auction event
Minimum Volume	1 MW or as decided by Exchange to meet Buyers
Quotation Step*	requirement
Minimum Value	Rs. 1 per MWh
Quotation Step*	The delivery point shall be on the State / Regional
Delivery Point	periphery of the selling entity
	The transmission charges to be paid by the buyers and
Transmission charges	sellers for Exchange transactions would be as laid down
Transmission charges	sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations
Transmission charges	sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to
Transmission charges	sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash
	sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  The losses would be handled as per the GNA Regulations
Transmission charges  Transmission Losses	sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2020, as amended from
	sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2020, as amended from time to time.
Transmission Losses	sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2020, as amended from time to time.  The delivery point shall be at the Regional periphery of the
	sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2020, as amended from time to time.



	Buyer shall bear the operating charges to be paid to the
	RLDC of the region and SLDC of the state in which Buyer
l	is located.
	Seller shall bear the operating charges to be paid to the
	RLDC of the region and SLDC of the state in which Seller
l	is located.
	In case both the Buyer and Seller are from the same
	Region then the RLDC operating charges shall be shared
	equally between the Buyer and the Seller.
	In case of intermediate region as per extant Regulation, the
l	intermediate RLDC operating charges shall be shared
	equally between the Buyer and the Seller. Such charges
	shall be recovered by the Exchange and socialized
	amongst all Buyers and Sellers whose trades are
	successful.
	No revision of Obligation issued by Exchange is allowed.
	Any revision by System Operator on account of reasons
Revision of Schedule	other than force majeure or constraints in transmission
	corridor shall be treated as default by the Buyer/Selling
	entity who is responsible for such an event
•	Traded Price * Quantity scheduled by Load Dispatch
	Centre at delivery point.
	In case of revision in schedule, the final price settlement
Settlement Price(s)	shall be based on revised scheduled quantity.
	The traded price shall be the prices discovered during the
	Reverse auction session applicable for Seller's offered
	quantum
1	a. Pre-bid margin
	Sellers: Rs. 40/MWh
	Buyers: Non-refundable fee of Rs. 1 lacs for initiating
Margin*	reverse auction (this fee will be adjusted in the additional
	margins to be collected from buyer after the successful
	execution of the Contract)



The System at the receipt of the bids will check for Pre-bid margin and will not accept Bids if sufficient margin is not available. The Pre-bid margin will be released when Post-trade margin / Delivery margin is applied.

#### b. Post-trade margin

Seller: 10% of total trade value

Buyer:

- Post trade margin of 15% of total cost of power for the Contract
- Delivery margin at 100% of total cost of power for 3 calendar days and 5% of cost of power for the cost of power for the remaining days

The applicable margin shall be higher of Post-trade margin or Delivery margin.

The Margin shall be recomputed on Application Acceptance or/and Real time curtailment.

In case of insufficient post trade margin, Application for Scheduling shall not be forwarded and if forwarded, Application for cancellation shall be sent to RLDC/ SLDC. Further penalty shall be levied as prescribed.

Once the Post-trade margin is applied, Pre-bid margin would be released.

#### c. Charge Margin

This margin would be applied at the time of Application creation or as Prescribed. Charge margin applicability would be applicable either on buy side, sell side or both. The Margin shall be recomputed on Application acceptance. Once the pay-in is fulfilled towards charges, charge margin would be released.

The margins may be in the form of Bank Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by Exchange from time to time.

Matching and/or transaction will not be executed in case



	sufficient margins are not maintained by Members. In case				
	of any default in payment,	deposits/margins placed with the			
	Exchange will be invoked to make good the default in				
	payment. All other forms of margin collected for other Contracts by the Exchange till such time may also be				
	impounded.				
	On Application	Charges in Pay-in from			
	acceptance day	Buyer			
	On Delivery (D) day	Cost of Power pay-in			
Pay-in*		from Buyer			
	On first D +1 day	Charges Pay-in from			
		Seller			
	All Pay-in will be done to the	ne Exchange by 11:00 hrs			
5	On D+1: Cost of power pay-out to the Seller. All pay-outs				
Pay-out*	will be done after 11:00 hrs				
- · · · ·	Transaction fee payable to the Exchange by the Buyer				
Transaction fees*	and Seller shall be informed through Circular				

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

### 2. Trading slots and Auction Trade session

#### 2.1. Trading slots

The Trading slots are those time periods during which the contracted quantity has to be delivered by the Seller for the entire Contract Period. The Trading slots and Auction Trade session will be notified by Exchange based on requirement submitted by Buyer.

#### 2.2. Auction Trade Session

The Any Day Single Sided Auction Trade session for the operational day of the Exchange shall be notified from time to time

3. Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(3) of CERC (Power Market) Regulations, 2021



### **Annexure C1**

# Annexure I C1: PXIL Hydro bid type in Intra Day Contingency Electricity Market Contract

# 1. Basic Contract Specification

Type of Market	Hydro bid type in Intra Day Contingency
Selling Entity	Any Hydro generation plant or Distribution licensee selling Hydro power
Buyer benefit	Purchase of Hydro power shall enable Obligated entities to fulfill their 'Other RPO' requirement for the year as prescribed in MOP Order reference No. 09/12/2021-RCM dated 22 <sup>nd</sup> July 2022
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.
Revision in Schedule	No Revisions in Schedule shall be allowed
Trading Methodology	Continuous matching mechanism or any other such matching mechanism, as per Annexure V of Business Rules.
Types of Order*	1 Fill and Kill (FAK) 2 Fill or Kill (FOK) 3 Limit orders The Exchange reserves the right to introduce other Order types by issuing a Circular from time to time
Auction Days	Daily
Auction Timings*	00:15 hours to 23:30 hours. The market shall remain closed for technical reasons from 23:30 hrs till 00:15 hours of next day (Day T is the trading day for entering bids in pre-defined sessions as decided by the Exchange)  The Exchange reserves the right to revise the auction timings by



	issuing a Circular from time to time
	10 time blocks ahead up to 24:00 hours of the Trading Day (T) with contracts for every 15-minute duration
Duration of Contracts	The start of delivery period shall be as per GNA Regulations 2022, and Procedure for T-GNA and direction received from RLDC and its amendment from time to time
Minimum Bid Volume*	0.1 MW / 100 kW or as specified by Exchange
Minimum Volume Quotation Step*	0.01 MW
Minimum Value Quotation step*	Rs. 1 per MWh
Delivery Point	The delivery point shall be regional periphery of selling entity
Transmission Charges	1) Regional Transmission Charges  As per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulation, 2020 as amended from time to time.  2) State Transmission System  As per concerned State Electricity Regulatory Commission Regulations / GNA Regulations 2022 as amended from time to time
Transmission Losses	As per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulation, 2020 as amended from time to time.  STU loss if applicable to both Buyer and sellers  Seller shall bear the Scheduling & Operating charges up to the delivery point. Buyer shall bear the Scheduling & Operating charges including 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
Application Fees & Operating Charges	The application fees & operating charges along with taxes, if



	any, submitted by the Exchange to the RLDC (s) / SLDC (s), shall be equally shared between the Buyer and Seller The Exchange reserves the right to change the above provisions by issuing a Circular from time to time.
Settlement Price	The price discovered during the Continuous matching session. The Exchange reserves the right to modify and/or introduce any other matching mechanism by issuance of Circular
Pre bid Margin*	Buyers will have to make available the 105% margin of the bid value before submission of bids. No pre-bid margin is required from Seller.  The Exchange reserves the right to amend the quantum of pre-bid margin from time to time
Post-Trade Margin* (after matching & Before Application to Load Dispatch Centre)	For Buyers  100% of the total trade value and applicable charges (Charge margin) or margin amount from the buyers and no post-bid margin from the seller or as Prescribed.  The Margin shall be recomputed on Application Acceptance and/or Real time curtailment. Once the Post-trade margin is applied, Pre-bid margin would be released. Once the pay-in for the trade is fulfilled, Post-trade margin would be released.  For Sellers  5% of the total trade value and applicable charges (Charge margin) or margin from Sellers or as Prescribed.  In case of insufficient post trade margin, the same will be adjusted from the next pay-out of the Sellers and it shall be adjusted along with payment of obligation on Pay-out Day
Transaction Fee*	The Exchange shall charge 2 paise/kWh on Cleared quantum from each Buyer and Seller The Exchange reserves the right to amend the transaction by issuing a Circular from time to time

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time



 Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021



# <u>Annexure I C-2 – PXIL Hydro bid type in Day Ahead Contingency Electricity Market Contract</u>

Type of Market	Hydro bid type in Day Ahead Contingency
Selling Entity	Any Hydro generation plant or Distribution licensee selling Hydro generation
Buyer Benefit	Purchase of Hydro power shall enable Obligated entities to fulfill their 'Other RPO' requirement for the year as prescribed in MOP Order reference No. 09/12/2021-RCM dated 22 <sup>nd</sup> July 2022
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.
Trading Methodology	Continuous matching mechanism as per Annexure V of Business Rules
Type of Order*	<ul> <li>1 Fill and Kill (FAK)</li> <li>2 Fill or Kill (FOK)</li> <li>3 Limit orders</li> <li>The Exchange reserves the right to introduce other Order types by issuing a Circular from time to time</li> </ul>
Auction Days	Daily
Auction Timings*	13:00 hours to 23:00 hours (Day T is the trading day for entering bids in pre-defined sessions as decided by the Exchange from time to time)
Duration of Contracts	96 contracts of 15-min duration each for next day Delivery (T + 1)
Minimum Bid Volume*	0.1 MW / 100 kW or as specified by Exchange



Minimum Volume Quotation Step*	0.01 MW
Minimum Value Quotation step*	Rs. 1 per MWh
Delivery Point	The delivery point shall be regional periphery of selling entity
Transmission Charges	1) Regional Transmission Charges  As per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulation, 2020 as amended from time to time.  2) State Transmission System  As per concerned State Electricity Regulatory Commission Regulations / GNA Regulations 2022 as amended from time to time
Transmission Losses	As per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulation, 2020 as amended from time to time.  STU loss, if applicable, to both Buyer and sellers  Seller shall bear the Scheduling & Operating charges up to the delivery point. Buyer shall bear the Scheduling & Operating charges including 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
Application Fees & Operating charges	The application fees & operating charges along with taxes, if any, submitted by the Exchange to the RLDC (s) / SLDC (s), shall be equally shared between the Buyer and Seller The Exchange reserves the right to change the above provisions by issuing a Circular from time to time.
Settlement Price	The price discovered during the Continuous matching session.  The Exchange reserves the right to modify and/or introduce any other matching mechanism by issuance of Circular
Pre bid margin*	Pre bid margin at the time of bidding will be 105% of the bid



	value from Buyers. No pre-bid margin is required from the
	Seller.
	The Exchange reserves the right to modify margin by issuance
	of Circular from time to time
	For Buyers
	100% of the total trade value and applicable charges (Charge
	margin) or margin amount from the buyers and no post-bid
	margin from the seller or as Prescribed.
	The Margin shall be recomputed on Application Acceptance
	and/or Real time curtailment. Once the Post-trade margin is
	applied, Pre-bid margin would be released. Once the pay-in for
	the trade is fulfilled, Post-trade margin would be released.
	For Sellers
	5% of the total trade value and applicable charges (Charge
	margin) or margin from Sellers or as Prescribed. In case of
Post-Trade Margin* (after	insufficient post trade margin, the same will be adjusted from
matching & Before	the next pay-out of the Sellers and it shall be adjusted along
Application to Load	with payment of obligation on Pay-out Day
Dispatch Centre)	The margins may be in the form of Bank Guarantee, FD, Cash
	or Bank limit or any such instrument as may be notified by the
	exchange from time to time. For the unmatched trades, the
	margin will be released to the Buyer.
	Bids will not be executed in case sufficient margins are not
	maintained by the Members. In case of any default in payment,
	Deposits / Margins placed with the Exchange will be invoked to
	make good the default in payment. All other forms of margin
	collected for other products by the Exchange till such time may
	also be impounded. Exchange reserves its right to change the
	margin requirements from time to time as felt necessary.
Transaction Fee*	
	As defined in Exchange circular from time to time es the right to amend these parameters by issuing a Circular from

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time



2. Other terms and conditions of the contract shall be as per Annexure VI –
Terms and Conditions for Contracts operating under provisions for Regulation
5(2) and 5(3) of CERC (Power Market) Regulations, 2021



## Annexure I C-3 - PXIL Daily Hydro bid type in Term Ahead Electricity Market Contract

Type of Market	Daily Hydro bid type in Term Ahead basis	
Selling Entity	Any Hydro generation plant or Distribution licensee selling Hydro power	
Buyer benefit	Purchase of Hydro power shall enable Obligated entities to fulf their 'Other RPO' requirement for the year as prescribed in MO Order reference No. 09/12/2021-RCM dated 22 <sup>nd</sup> July 2022	
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.	
Contracts Available for Trading	Delivery shall be in 'MW' for each time block for intended duration Seller and Buyer shall place Orders in 'MW' for intended duration, the Orders shall be matched, the time block wise matched quantum in 'MW' shall be submitted to RLDC for scheduling. Based on approved quantum information received from RLDC, the Exchange shall issue obligations as under:  a) Seller – Time block wise quantum of power in 'MW' scheduled for injection by RLDC  b) Buyer – the quantum of energy purchased in 'MWh' and the time block wise drawl in 'MW' scheduled by RLDC	
Trading Methodology	Double Sided Open Bidding with Uniform Price Step Auction	
Delivery Period*	Contracts as placed by the participant for the delivery period and time for any number of days from 'T+2' to 'T + 90' Days	
Type of Order*	Normal Order     Block Order	



Duration of Contracts*  Auction Timings*	The Exchange reserves the right to introduce new Order type by issuing a Circular from time to time  15 minutes or multiples thereof as notified by Exchange from time to time  00:00 to 24:00 Hours  The Exchange shall notify the start and end time for all auction days for submission of Order by issuing Circular from time to time.	
	After completion of end time no modification / revision to the Orders will be allowed	
Minimum Bid Volume*	Buyer: 1 MW or as specified by Exchange Seller: 0.1 MW or as specified by Exchange	
Minimum Volume Quotation Step*	0.01 MW	
Minimum Value Quotation step*	Rs. 1 per MWh	
Delivery Point	The delivery point shall be regional periphery of selling entity	
Transmission Charges	1) Regional Transmission Charges As per Sharing Regulations, 2020 as amended from time to time. 2) State Transmission System STU Charges if applicable to both Buyer and sellers As per concerned State Electricity Regulatory Commission Regulations / GNA Regulations 2022 as amended from time to time	
Transmission Losses	As per Sharing Regulations, 2020 as amended from time to time.  STU loss if applicable to both Buyer and Seller  Seller shall bear the Scheduling & Operating charges up to the delivery point. Buyer shall bear the Scheduling & Operating charges including 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	
Application Fees & Operating charges	The application fees & operating charges along with taxes, if any,	



	submitted by the Exchange to the RLDC (s) / SLDC (s), shall be equally shared between the Buyer and Seller The Exchange reserves the right to change the above provisions by issuing a Circular from time to time.	
Revision of Schedule	No revision of Obligation issued by Exchange is allowed.  Any revision by System Operator on account of reasons other than force majeure or constraints in transmission corridor shall be treated as default by the Buyer/Selling entity who is responsible for such an event	
Settlement Price	Traded Price * Quantity scheduled by Load Dispatch Centre at delivery point.  In case of revision in schedule, the final price settlement shall be based on revised scheduled quantity.  The traded price shall be the Uniform price discovered during the auction session	
Margin*	a. Pre-bid Margin Sellers: Nil Buyers: Rs. 40/MWh The System at the receipt of the bids will check for Pre-bid margin and will not accept Bids if sufficient margin is not available. The pre-bid margin will be released when Post-trade Margin is applied  b. Post-bid Margin Seller: 10% of total trade value Buyer:  i. Post trade margin of 15% of total cost of power for the Contract  ii. Delivery margin at 100% of total cost of power for 3 calendar days and 5% of cost of power for the cost of power for the remaining days  The applicable margin shall be higher of Post-trade margin or Delivery margin.	



The Margin shall be recomputed on Application Acceptance or/and Real time curtailment.

In case of insufficient margin, application for Scheduling shall not be forwarded and if forwarded, application for cancellation shall be sent to RLDC/ SLDC. Further penalty shall be levied as prescribed. Once the Post-trade margin is applied, Pre-bid margin would be released.

#### c. Charge Margin

The margin would be applied at the time of application creation or as prescribed. Charge margin would be applicable either on Buyer or Seller or both. The margin shall be recomputed on application acceptance, once the pay-in for trade is fulfilled towards charges, charge margin would be released

The Exchange reserves the right to revise the Pre-bid margin, Posttrade margin, Delivery margin and Charge margin applicable to Buyer and/or Seller by issuing a Circular from time to time

The margins may be in the form of Bonk Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by Exchange from time to time.

Matching and/or transaction will not be executed in case sufficient margins are not maintained by Members. In case of any default in payment, deposits/margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected for other Contracts by the Exchange till such time may also be impounded.

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On Application	Charges in Pay-in from Buyer
acceptance day	
On Delivery (D) day	Cost of Power pay-in from Buyer
On first D +1 day	Charges Pay-in from Seller
All Pay-in will be done to the Exchange by 11:00 hrs	



Pay-out*	On D+1: Cost of power pay-out to the Seller. All pay-outs will be done after 11:00 hrs
Transaction fees*	Transaction fee payable to the Exchange by the Buyer and Seller shall be informed through Circular.  Exchange reserves the right to revise the transaction fee by issuing a Circular from time to time.

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

#### 2. Trading slots

The Trading slots are those time periods during which the contracted quantity has to be delivered for the entire Contract Period. The Daily Contract can be traded over any or all of the Trading slots. The Trading slots and Auction Trade session will be notified by Exchange through Trading Calendar.

#### **Trading slots**

Slot	Hours
Round the Clock	00:00 to 24:00 Hours
Morning Peak	06:00 to 10:00 Hours
Evening Peak	18:00 to 22:00 Hours
Day off Peak	10:00 to 18:00 Hours
Night off Peak	00:00 to 06:00 hours and 22:00 to 24:00 hours
Round the Clock	00:00 to 24:00 Hours
15 minutes or multiples	15 minutes or multiples or any combination thereof
Thereof	based on request received from market participants
	prior to start of Auction session on Daily basis
The Trading Slots would be Prescribed by the Exchange from Time to Time	

Other terms and conditions of the contract shall be as per Annexure VI –
 Terms and Conditions for Contracts operating under provisions for Regulation
 and 5(3) of CERC (Power Market) Regulations, 2021



# <u>Annexure I C-4 – PXIL Weekly Hydro bid type in Term Ahead Electricity Market</u> <u>Contract</u>

Type of Market	Weekly Hydro bid type in Term Ahead basis (Batch Auction)		
Selling Entity	Any Hydro generation plant or Distribution licensee selling Hydro power		
Buyer benefit	Purchase of Hydro power shall enable Obligated entities to fulfill their 'Other RPO' requirement for the year as prescribed in MOP Order reference No. 09/12/2021-RCM dated 22 <sup>nd</sup> July 2022		
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.		
Trading Methodology	Double Sided Open Bidding with Uniform Price Step Auction		
Type of Order*	<ol> <li>Normal Order</li> <li>Block Order</li> <li>The Exchange may introduce any other Order type by issuance of Circular from time to time</li> </ol>		
Auction Days*	Monday to Friday of the Week (the transacting week is designated as 'Week 0')		
Auction timing*	12:00 to 17:00 hours on all Auction days		
Contract Available for Trading*	15 minutes or multiples thereof from Monday 00:00 Hours to Sunday 24:00 Hours of the Week for any number of Weeks from 'Week 1' to 'Week12' on rolling basis Seller and Buyer shall place Orders in 'MW' for intended duration, the Orders shall be matched, the time block wise matched quantum in 'MW' shall be submitted to RLDC for scheduling. Based on approved quantum information received from RLDC, the Exchange shall issue obligations as under:		



	<ul> <li>a) Seller – Time block wise quantum of power in 'MW' scheduled for injection by RLDC</li> <li>b) Buyer – The quantum of energy purchased in 'MWh' and the time block wise drawl in 'MW' scheduled by RLDC</li> </ul>		
Duration of Contracts	From 00:00 hours of Monday to 24:00 hours of Sunday of the Week for any number of Weeks from 'Week1' to 'Week12'  The Seller shall inject power (in 'MW') to be scheduled on daily basis or multiples thereof  96 Time Block Contracts for upcoming week delivery (Monday to Sunday)		
Minimum Bid Volume*	0.1 MW / 100 kW or as specified by Exchange		
Minimum Volume Quotation Step*	0.01 MW or as specified by Exchange		
Minimum Value Quotation step*	Rs. 1 per MWh		
Delivery Point	The delivery point shall be regional periphery of selling entity		
Transmission Charges	1) Regional Transmission Charges  As per Sharing Regulations, 2020 as amended from time to time.  2) State Transmission System  STU Charges if applicable to both Buyer and Seller  As per concerned State Electricity Regulatory Commission Regulations / GNA Regulations 2022 as amended from time to time		
Transmission Losses	As per Sharing Regulations, 2020 as amended from time to time.  STU loss if applicable to both Buyer and Seller  Seller shall bear the Scheduling & Operating charges up to the delivery point. Buyer shall bear the Scheduling & Operating charges including 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		
Application Fees & Operating charges	The application fees & operating charges along with taxes any, submitted by the Exchange to the RLDC (s) / SLDC (s) shall be equally shared between the Buyer and Seller The Exchange reserves the right to change the above provision by issuing a Circular from time to time.		
Revision of Schedule	No revision of Obligation issued by Exchange is allowed.  Any revision by System Operator on account of reasons other than force majeure or constraints in transmission corridor shall be treated as default by the Buyer/Selling entity who is responsible for such an event		
Settlement Price	Traded Price * Quantity scheduled by Load Dispatch Centre at delivery point.  In case of revision in schedule, the final price settlement shall be based on revised scheduled quantity.  The traded price shall be the Uniform price discovered during the auction session		
Margin*	a. Pre-bid Margin Sellers: Nil Buyers: Rs. 40/MWh The System at the receipt of the bids will check for Premargin and will not accept Bids if sufficient margin is available. The pre-bid margin will be released when Post-transfer Margin is applied.  b. Post-Trade margin Seller: 10% of total trade value Buyer:  i. Post trade margin of 15% of total cost of power for Contract ii. Delivery margin at 100% of total cost of power for		



calendar days and 5% of cost of power for the cost of power for the remaining days

The applicable margin shall be higher of Post-trade margin or Delivery margin.

The Margin shall be recomputed on Application Acceptance or/and Real time curtailment. In case of insufficient margin, application for Scheduling shall not be forwarded and if forwarded, application for cancellation shall be sent to RLDC/SLDC. Further penalty shall be levied as prescribed.

Once the Post-trade margin is applied, Pre-bid margin would be released. The Post-trade margin will be released on Payment of obligation on 'Pay-in' during last three days of Contract on daily basis

#### c. Charge Margin

The margin would be applied at the time of Application creation or as Prescribed. Charge margin applicability is specific to a product and would be applicable either on buy side, sell side or both. The Margin shall be recomputed on Application Acceptance. Once the pay-in is fulfilled towards charges, charge margin would be released.

The Exchange reserves the right to revise the Pre-bid margin, Post-trade margin, Delivery margin and Charge margin applicable to Buyer and/or Seller by issuing a Circular from time to time

The margins may be in the form of Bonk Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by Exchange from time to time.

Matching and/or transaction will not be executed in case sufficient margins are not maintained by Members. In case of any default in payment, deposits/margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected for other Contracts by the



	Exchange till such time may also be impounded.				
Pay-in*	On Application acceptance day	Charges in Pay-in from Buyer			
	On Delivery (D) day	Cost of Power pay-in from Buyer			
	On first D +1 day	Charges Pay-in from Seller			
	All Pay-in will be done	to the Exchange by 11:00 hrs			
Pay-out*	On D+1: Cost of power pay-out to the Seller. All pay-outs will be done after 11:00 hrs				
	Transaction fee payable to the Exchange by the Buyer and				
Transaction Fee*	Seller shall be informed through Circular.				
Transaction Fee	Exchange reserves the right to revise the transaction fee by				
	issuing a Circular from time to time.				

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

#### 2. Trading Hour slots and Auction Trade Session

The Trading Hour slots are those time periods during which the contracted quantity has to be delivered for the entire Contract Period. The Weekly product can be traded over any or all of the Trading Hour slots. The Trading Hour slots and Auction Trade session will be notified by Exchange through Trading Calendar.

#### **Trading Hour slots**

Slot	Hours
Round the Clock	00:00 to 24:00 Hours
Morning Peak	06:00 to 10:00 Hours
Evening Peak	18:00 to 22:00 Hours
Day off Peak	10:00 to 18:00 Hours
Night off Peak	Nigh-off peak - 00:00 to 06:00 hours and 22:00 to
	24:00 hours
15 Minutes or Multiple thereof	15 minutes or multiples or any combination thereof
	based on request received from market participants



	prior to start of Auction session on Daily basis
The Time Slots would be Prescri	bed by the Exchange from Time to Time

**Auction Trade Session** 

The Weekly Auction trade session shall be conducted on rolling basis, wherein auction shall be allowed Daily from Monday to Friday for delivery commencing from 'Week 1' to 'Week 12'. Matching of Orders would be undertaken on daily basis after the closure of auction window on each day. Uncleared Order would be carried forward to the next day based on consent provided by market participants, all uncleared Order after declaration of auction results for Friday's trading session shall be deleted.

An illustration of rolling auction session for different dates of trading days and delivery days is as under:

Consider the month of July 2022, for trade days 4<sup>th</sup> July to 9<sup>th</sup> July, the delivery duration permitted are 11<sup>th</sup> July 2022 to 2<sup>nd</sup> October 2022.

Week No	July – 2022						
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2	3
WO	4	5	6	7	8	9	10
W1	11	12	13	14	15	16	17
W2	18	19	20	21	22	23	24
W3	25	26	27	28	29	30	31
			Augus	st – 2022			
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
W4	1	2	3	4	5	6	7
W5	8	9	10	11	12	13	14
W6	15	16	17	18	19	20	21
W7	22	23	24	25	26	27	28
W8	29	30	31				
	Sep-22						
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
W8				1	2	3	4
W9	5	6	7	8	9	10	11



W10	12	13	14	15	16	17	18
W11	19	20	21	22	23	24	25
W12	26	27	28	29	30		
			0	ct-22			
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
W12						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31				•		

The trading days and transaction duration in Weekly Contract shall be rolled over by resetting the first day of transaction in Weekly Contract on Monday of next week.

Other terms and conditions of the contract shall be as per Annexure VI –
 Terms and Conditions for Contracts operating under provisions for Regulation
 and 5(3) of CERC (Power Market) Regulations, 2021



# <u>Annexure I C5 – PXIL Monthly Hydro bid type in Term Ahead Electricity Market</u> <u>Contract</u>

Type of Market	Month(s) Ahead Hydro bid type in Term Ahead basis (Batch Auction)		
Trading System	PRATYAY		
Colling ontity	Any Hydro generation plant or Distribution licensee selling		
Selling entity	Hydro power		
	Purchase of Hydro power shall enable Obligated entities to		
Duyar hanafit	fulfill their 'Other RPO' requirement for the year as		
Buyer benefit	prescribed in MOP Order reference No. 09/12/2021-RCM		
	dated 22 <sup>nd</sup> July 2022		
	Firm Delivery Contract		
Type of Contract	Delivery of power is essence of Contract, trade once		
	executed shall be submitted for scheduling		
	The monthly period shall be from start of next Calendar		
Delivery period	month (M1) up to end of month (M3) with duration of		
	minimum one calendar month		
Trading Methodology and Price discovery	Double Sided Open Bidding with Uniform Clearing Price		
	Auction Days will be made available to market participants		
	for transacting in Monthly basis as under:		
	a. From First Day of zero Month (M0)		
	b. To		
A .: 1 +	<ul> <li>For Delivery in Near Month (M1) ten(10) days prior</li> </ul>		
Auction days*	to end of zero Month (M0)		
	<ul> <li>For Delivery in Mid-Month (M2) five(5) days prior to</li> </ul>		
	end of zero Month (M0)		
	<ul> <li>For Delivery in Far-Month (M3) on last day of zero</li> </ul>		
	Month (M0)		
	12:00 to 17:00 Hours on daily basis		
Auction Timings*	(the Exchange reserves the right to revise the auction time		
	for single or multiple days in one or more days in advance)		



D (0	15 minutes or multiples thereof as notified by Exchange		
Duration of Contracts*	from time to time		
	Normal Order		
	2. Block Order		
	3. Other types of Order		
Order types*	The Exchange reserves the right to modify and/or		
	introduce other types of Order and inform the same to		
	market participants through a Circular issued from time to		
	time		
	Buyer: 1 MW or as specified by Exchange		
Minimum Bid Volume*	Seller: 0.1 MW or as specified by Exchange		
Minimum Volume Quotation Step*	0.01 MW or as specified by Exchange		
Minimum Value	Rs. 1 per MWh		
Quotation Step*	The delivery point shall be on the State / Regional		
Delivery Point	periphery of the selling entity		
	The transmission charges to be paid by the buyers and		
	sellers for Exchange transactions would be as laid down		
	under the GNA Regulations 2022 and Sharing Regulations		
Transmission charges	2020 as amended from time to time, would be payable to		
	the Exchange as per procedure notified in Circular from		
	time to time		
	The losses would be handled as per the GNA Regulations		
Transmission Losses	2022 and Sharing Regulations 2020, as amended from		
Transmission Esses	time to time.		
	The delivery point shall be at the Regional periphery of the		
	Selling entity. The following operating charges shall be		
	applicable.		
	Buyer shall bear the operating charges to be paid to the		
Operating Charges	RLDC of the region and SLDC of the state in which Buyer		
	is located.		
	Seller shall bear the operating charges to be paid to the		
	RLDC of the region and SLDC of the state in which Seller		
	The state of the state of the state in Which soller		



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	is located.
	In case both the Buyer and Seller are from the same
	Region then the RLDC operating charges shall be shared
	equally between the Buyer and the Seller.
	In case of intermediate region, the intermediate RLDC
	operating charges shall be shared equally between the
	Buyer and the Seller. Such charges shall be recovered by
	the Exchange and socialized amongst all Buyers and
	Sellers whose trades are successful.
	No revision of Obligation issued by Exchange is allowed.
	Any revision by System Operator on account of reasons
Revision of Schedule	other than force majeure or constraints in transmission
	corridor shall be treated as default by the Buyer/Selling
	entity who is responsible for such an event
	Traded Price * Quantity scheduled by Load Dispatch
	Centre at delivery point.
Settlement Price(s)	In case of revision in schedule, the final price settlement
	shall be based on revised scheduled quantity.
	The traded price shall be the Uniform prices discovered
	during the auction session
	a. Pre-bid Margin
	Sellers: Nil
	Buyers: Rs. 40/MWh
	The System at the receipt of the bids will check for Pre-bid
	margin and will not accept Bids if sufficient margin is not
	available. The pre-bid margin will be released when Post-
Margin*	trade Margin is applied.
	b. Post-trade Margin
	Seller: 10% of total trade value
	Buyer:
	i. Post trade margin of 15% of total cost of power for
	the Contract
	ii. Delivery margin at 100% of total cost of power for 3
	, ,



calendar days and 5% of cost of power for the cost of power for the remaining days

The applicable margin shall be higher of Post-trade margin or Delivery margin.

The Margin shall be recomputed on Application Acceptance and/or Real time curtailment.

In case of insufficient margin, application for Scheduling shall not be forwarded and if forwarded, application for cancellation shall be sent to RLDC/ SLDC. Further penalty shall be levied as prescribed.

Once the Post-trade margin is applied, Pre-bid margin would be released.

The Post-trade margin will be released on Payment of obligation on 'Pay-in' Day.

#### c. Charge Margin

This margin would be applied at the time of Application creation or as Prescribed. Charge margin applicability would be applicable either on buy side, sell side or both. The Margin shall be recomputed on Application acceptance. Once the pay-in is fulfilled towards charges, charge margin would be released.

The Exchange reserves the right to revise the Pre-bid margin, Post-trade margin, Delivery margin and Charge margin applicable to Buyer and/or Seller by issuing a Circular from time to time

The margins may be in the form of Bonk Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by Exchange from time to time.

Matching and/or transaction will not be executed in case sufficient margins are not maintained by Members. In case of any default in payment, deposits/margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected for other



	Contracts by the Exchange till such time may also be impounded.				
	On Application	Charges in Pay-in from			
	acceptance day	Buyer			
	On Delivery (D) day	Cost of Power pay-in			
Pay-in*		from Buyer			
	On first D +1 day	Charges Pay-in from			
		Seller			
	All Pay-in will be done to the Exchange by 11:00 hrs				
Dov. out*	On D+1: Cost of power pay-out to the Seller. All pay-ou				
Pay-out*	will be done after 11:00 hr	S			
	Transaction fee payable to the Exchange by the Buyer and				
<b>-</b>	Seller shall be informed through Circular.				
Transaction fees*	Exchange reserves the right to revise the transaction fee				
	by issuing a Circular from time to time.				

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

### 2. Trading slots and Trade session

#### 2.1. Trading slots

The Trading slots are those time periods during which the contracted quantity has to be delivered for the entire Contract Period. The Month(s) Ahead product can be traded over any or all of the Trading slots. The Trading slots and Auction Trade session will be notified by Exchange through Trading Calendar.

Slot	Hours
Round the Clock	00:00 to 24:00 Hours
Morning Peak	06:00 to 10:00 Hours
Evening Peak	18:00 to 22:00 Hours
Day off Peak	10:00 to 18:00 Hours
Night off Peak	00:00 to 06:00 hours and 22:00 to 24:00 hours
15 minutes or multiples thereof	15 minutes or multiples or any combination thereof, based on request received from market



participants prior to start of trading session for Contract			
The Trading slots would be prescribed by the Exchange from time to time			

#### 2.2. Trade Session

Trading hours are specific times within the Trading Days during which the Month(s) Ahead Contracts would be available for Trading on the Exchange. The Exchange may extend, advance or reduce the trading hour timings as and when it deems fit and necessary by notifying the Members.

#### 3. Delivery periods

- 3.1. The Delivery period shall be the same as the Order placed by the participants. Month(s) Ahead Contracts are Contracts, wherein Members and Participants can choose the Delivery Period (hours in a day as well as days of delivery in a month), as per their requirement and enter Order(s).
- 3.2. Upon submission of the Order and its acceptance by the system, a Contract is automatically created and made available for trading.

Illustration: In Month(s) Ahead Contracts, Orders for a delivery period can match with opposite Orders of the same delivery period. However, depending on counterpart liquidity in the Order book, partial quantity may get matched.

Illustration-1: For a buy Order for time slot 10:00 to 16:00 Hrs for delivery dates 01/07/2022 to 20/07/2022, matching for full/partial quantum will occur only if a sell order during such time slot 10:00 to 16:00 Hours for such delivery dates 01/07/2022 to 20/07/2022 is entered in the system.

If a seller's timeslot were to be 11:00 to 19:00 Hours for the same 20 days, then matching will take place for common time slot of 11:00 to 16:00 Hours

Illustration-2: For a buy Order for time slot 10:00 to 16:00 Hours for delivery dates 01/07/2022 to 20/07/2022, matching for full/partial quantum will occur only if a sell order during such time slot 10:00 to 19:00 Hours for during such delivery dates 01/07/2022 to 20/07/2022 is entered in the system.



If a seller's timeslot were to be 09:00 to 20:00 Hours for the period 11/07/2022 to 25/07/2022, then the matching will take place for common time slot of 10:00 to 16:00 Hours for the common delivery dates of 11/07/2022 to 20/07/2022.

The other terms and conditions are as given below.

#### 4. Application for Scheduling

Application for Scheduling shall be submitted to the Nodal RLDC as specified in the Trading and Delivery Calendar and as per the "Procedure for Scheduling of Bilateral transactions" issued by POSOCO. The month in which the application is submitted is considered as the first month.

#### 4.1. One Month Ahead transaction

Consider the month of July 2022 as 'Month M0', under the One Month Ahead contract, the application for transacted quantum to be submitted to Nodal RLDC shall provide delivery of power during near Month i.e. 'Month M1' i.e. August 2022.

	July – 2022 ('Zero Month M0')					
Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
	August – 2022 ('Near Month M1')					
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

(Note:

- 1) Days marked in green indicate the days when application is considered by RLDC for advance scheduling
- 2) Days marked in pink indicate the duration which is assessed by RLDC for processing application for advance scheduling
- 3) Days marked in white indicate days which are not considered by RLDC for processing application for advance scheduling)



When the transaction executed between Buyer / Seller in the month of July 2022 is submitted to nodal RLDC 10-days prior to end of the month then such transaction will be processed by Nodal RLDC under Advance Reservation for second month.

When the application for delivery during the month of August 2022 is submitted in the last 10-days of July 2022 i.e. from 22<sup>nd</sup> to 31<sup>st</sup> July 2022, then such application will be processed by Nodal RLDC under "First-Come-First-Serve" category.

#### 4.2. Two Month Ahead transaction

Consider the month of July 2022 as 'Month M1', under the Two Month Ahead transaction, the application for transacted quantum to be submitted to Nodal RLDC shall provide delivery of power during the third month i.e. September 2022.

	July – 2022 ('Zero Month M0')					
Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
	September – 2022 ('Mid Month M2')					
Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25

#### (Note:

- 1) Days marked in green indicate the days when application is considered by RLDC for advance scheduling
- 2) Days marked in pink indicate the duration which is assessed by RLDC for processing application for advance scheduling
- 3) Days marked in white indicate days which are not considered by RLDC for processing application for advance scheduling)



When the transaction executed between Buyer / Seller is submitted to nodal RLDC 5-days prior to closure of the month then such transaction will be processed by Nodal RLDC under Advance Reservation for third month.

#### 4.3. Three Month Ahead transaction

Consider the month of July 2022 as 'Month M1', under the Three Month Ahead transaction, the application for transacted quantum to be submitted to Nodal RLDC shall provide delivery of power during the fourth month i.e. October 2022.

July – 2022 ('Zero Month M0')						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
	October – 2022 ('Far Month M3')					
Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

#### (Note:

- Days marked in green indicate the days when application is considered by RLDC for advance scheduling
- 2) Days marked in pink indicate the duration which is assessed by RLDC for processing application for advance scheduling)

When the transaction executed between Buyer / Seller is submitted to nodal RLDC prior to close of the month then such transaction will be processed by Nodal RLDC under Advance Reservation for fourth month

#### 4.4. Matching

4.4.1. Matching of Orders will be undertaken at 17:00 hrs as under



- 4.4.1.1. 10 days prior to end of 'Month M0' i.e. on 20<sup>th</sup> / 21<sup>st</sup> of 'Month M0' for submission of application under 'Advance Reservation' for One Month Ahead delivery
- 4.4.1.2. Daily matching during remaining days of 'Month M0' i.e. after 20<sup>th</sup> /21<sup>st</sup> on completion of activities under Clause 4.4.1.1 above for submission of application under 'First Come First Serve' for One Month Ahead delivery. The uncleared Order at the end of the day would be carried forward to the next day
- 4.4.1.3. 5 days prior to end of 'Month M0' i.e. on 25<sup>th</sup> / 26<sup>th</sup> of 'Month M0' for submission of application under 'Advance Reservation' for Two Month Ahead delivery
- 4.4.1.4. On last day of 'Month M0' for submission of application under 'Advance Reservation' for Three Month Ahead delivery
  - The day (s) for activities under 4.4.1 above shall be dependent on calendar applicable for 'Month M0', the Exchange may from time to time amend the above based on year / calender applicable for the month.
- 4.4.2. After close of Bidding session on last day of 'Month M0', all uncleared Orders will be deleted from the 'PRATYAY' system
- Other terms and conditions of the contract shall be as per Annexure VI –
   Terms and Conditions for Contracts operating under provisions for Regulation
   and 5(3) of CERC (Power Market) Regulations, 2021



## Annexure I C-6 - PXIL Any Day Single Sided Hydro bid type in Term Ahead Electricity Market Contract

Type of Market	Any Day Single Sided Hydro bid type in Term Ahead Market Contract
Trading System	PRATYAY
Solling Entity	Any Hydro generation plant or Distribution licensee selling
Selling Entity	Hydro power
	Purchase of Hydro power shall enable Obligated entities to
Deve a la constitu	fulfill their 'Other RPO' requirement for the year as
Buyer benefit	prescribed in MOP Order reference No. 09/12/2021-RCM
	dated 22 <sup>nd</sup> July 2022
	Firm Delivery Contract
Type of Contract	Delivery of power is essence of Contract, trade once
	executed shall be sent for scheduling
	Contracts as requisitioned by the Buyer for the delivery
Delivery period*	period and time (day(s) and time slot(s))for any number of
	days from 'T+2' to 'T + 90' Days
	Reverse Auction:
	Buyer to specify its requirement in terms of quantum (MW)
	and the period of delivery including time slot(s) on all days.
Bidding and Auction	Seller to submit their Offers providing quantum (MW) and
process	Price in Rs. / MWh against the requisition made by Buyer
	in the Auction window. The auction process shall be
	undertaken as two (2) stage process i.e. the Initial Price
	Offer (IPO) stage and Reverse Auction
Price discovery and	Reverse Auction for Buyer's requisition as per Annexure V
Trading methodology	of Business Rules
	00:00 to 24:00 Hours, or,
Auction Timings*	As notified by Exchange from time to time for single or
	multiple days in one or more days in advance



Duration of Contracts*  Duration of Contracts*  Buyer: 1 MW for each Reverse auction event  Seller: 0.1 MW or as specified by Buyer enabling submission of Offer to participate in Reverse auction event  Minimum Volume Quotation Step*  The delivery point shall be on the State / Regional periphery of the selling entity  The transmission charges  Transmission Losses  Transmission Losses  Delivery Point  Delivery Point  Delivery Point  Delivery Point  The delivery paint shall be on the State / Regional periphery of the selling entity  The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2020, as amended from time to time.  The delivery point shall be at the Regional periphery of the Selling entity. The following operating charges shall be		Price in Rs. / MWh above which no Offer can be submitted				
Duration of Contracts*    From time to time	Ceiling Price	by a Seller				
Buyer: 1 MW for each Reverse auction event  Seller: 0.1 MW or as specified by Buyer enabling submission of Offer to participate in Reverse auction event  Minimum Volume Quotation Step*  Minimum Value Quotation Step*  The delivery point shall be on the State / Regional periphery of the selling entity  The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  Transmission Losses  Transmission Losses  The delivery point shall be at the Regional periphery of the The delivery point shall be at the Regional periphery of the The delivery point shall be at the Regional periphery of the Regional periphery of the The delivery point shall be at the Regional periphery of the The delivery point shall be at the Regional periphery of the The Description of the Regional periphery of the The delivery point shall be at the Regional periphery of the The Description of The Descriptio	D 11 (0 1 1 1	15 minutes or multiples thereof as notified by Exchange				
Minimum Bid Volume*  Seller: 0.1 MW or as specified by Buyer enabling submission of Offer to participate in Reverse auction event  Minimum Volume Quotation Step*  Minimum Value Quotation Step*  The delivery point shall be on the State / Regional periphery of the selling entity  The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  Transmission Losses  Transmission Losses  The delivery point shall be at the Regional periphery of the	Duration of Contracts*	from time to time				
Submission of Offer to participate in Reverse auction event  Minimum Volume Quotation Step*  Minimum Value Quotation Step*  Rs. 1 per MWh  Delivery Point  The delivery point shall be on the State / Regional periphery of the selling entity  The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  Transmission Losses  Transmission Losses  The delivery point shall be at the Regional periphery of the  The delivery point shall be at the Regional periphery of the		Buyer: 1 MW for each Reverse auction event				
Minimum Volume Quotation Step*  Minimum Value Quotation Step*  Rs. 1 per MWh  Delivery Point  The delivery point shall be on the State / Regional periphery of the selling entity  The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  Transmission Losses  Transmission Losses  The delivery point shall be at the Regional periphery of the  The delivery point shall be at the Regional periphery of the	Minimum Bid Volume*	Seller: 0.1 MW or as specified by Buyer enabling				
Quotation Step*  Rs. 1 per MWh Quotation Step*  The delivery point shall be on the State / Regional periphery of the selling entity  The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  Transmission Losses  Transmission Losses  The delivery point shall be at the Regional periphery of the		submission of Offer to participate in Reverse auction event				
Minimum Value Quotation Step*  The delivery point shall be on the State / Regional periphery of the selling entity  The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  Transmission Losses  Transmission Losses  The delivery point shall be at the Regional periphery of the	Minimum Volume	1 MW or as decided by Exchange to meet Buyers				
Quotation Step*  The delivery point shall be on the State / Regional periphery of the selling entity  The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  Transmission Losses  Transmission Losses  The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2020, as amended from time to time.  The delivery point shall be at the Regional periphery of the	Quotation Step*	requirement				
Delivery Point  periphery of the selling entity  The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2022 and Sharing Regulations 2020, as amended from time to time.  The delivery point shall be at the Regional periphery of the		Rs. 1 per MWh				
The transmission charges to be paid by the buyers and sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2022 and Sharing Regulations 2020, as amended from time to time.  The delivery point shall be at the Regional periphery of the	Dolivony Point	The delivery point shall be on the State / Regional				
Transmission charges  sellers for Exchange transactions would be as laid down under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2020, as amended from time to time.  The delivery point shall be at the Regional periphery of the	Delivery Politi	periphery of the selling entity				
Transmission charges  under the GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time, would be payable to the Exchange in cash  The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2020, as amended from time to time.  The delivery point shall be at the Regional periphery of the		The transmission charges to be paid by the buyers and				
Transmission Losses  The delivery point shall be at the Regional periphery of the		sellers for Exchange transactions would be as laid down				
the Exchange in cash  The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2020, as amended from time to time.  The delivery point shall be at the Regional periphery of the	Transmission charges	under the GNA Regulations 2022 and Sharing Regulations				
The losses would be handled as per the GNA Regulations 2022 and Sharing Regulations 2020, as amended from time to time.  The delivery point shall be at the Regional periphery of the		2020 as amended from time to time, would be payable to				
Transmission Losses  2022 and Sharing Regulations 2020, as amended from time to time.  The delivery point shall be at the Regional periphery of the		the Exchange in cash				
time to time.  The delivery point shall be at the Regional periphery of the		The losses would be handled as per the GNA Regulations				
The delivery point shall be at the Regional periphery of the	Transmission Losses	2022 and Sharing Regulations 2020, as amended from				
		time to time.				
Selling entity. The following operating charges shall be		The delivery point shall be at the Regional periphery of the				
applicable.						
Buyer shall bear the operating charges to be paid to the		Buyer shall bear the operating charges to be paid to the				
RLDC of the region and SLDC of the state in which Buyer		RLDC of the region and SLDC of the state in which Buyer				
is located.		is located.				
Operating Charges Seller shall bear the operating charges to be paid to the	Operating Charges	Seller shall bear the operating charges to be paid to the				
RLDC of the region and SLDC of the state in which Seller		RLDC of the region and SLDC of the state in which Seller				
is located.		is located.				
In case both the Buyer and Seller are from the same		In case both the Buyer and Seller are from the same				
Region then the RLDC operating charges shall be shared		Region then the RLDC operating charges shall be shared				
equally between the Buyer and the Seller.		equally between the Buyer and the Seller.				
In case of intermediate region as per extant Regulation, the		In case of intermediate region as per extant Regulation, the				



	intermediate RLDC operating charges shall be shared		
	equally between the Buyer and the Seller. Such charges		
	shall be recovered by the Exchange and socialized		
	amongst all Buyers and Sellers whose trades are		
	successful.		
	No revision of Obligation issued by Exchange is allowed.		
	Any revision by System Operator on account of reasons		
Revision of Schedule	other than force majeure or constraints in transmission		
	corridor shall be treated as default by the Buyer/Selling		
	entity who is responsible for such an event		
	Traded Price * Quantity scheduled by Load Dispatch		
	Centre at delivery point.		
	In case of revision in schedule, the final price settlement		
Settlement Price(s)	shall be based on revised scheduled quantity.		
	The traded price shall be the prices discovered during the		
	Reverse auction session applicable for Seller's offered		
	quantum		
	a. Pre-bid margin		
	Sellers: Rs. 40/MWh		
	Buyers: Non-refundable fee of Rs. 1 lacs for initiating		
	reverse auction (this fee will be adjusted in the additional		
	margins to be collected from buyer after the successful		
	execution of the Contract)		
	The System at the receipt of the bids will check for Pre-bid		
Margin*	margin and will not accept Bids if sufficient margin is not		
iviargin	available. The Pre-bid margin will be released when Post-		
	trade margin / Delivery margin is applied.		
	b. Post-trade margin		
	Seller: 10% of total trade value		
	Buyer:		
	i. Post trade margin of 15% of total cost of power for		
	the Contract		
	the contract		



	calendar days and	5% of cost of power for the co	ost
	of power for the remaining days		
	The applicable margin shall be higher of Post-trade margin		
	or Delivery margin.		
	The Margin shall be recom	puted on Application	
	Acceptance or/and Real tir	me curtailment.	
	In case of insufficient post	trade margin, Application for	
	Scheduling shall not be for	rwarded and if forwarded,	
	Application for cancellation	n shall be sent to RLDC/ SLD0	C.
	Further penalty shall be lev	vied as prescribed.	
	Once the Post-trade margin is applied, Pre-bid margin		
	would be released.		
	c. Charge Margin		
	This margin would be applied at the time of Application		
	creation or as Prescribed. Charge margin applicability		
	would be applicable either on buy side, sell side or both.		
	The Margin shall be recom	puted on Application	
	acceptance. Once the pay	-in is fulfilled towards charges	5,
	charge margin would be released.		
	The margins may be in the form of Bank Guarantee, FD,		
	Cash or Bank limit or any such instrument as may be		
	notified by Exchange from	time to time.	
	Matching and/or transaction	on will not be executed in case	9
	sufficient margins are not r	maintained by Members. In ca	ase
	of any default in payment,	deposits/margins placed with	the
	Exchange will be invoked to	to make good the default in	
	payment. All other forms o	f margin collected for other	
	Contracts by the Exchange	e till such time may also be	
	impounded.		
	On Application	Charges in Pay-in from	
Pay-in*	acceptance day	Buyer	
	On Delivery (D) day	Cost of Power pay-in	
		from Buyer	
		<u> </u>	



	On first D +1 day Charges Pay-in from			
		Seller		
	All Pay-in will be done to the Exchange by 11:00 hrs			
D	On D+1: Cost of power pay-out to the Seller. All pay-outs			
Pay-out*	will be done after 11:00 hrs			
T ( , t +	Transaction fee payable to the Exchange by the Buyer			
Transaction fees*	and Seller shall be informed through Circular			

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

#### 2. Trading slots and Auction Trade session

#### 2.1. Trading slots

The trading slots are those time periods during which the contracted quantity has to be delivered by the Seller for the entire Contract period. The trading slots and Auction Trade session will be notified by Exchange based on requirement submitted by Buyer.

#### 2.2. Auction Trade Session

The Any Day Single Sided Auction Trade session for the operational day of the Exchange shall be notified from time to time

Other terms and conditions of the contract shall be as per Annexure VI Terms and Conditions for Contracts operating under provisions for Regulation
 5(3) of CERC (Power Market) Regulations, 2021



### **Annexure D1**

# <u>Annexure I D1 – PXIL Intra Day Hydro Green Term Ahead Market (Hydro GTAM)</u> <u>Contract</u>

Type of Market	Intra Day – Hydro GTAM
Selling Entity	Hydro power shall be from Large Hydro power generating unit that has been commissioned after 08.03.2019
Buyer Benefit	Purchase of Hydro power shall be eligible to meet Hydro Power Obligation (HPO)
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.
Revision in Schedule	No revision in Schedule shall be allowed
Trading Methodology	Continuous matching mechanism as per Annexure V of Business Rules
Types of Order*	1 Fill and Kill (FAK) 2 Fill or Kill (FOK) 3 Limit orders The Exchange reserves the right to introduce other Order types by issuing a Circular from time to time
Auction Days	As specified in Exchange Circular from time to time
Auction Timings*	00:15 hours to 23:30 hours. The market shall remain closed for technical reasons from 23:30 hrs till 00:15 hours of next day (Day T is the trading day for entering bids in pre-defined sessions as decided by the Exchange)  The Exchange reserves the right to revise the auction timings by issuing a Circular from time to time



Duration of Contracts	10 time blocks ahead up to 24:00 hours of the Trading Day (T) with contracts for every 15-minute duration  The start of delivery period shall be as per GNA Regulations 2022, Procedure for T-GNA and direction received from NLDC/RLDC and its amendment from time to time
Minimum Bid Volume*	0.1 MW / 100 kW or as specified by Exchange
Minimum Volume Quotation Step*	0.01 MW
Minimum Value Quotation step*	Rs. 1 per MWh
Delivery Point	The delivery point shall be regional periphery of selling entity
Transmission Charges	1) Regional Transmission Charges As per Sharing Regulations, 2020 as amended from time to time.  2) State Transmission System As per concerned State Electricity Regulatory Commission Regulations / GNA Regulations 2022 as amended from time to time
Transmission Losses	As per Sharing Regulations, 2020 as amended from time to time.  STU loss if applicable to both Buyer and sellers  Seller shall bear the Scheduling & Operating charges up to the delivery point. Buyer shall bear the Scheduling & Operating charges including 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
Application Fees & Operating Charges	The application fees & operating charges along with taxes, if any, submitted by the Exchange to the RLDC (s) / SLDC (s), shall be equally shared between the Buyer and Seller The Exchange reserves the right to change the above provisions



	by issuing a Circular from time to time.
Settlement Price	The price discovered during the Continuous matching session
Pre bid Margin*	Buyers will have to make available the 105% margin of the bid value before submission of bids. No pre-bid margin is required from Seller.  The Exchange reserves the right to amend the quantum of pre-bid margin from time to time
Post-Trade Margin* (after matching & Before Application to Load Dispatch Centre)	For Buyers  100% of the total trade value and applicable charges (Charge margin) or margin amount from the buyers and no post-bid margin from the seller or as Prescribed.  The Margin shall be recomputed on Application Acceptance and/or Real time curtailment. Once the Post-trade margin is applied, Pre-bid margin would be released. Once the pay-in for the trade is fulfilled, Post-trade margin would be released.  For Sellers  5% of the total trade value and applicable charges (Charge margin) or margin from Sellers or as Prescribed.  In case of insufficient post trade margin, the same will be adjusted from the next pay-out of the Sellers and it shall be adjusted along with payment of obligation on Pay-out Day
Transaction Fee*	The Exchange shall charge 2 paise/kWh on Cleared quantum from each Buyer and Seller The Exchange reserves the right to amend the transaction by issuing a Circular from time to time

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

- 2. Other terms and conditions of the contract shall be as per Annexure VI
  - Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021





# <u>Annexure I D2 – PXIL Day Ahead Contingency Hydro Green Term Ahead Market</u> (Hydro GTAM) Contract

Type of Market	Day Ahead Contingency – Hydro GTAM
Selling Entity	Hydro power shall be from Large Hydro power generating unit that has been commissioned after 08.04.2019
Buyer Benefit	Purchase of Hydro power shall be eligible to meet Hydro Power Obligation (HPO)
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.
Revision in Schedule	No revision in Schedule shall be allowed
Trading Methodology	Continuous matching mechanism as per Annexure V of Business Rules
Type of Order*	<ul> <li>1 Fill and Kill (FAK)</li> <li>2 Fill or Kill (FOK)</li> <li>3 Limit orders</li> <li>The Exchange reserves the right to introduce other Order types by issuing a Circular from time to time</li> </ul>
Auction Days	As specified in Exchange Circular from time to time
Auction Timings*	15:00 hours to 23:00 hours (Day T is the trading day for entering bids in pre-defined sessions as decided by the Exchange from time to time)
Duration of Contracts	96 contracts of 15-min duration each for next day Delivery (T + 1)



Minimum Bid Volume*	0.1 MW / 100 kW or as specified by Exchange
Minimum Volume Quotation Step*	0.01 MW
Minimum Value Quotation step*	Rs. 1 per MWh
Delivery Point	The delivery point shall be regional periphery of selling entity
Transmission Charges	1) Regional Transmission Charges As per Sharing Regulations, 2020 as amended from time to time.  2) State Transmission System As per concerned State Electricity Regulatory Commission Regulations / GNA Regulations 2022 as amended from time to time
Transmission Losses	As per Sharing Regulations, 2020 as amended from time to time.  STU loss, if applicable, to both Buyer and sellers Seller shall bear the Scheduling & Operating charges up to the delivery point. Buyer shall bear the Scheduling & Operating charges including 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
Application Fees & Operating charges	The application fees & operating charges along with taxes, if any, submitted by the Exchange to the RLDC (s) / SLDC (s), shall be equally shared between the Buyer and Seller The Exchange reserves the right to change the above provisions by issuing a Circular from time to time.
Settlement Price	The price discovered during the Continuous matching session
Pre bid margin*	Pre bid margin at the time of bidding will be 105% of the bid value from Buyers. No pre-bid margin is required from the Seller.



	The Exchange reserves the right to modify margin by issuance of Circular from time to time
Post-Trade Margin* (after matching & Before Application to Load Dispatch Centre)	For Buyers  100% of the total trade value and applicable charges (Charge margin) or margin amount from the buyers and no post-bid margin from the seller or as Prescribed.  The Margin shall be recomputed on Application Acceptance and/or Real time curtailment. Once the Post-trade margin is applied, Pre-bid margin would be released. Once the pay-in for the trade is fulfilled, Post-trade margin would be released.  For Sellers  5% of the total trade value and applicable charges (Charge margin) or margin from Sellers or as Prescribed. In case of insufficient post trade margin, the same will be adjusted from the next pay-out of the Sellers and it shall be adjusted along with payment of obligation on Pay-out Day  The margins may be in the form of Bank Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by the exchange from time to time. For the unmatched trades, the margin will be released to the Buyer.  Bids will not be executed in case sufficient margins are not maintained by the Members. In case of any default in payment, Deposits / Margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected for other products by the Exchange till such time may also be impounded. Exchange reserves its right to change the
	margin requirements from time to time as felt necessary.  The Exchange shall charge 2 paise/kWh on Cleared quantum from each Buyer and Seller
Transaction Fee*	The Exchange reserves the right to amend the transaction by



issuing a Circular from time to time

2. Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time



# <u>Annexure I D3 - PXIL Daily Hydro Green Term Ahead Market (Hydro GTAM)</u> <u>Contract</u>

Type of Market	Daily Green Hydro on Term Ahead basis (Batch Auction)
Selling Entity	Hydro power shall be from Large Hydro power generating unit that has been commissioned after 08.03.2019 and NOC mentioning eligible for GTAM and also for meeting HPO
Buyer benefit	Purchase of Hydro power shall be eligible to meet Hydro Power Obligation (HPO)
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.
Contracts Available for Trading	Delivery shall be in 'MW' for each time block for intended duration Seller and Buyer shall place Orders in 'MW' for intended duration, the Orders shall be matched, the time block wise matched quantum in 'MW' shall be submitted to RLDC for scheduling. Based on approved quantum information received from RLDC, the Exchange shall issue obligations as under:  a) Seller – Time block wise quantum of power in 'MW' scheduled for injection by RLDC b) Buyer – the quantum of energy purchased in 'MWh' and the time block wise drawl in 'MW' scheduled by RLDC
Trading Methodology	Double Sided Open Bidding with Uniform Price Step Auction
Delivery Period*	Contracts as placed by the participant for the delivery period and time for any number of days from 'T+2' to 'T + 90' Days
Type of Order*	Normal Order     Block Order



	The Exchange reserves the right to introduce new Order type by
	issuing a Circular from time to time
	15 minutes or multiples thereof as notified by Exchange from time
Duration of Contracts*	to time
	00:00 to 24:00 Hours
	The Exchange shall notify the start and end time for all auction
Auction Timings*	days for submission of Order by issuing Circular from time to time.
	After completion of end time no modification / revision to the Orders
	will be allowed
	Buyer: 1 MW or as specified by Exchange
Minimum Bid Volume*	Seller: 0.1 MW or as specified by Exchange
Minimum Volume Quotation Step*	0.01 MW
Minimum Value Quotation step*	Rs. 1 per MWh
Delivery Point	The delivery point shall be regional periphery of selling entity
	1) Regional Transmission Charges
	As per Sharing Regulations 2020 as amended from time to time.
Transmission	2) State Transmission System
Charges	STU Charges if applicable to both Buyer and sellers
	As per concerned State Electricity Regulatory Commission
	Regulations / GNA Regulations 2022 as amended from time to time
	As per Sharing Regulations, 2020 as amended from time to time.
	STU loss if applicable to both Buyer and Seller
Transmission Losses	Seller shall bear the Scheduling & Operating charges up to the
	delivery point. Buyer shall bear the Scheduling & Operating
	charges including 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
Application Fees & Operating charges	The application fees & operating charges along with taxes, if any,



	submitted by the Exchange to the RLDC (s) / SLDC (s), shall be equally shared between the Buyer and Seller The Exchange reserves the right to change the above provisions by issuing a Circular from time to time.
Revision of Schedule	No revision of Obligation issued by Exchange is allowed.  Any revision by System Operator on account of reasons other than force majeure or constraints in transmission corridor shall be treated as default by the Buyer/Selling entity who is responsible for such an event
Settlement Price	Traded Price * Quantity scheduled by Load Dispatch Centre at delivery point.  In case of revision in schedule, the final price settlement shall be based on revised scheduled quantity.  The traded price shall be the Uniform price discovered during the auction session
	a. Pre-bid Margin Sellers: Nil Buyers: Rs. 40/MWh The System at the receipt of the bids will check for Pre-bid margin and will not accept Bids if sufficient margin is not available. The pre-bid margin will be released when Post-trade Margin is applied  b. Post-bid Margin
Margin*	Seller: 10% of total trade value  Buyer:  i. Post trade margin of 15% of total cost of power for the Contract  ii. Delivery margin at 100% of total cost of power for 3 calendar days and 5% of cost of power for the cost of power for the remaining days  The applicable margin shall be higher of Post-trade margin or Delivery margin.



The Margin shall be recomputed on Application Acceptance or/and Real time curtailment. In case of insufficient margin, application for Scheduling shall not be forwarded and if forwarded, application for cancellation shall be sent to RLDC/ SLDC. Further penalty shall be levied as prescribed. Once the Post-trade margin is applied, Pre-bid margin would be released. c. Charge Margin The margin would be applied at the time of application creation or as prescribed. Charge margin would be applicable either on Buyer or Seller or both. The margin shall be recomputed on application acceptance, once the pay-in for trade is fulfilled towards charges, charge margin would be released The Exchange reserves the right to revise the Pre-bid margin, Posttrade margin, Delivery margin and Charge margin applicable to Buyer and/or Seller by issuing a Circular from time to time The margins may be in the form of Bonk Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by Exchange from time to time. Matching and/or transaction will not be executed in case sufficient margins are not maintained by Members. In case of any default in payment, deposits/margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected for other Contracts by the Exchange till such time may also be impounded. On Application Charges in Pay-in from Buyer acceptance day On Delivery (D) day Cost of Power pay-in from Buyer Pay-in\* On first D +1 day Charges Pay-in from Seller All Pay-in will be done to the Exchange by 11:00 hrs On D+1: Cost of power pay-out to the Seller. All pay-outs will be Pay-out\*



	done after 11:00 hrs
Transaction fees*	Transaction fee payable to the Exchange by the Buyer and Seller shall be informed through Circular.  Exchange reserves the right to revise the transaction fee by issuing a Circular from time to time.

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

### 2. Trading slots

The Trading slots are those time periods during which the contracted quantity has to be delivered for the entire Contract Period. The Daily Contract can be traded over any or all of the Trading slots. The Trading slots and Auction Trade session will be notified by Exchange through Trading Calendar.

#### **Trading slots**

Slot	Hours
Round the Clock	00:00 to 24:00 Hours
Morning Peak	06:00 to 10:00 Hours
Evening Peak	18:00 to 22:00 Hours
Day off Peak	10:00 to 18:00 Hours
Night off Peak	00:00 to 06:00 hours and 22:00 to 24:00 hours
Round the Clock	00:00 to 24:00 Hours
15 minutes or multiples	15 minutes or multiples or any combination thereof
Thereof	based on request received from market participants
	prior to start of Auction session on Daily basis
The Trading Slots would be Prescribed by the Exchange from Time to Time	

Other terms and conditions of the contract shall be as per Annexure VI –
 Terms and Conditions for Contracts operating under provisions for Regulation
 and 5(3) of CERC (Power Market) Regulations, 2021



# <u>Annexure I D4 – PXIL Weekly Hydro Green Term Ahead Market (Hydro GTAM)</u> <u>Contract</u>

Type of Market	Weekly Hydro on Green Term Ahead basis (Batch Auction)
Selling Entity	Hydro power shall be from Large Hydro Power generating unit that has been commissioned after 08.03.2019 and NOC mentioning eligible for GTAM and also for meeting HPO
Buyer benefit	Purchase of Hydro power shall be eligible to meet Hydro Power Obligation (HPO)
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.
Trading Methodology	Double Sided Open Bidding with Uniform Price Step Auction
Type of Order*	Normal Order     Block Order  The Exchange may introduce any other Order type by issuance of Circular from time to time
Auction Days*	Monday to Friday of the Week (the transacting week is designated as 'Week 0')
Auction timing*	12:00 to 17:00 hours on all Auction days
Contract Available for Trading*	15 minutes or multiples thereof from Monday 00:00 Hours to Sunday 24:00 Hours of the Week for any number of Weeks from 'Week 1' to 'Week12' on rolling basis Seller and Buyer shall place Orders in 'MW' for intended duration, the Orders shall be matched, the time block wise matched quantum in 'MW' shall be submitted to RLDC for scheduling. Based on approved quantum information received from RLDC, the



	Exchange shall issue obligations as under:  a) Seller – Time block wise quantum of power in 'MW' scheduled for injection by RLDC  b) Buyer – The quantum of energy purchased in 'MWh' and the time block wise drawl in 'MW' scheduled by RLDC
Duration of Contracts	From 00:00 hours of Monday to 24:00 hours of Sunday of the Week for any number of Weeks from 'Week1' to 'Week12'  The Seller shall inject power (in 'MW') to be scheduled on daily basis or multiples thereof  96 Time Block Contracts for upcoming week delivery (Monday to Sunday)
Minimum Bid Volume*	0.1 MW / 100 kW or as specified by Exchange
Minimum Volume Quotation Step*	0.01 MW or as specified by Exchange
Minimum Value Quotation step*	Rs. 1 per MWh
Delivery Point	The delivery point shall be regional periphery of selling entity
Transmission Charges	1) Regional Transmission Charges  As per Sharing Regulations, 2020 as amended from time to time.  2) State Transmission System  STU Charges if applicable to both Buyer and Seller  As per concerned State Electricity Regulatory Commission Regulations / GNA Regulations 2022 as amended from time to time
Transmission Losses	As per Sharing Regulations, 2020 as amended from time to time.  STU loss if applicable to both Buyer and Seller  Seller shall bear the Scheduling & Operating charges up to the delivery point. Buyer shall bear the Scheduling & Operating



	charges including 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
Application Fees & Operating charges	The application fees & operating charges along with taxes, if any, submitted by the Exchange to the RLDC (s) / SLDC (s), shall be equally shared between the Buyer and Seller  The Exchange reserves the right to change the above provisions by issuing a Circular from time to time.
Revision of Schedule	No revision of Schedule is allowed. any revision by System Operator on account of reasons other than force majeure or constraints in transmission corridor shall be treated as default by the Buyer/Selling entity who is responsible for such an event
Settlement Price	Traded Price * Quantity scheduled by Load Dispatch Centre at delivery point.  In case of revision in schedule, the final price settlement shall be based on revised scheduled quantity.  The traded price shall be the Uniform price discovered during the auction session
Margin*	<ul> <li>a. Pre-bid Margin Sellers: Nil Buyers: Rs. 40/MWh The System at the receipt of the bids will check for Pre-bid margin and will not accept Bids if sufficient margin is not available. The pre-bid margin will be released when Post-trade Margin is applied.</li> <li>b. Post-Trade margin Seller: 10% of total trade value Buyer:  i. Post trade margin of 15% of total cost of power for the Contract</li> </ul>



 Delivery margin at 100% of total cost of power for 3 calendar days and 5% of cost of power for the cost of power for the remaining days

The applicable margin shall be higher of Post-trade margin or Delivery margin.

The Margin shall be recomputed on Application Acceptance or/and Real time curtailment. In case of insufficient margin, application for Scheduling shall not be forwarded and if forwarded, application for cancellation shall be sent to RLDC/SLDC. Further penalty shall be levied as prescribed.

Once the Post-trade margin is applied, Pre-bid margin would be released. The Post-trade margin will be released on Payment of obligation on 'Pay-in' during last three days of Contract on daily basis

#### c. Charge Margin

The margin would be applied at the time of Application creation or as Prescribed. Charge margin applicability is specific to a product and would be applicable either on buy side, sell side or both. The Margin shall be recomputed on Application Acceptance. Once the pay-in is fulfilled towards charges, charge margin would be released.

The Exchange reserves the right to revise the Pre-bid margin, Post-trade margin, Delivery margin and Charge margin applicable to Buyer and/or Seller by issuing a Circular from time to time

The margins may be in the form of Bonk Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by Exchange from time to time.

Matching and/or transaction will not be executed in case sufficient margins are not maintained by Members. In case of any default in payment, deposits/margins placed with the Exchange will be invoked to make good the default in



	payment All other	forms of margin collected for other						
	Contracts by the Exchange till such time may also be impounded.							
Pay-in*	On Application Charges in Pay-in from Buyer acceptance day							
	On Delivery (D) day	Cost of Power pay-in from Buyer						
	On first D +1 day Charges Pay-in from Seller							
	All Pay-in will be done to the Exchange by 11:00 hrs							
Pay-out*	On D+1: Cost of power pay-out to the Seller. All pay-outs will							
	be done after 11:00 hrs							
	Transaction fee payab	ble to the Exchange by the Buyer and						
Transaction Fee*	Seller shall be informed through Circular.							
	Exchange reserves the right to revise the transaction fee by issuing a Circular from time to time.							

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

## 2. Trading Hour slots and Auction Trade Session

The Trading Hour slots are those time periods during which the contracted quantity has to be delivered for the entire Contract Period. The Weekly product can be traded over any or all of the Trading Hour slots. The Trading Hour slots and Auction Trade session will be notified by Exchange through Trading Calendar.

### **Trading Hour slots**

Slot	Hours
Round the Clock	00:00 to 24:00 Hours
Morning Peak	06:00 to 10:00 Hours
Evening Peak	18:00 to 22:00 Hours
Day off Peak	10:00 to 18:00 Hours
Night off Peak	Nigh-off peak – 00:00 to 06:00 hours and 22:00 to
Trigite on Fount	24:00 hours
15 Minutes or Multiple thereof	15 minutes or multiples or any combination thereof



	based on request received from market participants					
	prior to start of Auction session on Daily basis					
The Time Slots would be Prescribed by the Exchange from Time to Time						

### **Auction Trade Session**

The Weekly Auction trade session shall be conducted on rolling basis, wherein auction shall be allowed Daily from Monday to Friday for delivery commencing from 'Week 1' to 'Week 12'. Matching of Orders would be undertaken on daily basis after the closure of auction window on each day. Uncleared Order would be carried forward to the next day based on consent provided by market participants, all uncleared Order after declaration of auction results for Friday's trading session shall be deleted.

An illustration of rolling auction session for different dates of trading days and delivery days is as under:

Consider the month of July 2022, for trade days 4<sup>th</sup> July to 9<sup>th</sup> July, the delivery duration permitted are 11<sup>th</sup> July 2022 to 2<sup>nd</sup> October 2022.

Week No	July – 2022						
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2	3
W0	4	5	6	7	8	9	10
W1	11	12	13	14	15	16	17
W2	18	19	20	21	22	23	24
W3	25	26	27	28	29	30	31
			Augus	st – 2022			
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
W4	1	2	3	4	5	6	7
W5	8	9	10	11	12	13	14
W6	15	16	17	18	19	20	21
W7	22	23	24	25	26	27	28
W8	29	30	31				
			Septem	ber – 2022	)		
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
W8				1	2	3	4



W9	5	6	7	8	9	10	11
W10	12	13	14	15	16	17	18
W11	19	20	21	22	23	24	25
W12	26	27	28	29	30		
			0	ct-22			
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
W12						1	2
	3	4	5	6	7	8	9
	4.0						4.0
	10	11	12	13	14	15	16
	10 17	11 18	12 19	13 20	14 21	15 22	16 23

The trading days and transaction duration in Weekly Contract shall be rolled over by resetting the first day of transaction in Weekly Contract on Monday of next week.

Other terms and conditions of the contract shall be as per Annexure VI –
 Terms and Conditions for Contracts operating under provisions for Regulation
 and 5(3) of CERC (Power Market) Regulations, 2021



# <u>Annexure I D5 – PXIL Monthly Hydro Green Term Ahead Market (Hydro GTAM)</u> <u>Contract</u>

Month(s) Ahead Green Hydro Term Ahead basis (Batch				
Type of Market	Auction)			
Trading System	PRATYAY			
Oallian anditu	Hydro power shall be from Large Hydro power generating			
Selling entity	unit that has been commissioned after 08.03.2019			
Duran han afit	Purchase of Hydro power shall be eligible to meet Hydro			
Buyer benefit	Power Obligation (HPO)			
	Firm Delivery Contract			
Type of Contract	Delivery of power is essence of Contract, trade once			
	executed shall be submitted for scheduling			
	The monthly period shall be from start of next Calendar			
Delivery period	month (M1) up to end of month (M3) with duration of			
	minimum one calendar month			
Trading Methodology	Double Sided Open Bidding with Uniform Clearing Price			
and Price discovery				
	Auction Days will be made available to market participants			
	for transacting in Monthly basis as under:			
	a. From First Day of zero Month (M0)			
	b. To			
	<ul> <li>For Delivery in near Month (M1) ten(10) days prior</li> </ul>			
Auction days*	to end of zero Month (M0)			
	■ For Delivery in mid-Month (M2) five(5) days prior to			
	end of zero Month (M0)			
	<ul> <li>For Delivery in far-Month (M3) on last day of zero</li> </ul>			
	Month (M0)			
	12:00 to 17:00 Hours on daily basis			
Auction Timings*	(the Exchange reserves the right to revise the auction time			
	for single or multiple days in one or more days in advance)			
<b>D</b> 1 (0 )	15 minutes or multiples thereof as notified by Exchange			
Duration of Contracts*	from time to time			



	Normal Order				
	Block Order				
	3. Other types of Order				
Order types*	The Exchange reserves the right to modify and/or				
	introduce other types of Order and inform the same to				
	market participants through a Circular issued from time to				
	time				
Minimum Did Valuma*	Buyer: 1 MW or as specified by Exchange				
Minimum Bid Volume*	Seller: 0.1 MW or as specified by Exchange				
Minimum Volume	0.01 MW or as decided by Exchange				
Quotation Step*	Do 4 mar MAN				
Minimum Value  Quotation Step*	Rs. 1 per MWh				
Quotation Otop	The delivery point shall be on the State / Regional				
Delivery Point	periphery of the selling entity				
	The transmission charges to be paid by the buyers and				
	sellers for Exchange transactions would be as laid down				
Transmission charges	under the GNA Regulations 2022 and Sharing Regulations				
Transmission charges	2020 as amended from time to time, would be payable to				
	the Exchange as per procedure notified in Circular from				
	time to time				
	The losses would be handled as per the GNA Regulations				
Transmission Losses	2022 and Sharing Regulations 2020, as amended from				
Transmission Essess	time to time.				
	The delivery point shall be at the Regional periphery of the				
	Selling entity. The following operating charges shall be				
	applicable.				
	Buyer shall bear the operating charges to be paid to the				
	RLDC of the region and SLDC of the state in which Buyer				
Operating Charges	is located.				
	Seller shall bear the operating charges to be paid to the				
	RLDC of the region and SLDC of the state in which Seller				
	is located.				
	In case both the Buyer and Seller are from the same				



	Degion than the DLDC encreting charges shall be shared			
	Region then the RLDC operating charges shall be shared			
	equally between the Buyer and the Seller.			
	In case of intermediate region, the intermediate RLDC			
	operating charges shall be shared equally between the			
	Buyer and the Seller. Such charges shall be recovered by			
	the Exchange and socialized amongst all Buyers and			
	Sellers whose trades are successful.			
	No revision of Obligation issued by Exchange is allowed.			
	Any revision by System Operator on account of reasons			
Revision of Schedule	other than force majeure or constraints in transmission			
	corridor shall be treated as default by the Buyer/Selling			
	entity who is responsible for such an event			
	Traded Price * Quantity scheduled by Load Dispatch			
	Centre at delivery point.			
Settlement Price(s)	In case of revision in schedule, the final price settlement			
	shall be based on revised scheduled quantity.			
	The traded price shall be the Uniform price discovered			
	during the auction session			
	a. <u>Pre-bid Margin</u>			
	Sellers: Nil			
	Buyers: Rs. 40/MWh			
	The System at the receipt of the bids will check for Pre-bid			
	margin and will not accept Bids if sufficient margin is not			
	available. The pre-bid margin will be released when Post-			
	trade Margin is applied.			
Margin*	b. Post-trade Margin			
	Seller: 10% of total trade value			
	Buyer:			
	i. Post trade margin of 15% of total cost of power for			
	the Contract			
	ii. Delivery margin at 100% of total cost of power for 3			
	calendar days and 5% of cost of power for the cost			
	of power for the remaining days			



The applicable margin shall be higher of Post-trade margin or Delivery margin.

The Margin shall be recomputed on Application Acceptance and/or Real time curtailment.

In case of insufficient margin, application for Scheduling shall not be forwarded and if forwarded, application for cancellation shall be sent to RLDC/ SLDC. Further penalty shall be levied as prescribed.

Once the Post-trade margin is applied, Pre-bid margin would be released.

The Post-trade margin will be released on Payment of obligation on 'Pay-in' Day.

#### c. Charge Margin

This margin would be applied at the time of Application creation or as Prescribed. Charge margin applicability would be applicable either on buy side, sell side or both. The Margin shall be recomputed on Application acceptance. Once the pay-in is fulfilled towards charges, charge margin would be released.

The Exchange reserves the right to revise the Pre-bid margin, Post-trade margin, Delivery margin and Charge margin applicable to Buyer and/or Seller by issuing a Circular from time to time

The margins may be in the form of Bonk Guarantee, FD, Cash or Bank limit or any such instrument as may be notified by Exchange from time to time.

Matching and/or transaction will not be executed in case sufficient margins are not maintained by Members. In case of any default in payment, deposits/margins placed with the Exchange will be invoked to make good the default in payment. All other forms of margin collected for other Contracts by the Exchange till such time may also be impounded.



	On Application	Charges in Pay-in from		
	acceptance day	Buyer		
Pay-in*	On Delivery (D) day	Cost of Power pay-in		
ray-III		from Buyer		
	On first D +1 day	Charges Pay-in from		
		Seller		
	All Pay-in will be done to the	he Exchange by 11:00 hrs		
	On D+1: Cost of power pay-out to the Seller. All pay-outs			
Pay-out*	will be done after 11:00 hrs			
	Transaction fee payable to	the Exchange by the Buyer and		
T	Seller shall be informed through Circular.			
Transaction fees*	Exchange reserves the right to revise the transaction fee			
	by issuing a Circular from time to time.			

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

## 2. Trading slots and Trade session

### 2.1. Trading slots

The Trading slots are those time periods during which the contracted quantity has to be delivered for the entire Contract Period. The Month(s) Ahead product can be traded over any or all of the Trading slots. The Trading slots and Auction Trade session will be notified by Exchange through Trading Calendar.

Slot	Hours
Round the Clock	00:00 to 24:00 Hours
Morning Peak	06:00 to 10:00 Hours
Evening Peak	18:00 to 22:00 Hours
Day off Peak	10:00 to 18:00 Hours
Night off Peak	00:00 to 06:00 hours and 22:00 to 24:00 hours
15 minutes or multiples thereof	15 minutes or multiples or any combination thereof, based on request received from market participants prior to start of trading session for Contract
The Trading slots would be preso	ribed by the Exchange from time to time

#### 2.2. Trade Session



Trading hours are specific times within the Trading Days during which the Month(s) Ahead Contracts would be available for Trading on the Exchange. The Exchange may extend, advance or reduce the trading hour timings as and when it deems fit and necessary by notifying the Members.

### 3. Delivery periods

- 3.1. The Delivery period shall be the same as the Order placed by the participants. Month(s) Ahead Contracts are Contracts, wherein Members and Participants can choose the Delivery Period (hours in a day as well as days of delivery in a month), as per their requirement and enter Order(s).
- 3.2. Upon submission of the Order and its acceptance by the system, a Contract is automatically created and made available for trading.

Illustration: In Month(s) Ahead Contracts, Orders for a delivery period can match with opposite Orders of the same delivery period. However, depending on counterpart liquidity in the Order book, partial quantity may get matched.

Illustration-1: For a buy Order for time slot 10:00 to 16:00 Hrs for delivery dates 01/07/2022 to 20/07/2022, matching for full/partial quantum will occur only if a sell order during such time slot 10:00 to 16:00 Hours for such delivery dates 01/07/2022 to 20/07/2022 is entered in the system.

If a seller's timeslot were to be 11:00 to 19:00 Hours for the same 20 days, then matching will take place for common time slot of 11:00 to 16:00 Hours

Illustration-2: For a buy Order for time slot 10:00 to 16:00 Hours for delivery dates 01/07/2022 to 20/07/2022, matching for full/partial quantum will occur only if a sell order during such time slot 10:00 to 19:00 Hours for during such delivery dates 01/07/2022 to 20/07/2022 is entered in the system.

If a seller's timeslot were to be 09:00 to 20:00 Hours for the period 11/07/2022 to 25/07/2022, then the matching will take place for common time slot of 10:00 to 16:00 Hours for the common delivery dates of 11/07/2022 to 20/07/2022.

The other terms and conditions are as given below.

### 4. Application for Scheduling



Application for Scheduling shall be submitted to the Nodal RLDC as specified in the Trading and Delivery Calendar and as per the "Procedure for T-GNA" issued by NLDC. The month in which the application is submitted is considered as the first month.

#### 4.1. One Month Ahead transaction

Consider the month of July 2022 as 'Month M0', under the One Month Ahead contract, the application for transacted quantum to be submitted to Nodal RLDC shall provide delivery of power during near Month i.e. 'Month M1' i.e. August 2022.

	July – 2022 ('Zero Month M0')							
Mon	Tue	Wed	Thu	Fri	Sat	Sun		
				1	2	3		
4	5	6	7	8	9	10		
11	12	13	14	15	16	17		
18	19	20	21	22	23	24		
25	26	27	28	29	30	31		
	Aug	ust - 2022	('Near Mo	nth M1	)			
Mon	Tue	Wed	Thu	Fri	Sat	Sun		
1	2	3	4	5	6	7		
8	9	10	11	12	13	14		
15	16	17	18	19	20	21		
22	23	24	25	26	27	28		
29	30	31						

#### (Note:

- Days marked in green indicate the days when application is considered by RLDC for advance scheduling
- 2) Days marked in pink indicate the duration which is assessed by RLDC for processing application for advance scheduling
- 3) Days marked in white indicate days which are not considered by RLDC for processing application for advance scheduling)

When the transaction executed between Buyer / Seller in the month of July 2022 is submitted to nodal RLDC 10-days prior to end of the month then such transaction will be processed by Nodal RLDC under Advance Reservation for second month.

When the application for delivery during the month of August 2022 is submitted in the last 10-days of July 2022 i.e. from 22<sup>nd</sup> to 31<sup>st</sup> July 2022, then such application will be processed by Nodal RLDC under "First-Come-First-Serve" category.



#### 4.2. Two Month Ahead transaction

Consider the month of July 2022 as 'Month M1', under the Two Month Ahead transaction, the application for transacted quantum to be submitted to Nodal RLDC shall provide delivery of power during the third month i.e. September 2022.

	July – 2022 ('Zero Month M0')						
Mon	Tue	Wed	Thu	Fri	Sat	Sun	
				1	2	3	
4	5	6	7	8	9	10	
11	12	13	14	15	16	17	
18	19	20	21	22	23	24	
25	26	27	28	29	30	31	
	Septe	mber – 202	22 ('Mid-M	onth M	2')		
Mon	Tue	Wed	Thu	Fri	Sat	Sun	
			1	2	3	4	
5	6	7	8	9	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	
26	27	28	29	30			

(Note:

- 1) Days marked in green indicate the days when application is considered by RLDC for advance scheduling
- 2) Days marked in pink indicate the duration which is assessed by RLDC for processing application for advance scheduling
- 3) Days marked in white indicate days which are not considered by RLDC for processing application for advance scheduling)

When the transaction executed between Buyer / Seller is submitted to nodal RLDC 5-days prior to closure of the month then such transaction will be processed by Nodal RLDC under Advance Reservation for third month.

#### 4.3. Three Month Ahead transaction

Consider the month of July 2022 as 'Month M1', under the Three Month Ahead transaction, the application for transacted quantum to be submitted to Nodal RLDC shall provide delivery of power during the fourth month i.e. October 2022.

July – 2022 ('Zero Month M0')						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3



4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
	October – 2022 ('Far Month M3')					
Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2
3	4	5	6	7	1 8	9
3 10	4	5 12	6 13	7	1 8 15	
				_		9
10	11	12	13	14	15	9

(Note:

- 1) Days marked in green indicate the days when application is considered by RLDC for advance scheduling
- 2) Days marked in pink indicate the duration which is assessed by RLDC for processing application for advance scheduling)

When the transaction executed between Buyer / Seller is submitted to nodal RLDC prior to close of the month then such transaction will be processed by Nodal RLDC under Advance Reservation for fourth month

#### 4.4. Matching

- 4.4.1. Matching of Orders will be undertaken at 17:00 hours as under
  - 4.4.1.1. 10 days prior to close of 'Month M0' i.e. on 20<sup>th</sup> / 21<sup>st</sup> of 'Month M0' for submission of application under 'Advance Reservation' for One Month Ahead delivery
  - 4.4.1.2. Daily matching during remaining days of 'Month M0' i.e. from 21<sup>st</sup> / 22<sup>nd</sup> after completion of activities under 4.4.1 above for submission of application under 'First Come First Serve' for One Month Ahead delivery. The uncleared Order at the end of the day would be carried forward to the next day
  - 4.4.1.3. 5 days prior to close of 'Month M0' i.e. on 25<sup>th</sup> / 26<sup>th</sup> of 'Month M0' for submission of application under 'Advance Reservation' for Two Month Ahead delivery
  - 4.4.1.4. On last day of 'Month M0' for submission of application under 'Advance Reservation' for Three Month Ahead delivery



The day (s) for activities under 4.4.1 above shall be dependent on calendar applicable for 'Month M0' the Exchange may from time to time amend the above based on year / calendar applicable for the month.

- 4.4.2. After close of Bidding session on last day of 'Month M0', all uncleared Orders will be deleted from the 'PRATYAY' system
- Other terms and conditions of the contract shall be as per Annexure VI –
   Terms and Conditions for Contracts operating under provisions for Regulation
   and 5(3) of CERC (Power Market) Regulations, 2021



# <u>Annexure I D6 – PXIL Any Day Single Sided Hydro Green Term Ahead Market</u> (Hydro GTAM) Contract

. Basic Contract Specification			
Type of Market	Any Day Single Sided Hydro Green Term Ahead Market Contract		
Trading System	PRATYAY		
Trading System	Hydro power shall be from Large Hydro power generating		
Selling Entity			
	unit that has been commissioned after 08.03.2019		
Buyer benefit	Purchase of Hydro power shall be eligible to meet Hydro		
Bayor bonom	Power Obligation (HPO)		
	Firm Delivery Contract		
Type of Contract	Delivery of power is essence of Contract, trade once		
	executed shall be sent for scheduling		
	Contracts as requisitioned by the Buyer for the delivery		
Delivery period*	period and time (day(s) and time slot(s))for any number of		
	days from 'T+2' to 'T + 90' Days		
	Reverse Auction:		
	Buyer to specify its requirement in terms of quantum (MW)		
	and the period of delivery including time slot(s) on all days.		
Bidding and Auction	Seller to submit their Offers providing quantum (MW) and		
process	Price in Rs. / MWh against the requisition made by Buyer		
	in the Auction window. The auction process shall be		
	undertaken as two (2) stage process i.e. the Initial Price		
	Offer (IPO) stage and Reverse Auction		
Price discovery and	Reverse Auction for Buyer's requisition as per Annexure V		
Trading methodology	of Business Rules		
	00:00 to 24:00 Hours, or,		
Auction Timings*	As notified by Exchange from time to time for single or		
	multiple days in one or more days in advance		
Coiling Dring	Price in Rs. / MWh above which no Offer can be submitted		
Ceiling Price	by a Seller		
Duration of Contracts*	15 minutes or multiples thereof as notified by Exchange		
Duration of Contracts*	from time to time		
	i		



	Buyer: 1 MW for each Reverse auction event		
Minimum Bid Volume*	Seller: 0.1 MW or as specified by Buyer enabling		
	submission of Offer to participate in Reverse auction event		
Minimum Volume	1 MW or as decided by Exchange to meet Buyers		
Quotation Step*	requirement		
Minimum Value Quotation Step*	Rs. 1 per MWh		
Dalling and Dalint	The delivery point shall be on the State / Regional		
Delivery Point	periphery of the selling entity		
	The transmission charges to be paid by the buyers and		
	sellers for Exchange transactions would be as laid down		
Transmission charges	under the GNA Regulations 2022 and Sharing Regulations		
	2020 as amended from time to time, would be payable to		
	the Exchange in cash		
	The losses would be handled as per the GNA Regulations		
Transmission Losses	2022 and Sharing Regulations 2020, as amended from		
	time to time.		
	The delivery point shall be at the Regional periphery of the		
	Selling entity. The following operating charges shall be		
	applicable.		
	Buyer shall bear the operating charges to be paid to the		
	RLDC of the region and SLDC of the state in which Buyer		
	is located.		
	Seller shall bear the operating charges to be paid to the		
	RLDC of the region and SLDC of the state in which Seller		
Operating Charges	is located.		
	In case both the Buyer and Seller are from the same		
	Region then the RLDC operating charges shall be shared		
	equally between the Buyer and the Seller.		
	In case of intermediate region as per extant Regulation, the		
	intermediate RLDC operating charges shall be shared		
	equally between the Buyer and the Seller. Such charges		
	shall be recovered by the Exchange and socialized		
	amongst all Buyers and Sellers whose trades are		



	successful.				
	No revision of Obligation issued by Exchange is allowed.				
Revision of Schedule	Any revision by System Operator on account of reasons				
	other than force majeure or constraints in transmission				
	corridor shall be treated as default by the Buyer/Selling				
	entity who is responsible for such an event				
	Traded Price * Quantity scheduled by Load Dispatch				
	Centre at delivery point.				
	In case of revision in schedule, the final price settlement				
Settlement Price(s)	shall be based on revised scheduled quantity.				
	The traded price shall be the prices discovered during the				
	Reverse auction session applicable for Seller's offered				
	quantum				
	a. Pre-bid margin				
	Sellers: Rs. 40/MWh				
	Buyers: Non-refundable fee of Rs. 1 lacs for initiating				
	reverse auction (this fee will be adjusted in the additional				
	margins to be collected from buyer after the successful				
	execution of the Contract)				
	The System at the receipt of the bids will check for Pre-bid				
	margin and will not accept Bids if sufficient margin is not				
	available. The Pre-bid margin will be released when Post-				
Margin*	trade margin / Delivery margin is applied.				
Margin*	b. Post-trade margin				
	Seller: 10% of total trade value				
	Buyer:				
	i. Post trade margin of 15% of total cost of power for				
	the Contract				
	ii. Delivery margin at 100% of total cost of power for 3				
	calendar days and 5% of cost of power for the cost				
	of power for the remaining days				
	The applicable margin shall be higher of Post-trade margin				
	or Delivery margin.				



	The Margin shall be recomputed on Application			
	Acceptance or/and Real time curtailment.			
	In case of insufficient post trade margin, Application for			
	Scheduling shall not be forwarded and if forwarded,			
	Application for cancellation shall be sent to RLDC/ SLDC.			
	Further penalty shall be levied as prescribed.			
	Once the Post-trade margin is applied, Pre-bid margin			
	would be released.			
	c. Charge Margin			
	This margin would be applied at the time of Application			
	creation or as Prescribed.	Charge margin applicability		
	would be applicable either on buy side, sell side or both.			
	The Margin shall be recomputed on Application			
	acceptance. Once the pay-in is fulfilled towards charges,			
	charge margin would be released.			
	The margins may be in the form of Bank Guarantee, FD,			
	Cash or Bank limit or any such instrument as may be			
	notified by Exchange from time to time.			
	Matching and/or transaction will not be executed in case			
	sufficient margins are not maintained by Members. In case			
	of any default in payment, deposits/margins placed with the			
	Exchange will be invoked to make good the default in			
	payment. All other forms of margin collected for other			
	Contracts by the Exchange till such time may also be			
	impounded.			
	On Application	Charges in Pay-in from		
	On Delivery (D) day	Buyer Cost of Power pay-in		
Pay-in*	On Delivery (b) day	from Buyer		
	On first D +1 day	Charges Pay-in from		
	All Day in will be done to the	Seller		
	All Pay-in will be done to the Exchange by 11:00 hrs On D+1: Cost of power pay-out to the Seller. All pay-outs			
Pay-out*	will be done after 11:00 hrs			
Transaction fees*	Transaction fee payable to the Exchange by the Buyer			
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	and Seller shall be informed through Circular
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<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

### 2. Trading slots and Auction Trade session

#### 2.1. Trading slots

The trading slots are those time periods during which the contracted quantity has to be delivered by the Seller for the entire Contract period. The trading slots and Auction Trade session will be notified by Exchange based on requirement submitted by Buyer.

#### 2.2. Auction Trade Session

The Any Day Single Sided Auction Trade session for the operational day of the Exchange shall be notified from time to time

Other terms and conditions of the contract shall be as per Annexure VI

 Terms and Conditions for Contracts operating under provisions for
 Regulation 5(3) of CERC (Power Market) Regulations, 2021



## **Annexure E1**

## Annexure I E1 - PXIL High Price Intra Day Market (HP-Intra) Contract

Type of Market	High Price Intra Day Market
Transaction system	PRATYAY
Eligibility to participate	Selling entity  Based on approved list of Seller information provided by Ministry of Power, Central Electricity Authority, Central Electricity Regulatory Commission, Grid Controller of India limited or as per directives approving introduction of such Contract.  Currently, the eligible entities are:  a. Gas based power plants using imported RLNG and Naphtha  b. Imported Coal based power plant using imported coal c. Battery Energy Storage Systems (BESS)  The NOC issued to the selling entity shall specify the quantum (MW) permitted for sale.  The Exchange reserves the right to include/exclude eligible entities by issuance of Circular based on directions issued by MOP / CEA / CERC / GRID-INDIA from time to time  Buying entity  All market participants with valid NOC/Standing Clearance prescribing quantum (in MW) for purchase issued by RLDC / SLDC, as the case may be
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.
Revision in Schedule	No revision in Schedule shall be allowed
Trading Methodology	Continuous matching mechanism as per Annexure V of



	Business Rules
Types of Order*	<ol> <li>Fill and Kill (FAK)</li> <li>Fill or Kill (FOK)</li> <li>Limit Orders</li> <li>The Exchange reserves the right to introduce other Order types by issuing a Circular from time to time</li> </ol>
Auction Timings*	00:15 hours to 23:30 hours. The market shall remain closed for technical reasons from 23:30 hrs till 00:15 hours of next day (Day T is the trading day for entering bids in pre-defined sessions as decided by the Exchange) The Exchange reserves the right to revise the auction timings by issuing a Circular from time to time
Duration of Contracts*	10 time blocks ahead up to 24:00 hours of the Trading Day (T) with contracts for every 15-minute duration  The start of delivery period shall be as per GNA Regulations 2022, Procedure for T-GNA and direction received from NLDC/RLDC and its amendment from time to time
Minimum Bid Volume*	0.1 MW /100 kW or as prescribed by Exchange from time to time
Minimum Volume Quotation Step*	0.01 MW
Minimum Value Quotation step*	Rs. 1 per MWh
Delivery Point	The delivery point shall be regional periphery in which the grid- connected entity is located
Floor and Forbearance Price*	Rs. 20000 per MWh shall be the Forbearance price.  The Exchange reserves the right to prescribe Floor and/or Forbearance price applicable for transacting in the Contract by issuance of Circular from time to time and based on directives



	issued by Hon'ble Commission
Transmission Charges	Inter-State Transmission System As Per GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time and relevant orders of Central Electricity Regulatory Commission State Transmission System As per concerned State Electricity Regulatory Commission Regulations / GNA Regulations 2022 as amended from time to time
Transmission Losses	Payable in kind from delivery point to its grid connection point.
Application Fees & Operating Charges*	The application fees & operating charges along with taxes, if any, submitted by the Exchange to the NLDC /RLDC (s) / SLDC (s) shall be as per GNA Regulations 2022  The Exchange reserves the right to amend the above provisions by issuing a Circular from time to time.
Settlement Price	The price discovered during the Continuous matching session
Pre bid Margin*	Buyers will have to make available the 105% margin of the bid value before submission of bids. No pre-bid margin is required from Seller. The Exchange reserves the right to amend the quantum of pre-bid margin from time to time
Post Trade Margin*	For Buyers  100% of the total trade value and applicable charges (Charge margin) or margin amount from the buyers and no post-bid margin from the seller or as Prescribed. The Margin shall be recomputed on Application Acceptance and/or Real time curtailment. Once the Post trade margin is applied, Pre-bid margin would be released. Once the pay-in for the trade is fulfilled, Post-trade margin would be released.  For Sellers  5% of the total trade value and applicable charges (Charge margin) or margin from Sellers or as Prescribed. In case of



	insufficient post trade margin, the same will be adjusted from
	the next pay-out of the Sellers and it shall be adjusted along
	with payment of obligation on Pay-out Day
	The Exchange shall charge 2 paise/kWh on Cleared quantum
	from each Buyer and Seller.
Transaction Fee*	The Exchange reserves the right to amend the transaction by
	issuing a Circular from time to time

<sup>\*</sup>The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

- 2. Other terms and conditions of the contract shall be as per Annexure VI
  - Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021



## **Annexure E2**

## Annexure I E2 - PXIL High Price Day Ahead Contingency (HP-DAC) Contract

1. Basic Contract Specification

Type of Market	High Price Day Ahead Contingency Market
Transaction system	PRATYAY
Eligibility to participate	Selling entity Based on approved list of Seller information provided by Ministry of Power, Central Electricity Authority, Central Electricity Regulatory Commission, Grid Controller of India limited or as per directives approving introduction of such Contract. Currently, the eligible entities are:  a. Gas based power plants using imported RLNG and Naphtha  b. Imported Coal based power plant using imported coal c. Battery Energy Storage Systems (BESS) The NOC issued to the selling entity shall specify the quantum (MW) permitted for sale. The Exchange reserves the right to include/exclude eligible entities by issuance of Circular based on directions issued by MOP / CEA / CERC / GRID-INDIA from time to time  Buying entity All market participants with valid NOC/Standing Clearance prescribing quantum (in MW) for purchase issued by RLDC / SLDC, as the case may be
Type of Contract	Firm Delivery Contract  Delivery of power is the essence of contract. Trade once executed shall be sent for scheduling.
Revision in Schedule	No revision in Schedule shall be allowed
Trading Methodology	Continuous matching mechanism as per Annexure V of Business Rules



Types of Order*	Fill and Kill (FAK)     Fill or Kill (FOK)     Limit Orders  The Exchange reserves the right to introduce other Order types by issuing a Circular from time to time
Auction Timings*	13:00 to 23:00 hours (Day T is the trading day for entering bids in different session as decided by Exchange from time to time
Duration of Contracts*	96 Contracts of 15-minute duration each for next day Delivery ('T+1')
Minimum Bid Volume*	0.1 MW /100 kW or as prescribed by Exchange from time to time
Minimum Volume  Quotation Step*	0.01 MW
Minimum Value Quotation step*	Rs. 1 per MWh
Delivery Point	The delivery point shall be regional periphery in which the grid- connected entity is located
Floor and Forbearance Price*	Rs. 20,000/- per MWh shall be the Forbearance price.  The Exchange reserves the right to prescribe Floor and/or Forbearance price applicable for transacting in the Contract by issuance of Circular from time to time and based on directives issued by Hon'ble Commission
Transmission Charges	Inter-State Transmission System As Per GNA Regulations 2022 and Sharing Regulations 2020 as amended from time to time and relevant orders of Central Electricity Regulatory Commission State Transmission System As per concerned State Electricity Regulatory Commission Regulations / GNA Regulations 2022 as amended from time to



	time
Transmission Losses	Payable in kind from delivery point to its grid connection point.
Application Fees & Operating Charges*	The application fees & operating charges along with taxes, if any, submitted by the Exchange to the NLDC /RLDC (s) / SLDC (s) shall be as per GNA Regulations 2022  The Exchange reserves the right to amend the above provisions by issuing a Circular from time to time.
Settlement Price	The price discovered during the Continuous matching session
Pre bid Margin*	Buyers will have to make available the 105% margin of the bid value before submission of bids. No pre-bid margin is required from Seller.  The Exchange reserves the right to amend the quantum of pre-bid margin from time to time
Post Trade Margin* ((after matching & Before Application to Load Dispatch Centre)	For Buyers  100% of the total trade value and applicable charges (Charge margin) or margin amount from the buyers and no post-bid margin from the seller or as Prescribed. The Margin shall be recomputed on Application Acceptance and/or Real time curtailment. Once the Post trade margin is applied, Pre-bid margin would be released. Once the pay-in for the trade is fulfilled, Post-trade margin would be released.  For Sellers  5% of the total trade value and applicable charges (Charge margin) or margin from Sellers or as Prescribed. In case of insufficient post trade margin, the same will be adjusted from the next pay-out of the Sellers and it shall be adjusted along with payment of obligation on Pay-out Day
Transaction Fee*	The Exchange shall charge 2 paise/kWh on Cleared quantum from each Buyer and Seller.  The Exchange reserves the right to amend the transaction by issuing a Circular from time to time



\*The Exchange reserves the right to amend these parameters by issuing a Circular from time to time

2. Other terms and conditions of the contract shall be as per Annexure VI – Terms and Conditions for Contracts operating under provisions for Regulation 5(2) and 5(3) of CERC (Power Market) Regulations, 2021



## **Annexure F**

## Annexure I F (1) - PXIL Day Ahead Ancillary Services Market (DAM-AS) Contract

## 1. Basic Contract Specification

Type of Market	Day Ahead Ancillary Services Market (DAM-AS)
Transaction system	PRATYAY
Eligible Entity	As provided at Regulation 14 of AS Regulation 2022, the eligible entities shall be:  a. A generating station, or b. An entity having energy storage resource, or c. An entity capable of providing demand response, on standalone or aggregated basis connected to inter-State transmission system or intra-State transmission system.  The NOC issued by Nodal Agency to the eligible entity shall specify the quantum (MW) permitted for providing TRAS service
Price discovery	As provided at Regulation 17 of AS Regulation 2022
Contract Obligation	Delivery of TRAS services is the essence of Contract.  Despatch instructions provided by Nodal Agency shall be complied by TRAS provider
Type of Services	TRAS-Up and TRAS-Down in compliance to Regulation 15 of AS Regulation 2022
Bid submission	<ul> <li>In compliance to Regulation 16 of AS Regulation 2022:</li> <li>a. For TRAS-Up: the Energy-Up bid in Rs./MWh shall be submitted for the offer volume in MW</li> <li>b. For TRAS-Down: the Energy-Down bid in Rs. /MWh shall be submitted for the offer volume in MW</li> <li>All participants should ensure that capacity offered as sell bid for energy in Power exchange and for TRAS from a resource in the</li> </ul>



	same time block, shall be separate and non-overlapping
	For eligible entities participating exclusively in DAM-AS
	Market for providing TRAS-Up / TRAS-Down services
	10:00 to 11:00 hrs. of 'Day T' ('Day T' is the trading day for
	entering bids during the auction session)
	For eligible entities seeking carry over of uncleared single
	bids from DAM-Energy and HP-DAM Energy to DAM-AS
	Market for providing TRAS-Up services.
Auction Timings	10:00 to 11:00 hrs of 'Day T'.
	The uncleared single bids from Day Ahead Energy Market
	('DAM-Energy') and High Price-Day Ahead Energy Market ('HP-
	DAM') shall be carry forwarded to DAM-AS Market for such
	entities that has provided consent for Order Carry Forward
	('OCF') in 'PRATYAY' system at the time of bid entry. The
	uncleared block bids from DAM-Energy and HP-DAM will not be
	carry forwarded to DAM-AS Market.
	No OCF facility shall be applicable for TRAS-Down services.
	96 contracts of 15-minute duration each for next day (T + 1)
Duration of Contracts	delivery or as per Despatch instructions provided by Nodal
	Agency
Minimum Bid Volume	1 MW or as prescribed by Nodal Agency from time to time
William Bld Volume	1 WW or de prosonibled by Model / Igoney from time to time
Minimum Volume	0.1 MW or as prescribed by Nodal Agency from time to time
Quotation Step	on more as presented by medan (gene) mem anne te anne
Minimum Value	
Quotation step	Re. 1 per MWh as prescribed by Nodal Agency from time to time
Price Bid submission	For TRAS-Up services
range	a. For Eligible HP-DAM Seller:
<u> </u>	The price range will be similar to HP-DAM Energy Market price range of Rs 0/kWh to Rs 20/kWh or as prescribed by CERC



	from time to time
	b. For Other Seller:
	The price range will be similar to DAM Energy Market price range of Rs 0/kWh to Rs10/kWh or as prescribed by CERC from time to time
	For TRAS-Down services
	Price range, if any, shall be as prescribed by CERC or as per
	Nodal Agency procedure issued from time to time
Transmission Charges	No transmission charge and/or loss shall be applicable as
and Losses	prescribed at Regulation 22 of AS Regulation 2022
	The application fees & operating charges along with taxes, if
	any, submitted by the Exchange to the NLDC /RLDC (s) / SLDC
Application Fees &	(s) shall be as per AS Regulation 2022 and Detailed Procedure
Operating Charges	for TRAS issued by Nodal Agency
	The Exchange reserves the right to change the above provisions
	by issuing a Circular from time to time.
	a. TRAS-UP: Market Clearing price as prescribed at
	Regulations 17 (1), 17 (2) and 17 (5) of AS
	Regulation 2022
Settlement Process	b. TRAS-Down: Market Clearing price as prescribed at
	Regulations 17(3), 17(4) and 17 (5) of AS
	Regulation 2022
	The Exchange shall specify margin for participation in TRAS
	services with respect to transaction fee and other charges as
Pre - Bid margin, Pre-	applicable under AS Regulation 2022 and any other Regulation
Trade margin and Post-	issued by Hon'ble Commission.
	located by Florible Colliniasion.
-	Exchange reserves the right to amend the margin provisions by
	issuing a Circular from time to time



	The transaction fee shall be 2 Paise/kWh for Quantum cleared
	and despatched by Nodal Agency.
Transaction fee	
	Exchange reserves the right to amend the transaction fee by
	issuing a Circular in compliance to directives issued by Hon'ble
	CERC from time to time

## 2. Day Ahead AS Market Contract operation

The time lines for participation in Day Ahead AS Market for providing TRAS services are:

S. No.	Time	Activity
1	By 10:00 hrs	Nodal agency to declare quantum of TRAS reserves to be
'	By 10.001113	procured for next day
		Auction session
		The Auction Trade Session would run from 10:00 to 12:00
		hrs on all seven (7) days of the week except for the
2	10:00 to 11:00	Exchange declared holidays. During this session Members
	hrs	(through their Approved Users) would be allowed to place
		bids in 'PRATYAY' system. No fresh bids or revision of bids
		would be allowed by the system after the gate closure at
		12:00 Hrs
	By 15:30 hrs	Nodal Agency transfer
3.		The Exchange would share all bids received from TRAS
J.		providers, including bids consented with OCF, to Nodal
		Agency
	By 17:00 hrs	Clearance of Day Ahead AS Market by Nodal Agency
		Nodal Agency would send the cleared TRAS-Up and TRAS-
4		down information to RLDC, SLDCs, TRAS providers and to
		Power exchange providing information about Market
		clearing price and cleared quantum of TRAS provider

The clearance advice issued by National Load Despatch Centre to the Exchange at by 17:00 hrs shall be on good faith basis. The clearance advice by the National Load



Despatch Centre shall be binding on TRAS provider and shall not have any financial liability on Power exchange.

The other processes under the Auction session are:

## 2.1. Bidding phase:

- Nodal Agency to communicate quantum of reserves to be procured by Nodal Agency before the start of bidding session separately for TRAS-Up & TRAS-Down services
- ii. The quantum of reserves to be procured by Nodal Agency received by Exchange shall be available for the information of TRAS Provider.

## 2.2. Bid aggregation and submission to Nodal Agency:

- i. The Auction Trade Session would run from 10:00 to 11:00 hrs on all seven (7) days of the week except for the Exchange declared holidays. During this session Members (through their Approved Users) would be allowed to place bids in 'PRATYAY' system. No fresh bids or revision of bids would be allowed by the system after the gate closure at 11:00 Hrs.
- ii. The TRAS provider shall ensure that the capacity offered, as a sell bid for energy market and for TRAS from a resource in the same time-block, shall be separate and non-overlapping
- iii. The bids accumulated during bidding session and carry forward of uncleared bids under OCF option shall be combined prior to forwarding of bids to Nodal Agency for price discovery

## 2.3. Bid matching by Nodal Agency:

Nodal Agency shall match the bids under provisions of Regulation 17 of AS Regulation 2022

## 2.4. Clearing by Nodal Agency:

Nodal Agency to communicate Market clearing price and cleared quantum (MW) separately for TRAS-Up and TRAS-Down. The Exchange shall inform the cleared



quantum and clearing price to cleared TRAS participant on receipt of information from Nodal Agency.

The Exchange shall issue obligation report providing information on transaction fee and charges based on cleared and despatched quantity information received from Nodal Agency

## 2.5. Scheduling and Despatch

Scheduling and dispatch of TRAS services shall be as per Regulation 18 of AS Regulations 2022, IEGC 2023, other Regulations issued by CERC, Detailed Procedure issued by Nodal Agency and directives issued by Hon'ble Commission from time to time.

The instructions for scheduling and dispatch of TRAS services shall be issued by Nodal Agency directly to TRAS provider and the same shall be complied by the participant

## 2.6. Settlement of Contract

The Accounting and Settlement of TRAS-Up and/or TRAS-Down services under Day Ahead AS Market shall be under provision of Regulation 21 of AS Regulation 2022, as amended from time to time and the same shall be carried out by Nodal Agency directly with TRAS provider.

The Exchange shall not be obliged to settle and/or under take pay-in/pay-out as the case may be for TRAS services provided by TRAS participant on receipt of instructions made by Nodal Agency.

Further, the Bye-Laws, Rules and Business Rules of the Exchange, to the extent of Exchange assuming liability as counter party to each transaction shall not be applicable for the transactions carried out in the Ancillary Services Market and accordingly provisions with respect to Deposits, Settlement Guarantee Fund and all contractual terms with respect to delivery of transacted contracts at Exchange shall not be applicable in Ancillary Market Contract.

The decision of the Exchange on the applicability of any provision of the Bye Laws, Rules and Business Rules of the Exchange in the Ancillary Market Contract shall be final and binding.

#### 3. Indemnification



The TRAS provider shall keep Exchange indemnified at all times and shall undertake to indemnify, defend and save the Exchange harmless from any and all damages, losses, and claims arising out of or resulting from the activities carried out by Nodal Agency with respect to the Ancillary Services Market under provisions of AS Market Regulation 2022.



## Annexure I F (2) - PXIL Real Time Ancillary Services Market (RTM-AS) Contract

## 1. Basic Contract Specification

Type of Market	Real Time Ancillary Services Market (RTM-AS)
Transaction system	PRATYAY
Eligible Entity	As provided at Regulation 14 of AS Regulation 2022, the eligible entities shall be:  a. A generating station, or  b. An entity having energy storage resource, or  c. An entity capable of providing demand response, on standalone or aggregated basis connected to inter-State transmission system or intra-State transmission system.  The NOC issued by Nodal Agency to the eligible entity shall specify the quantum (MW) permitted for providing TRAS service
Price discovery	As provided at Regulation 17 of AS Regulation 2022
Contract Obligation	Delivery of TRAS services is the essence of Contract.  Despatch instructions provided by Nodal Agency shall be complied by TRAS provider
Type of Services	TRAS-Up and TRAS-Down in compliance to Regulation 15 of AS Regulation 2022
Bid submission	<ul> <li>In compliance to Regulation 16 of AS Regulation 2022:</li> <li>a. For TRAS-Up: the Energy-Up bid in Rs./MWh shall be submitted for the offer volume in MW</li> <li>b. For TRAS-Down: the Energy-Down bid in Rs. /MWh shall be submitted for the offer volume in MW</li> <li>All participants should ensure that capacity offered as sell bid for</li> </ul>



	energy in Power exchange and for TRAS from a resource in the
	same time block, shall be separate and non-overlapping
	As prescribed at Regulation 16 (1) of AS Regulation 2022
	Even time block of 15-minute duration of each hour, e.g. 00:15
Auction Timings	to 00:30 Hrs. and 00:45 to 01:00 Hrs. during the 1st hour. The
	timeline for auction and clearance of Contract shall be on rolling basis.
	No carry forward of uncleared bids from other Contracts to RTM-AS is permitted
Duration of Contracts	48 contracts for two consecutive time blocks with each time block of 15-minute duration
Minimum Bid Volume	1 MW or as prescribed by Nodal Agency from time to time
Minimum Volume Quotation Step	0.1 MW or as prescribed by Nodal Agency from time to time
Minimum Value Quotation step	Re. 1 per MWh as prescribed by Nodal Agency from time to time
	For TRAS-Up services
	a. For Eligible HP-DAM Seller
	The price range will be similar to HP-DAM Energy Market range
	of Rs 0/kWh to Rs 20/kWh or as prescribed by CERC from time
Price bid submission	to time
range	b. For Other Seller:
	The price range will be similar to DAM Energy Market price
	range of Rs 0/kWh to Rs10/kWh or as prescribed by CERC from time to time
	For TRAS-Down services



	Price range, if any, shall be as prescribed by CERC or as per
	Nodal Agency procedure issued from time to time
Transmission Charges	No transmission charge and/or loss shall be applicable as
and Losses	prescribed at Regulation 22 of AS Regulation 2022
	The application fees & operating charges along with taxes, if any, submitted by the Exchange to the NLDC /RLDC (s) / SLDC
Application Fees &	(s) shall be as per AS Regulation 2022 and Detailed Procedure
Operating Charges	for TRAS issued by Nodal Agency
	The Exchange reserves the right to change the above provisions
	by issuing a Circular from time to time.
Settlement Process	<ul> <li>a. TRAS-Up: Market Clearing price as prescribed at Regulations 17 (1), 17 (2) and 17 (5) of AS Regulation 2022</li> <li>b. TRAS-Down: Market Clearing price as prescribed at Regulations 17(3), 17(4) and 17 (5) of AS Regulation 2022</li> </ul>
Pre - Bid margin, Pre- Trade margin and Post- Trade margin	The Exchange shall specify margin for participation in TRAS services with respect to transaction fee and other charges as applicable under AS Regulation 2022 and any other Regulation issued by Hon'ble Commission.  Exchange reserves the right to amend the margin provisions by issuing a Circular from time to time
Transaction fee	The transaction fee shall be 2 Paise/kWh for Quantum cleared and despatched by Nodal Agency.  Exchange reserves the right to amend the transaction fee by issuing a Circular in compliance to directives issued by Hon'ble CERC from time to time



## 2. Real Time AS Market Contract operation

The timelines for auction sessions and delivery durations shall be as per Regulation 16 (1) of AS Regulation 2022. The auction window for delivery during first two time blocks of the 1st hour of the Day (D), i.e. from 00:00 to 00:30 hrs shall open during the period 22:45 to 23:00 hrs of the previous day (D-1).

The auction process would be conducted during even time blocks of the hour. The timelines for auction and delivery would be as provided in the **Table 1** below.

Table 1: Real Time AS Auction and delivery timelines

Real Time AS Auction	Envisaged Clearance by NLDC	NLDC may convey clearance and/or instruction to TRAS provider and inform the same to RLDCs / SLDCs / TRAS Provider / Power exchange	Delivery of TRAS
22:45 to 23:00 hrs	23:00 to 23:15 hrs	23:15 to 23:45 hrs	00:00 to 00:30 hrs
23:15 to 23:30 hrs	23:30 to 23:45 hrs	23:45 to 00:15 hrs	00:30 to 01:00 hrs
23:45 to 00:00 hrs	00:00 to 00:15 hrs	00:15 to 00:45 hrs	01:00 to 01:30 hrs
00:15 to 00:30 hrs	00:30 to 00:45 hrs	00:45 to 01:15 hrs	01:30 to 02:00 hrs
10:15 to 10:30 hrs	10:30 to 10:45 hrs	10:45 to 11:15 hrs	11:30 to 12:00 hrs
10:45 to 11:00 hrs	11:00 to 11:15hrs	11:15 to 11:45 hrs	12:00 to 12:30 hrs
21:45 to 22:00 hrs	22:00 to 22:15 hrs	22:15 to 22:45 hrs	23:00 to 23:30 hrs
22:15 to 22:30 hrs	22:30 to 22:45 hrs	22:45 to 23:15 hrs	23:30 to 24:00 hrs

For delivery of TRAS during six-time time blocks of the day i.e. from 00:00 hours onwards to 01:30 hours of the day (D), the Real Time AS auction would be conducted a day prior to delivery (D-1). The delivery of TRAS could cover any time block of 15-minute or both the time blocks during the delivery period of 30-minute (i.e. 00:00 to 00:15 and/or 00:15 to 00:30 for 30-minute delivery period of 00:00 to 00:30 hrs).

The Exchange shall provide 'Good till Cancelled' queuing type wherein the bid shall be carried over for remaining auction sessions till they are modified or cancelled by the TRAS provider. The 'Good till Cancelled' queuing type provided by the Exchange will facilitate the TRAS provider to submit bids for all the delivery time periods, however the bids would be



submitted to Nodal Agency as per the timelines for auction session as illustrated in the Table 1 above.

The auction timelines and the related applicable delivery periods are illustrated in the Figure 1 below:

D-1 Delivery 1 hour after Auction

Figure 2: Real Time AS Auction and applicable Delivery Timelines

The clearance and/or despatch instruction provided by the Nodal Agency to TRAS provider shall be binding and shall not have any financial liability on Power exchange.

The other processes under the Auction session are:

## 2.1. Bidding phase:

- Nodal Agency to communicate quantum of reserves to be procured by Nodal Agency before the start of bidding session separately for TRAS-Up & TRAS-Down services
- ii. The quantum of reserves to be procured by Nodal Agency received by Exchange shall be available for the information of TRAS Provider.

## 2.2. Bid aggregation and submission to Nodal Agency:

 The Auction Trade Session would run during even time blocks of the hour on all seven (7) days of the week except for the Exchange declared holidays. During this session Members (through their Approved Users) would be allowed to place



bids in 'PRATYAY' system. No fresh bids or revision of bids would be allowed by the system after the gate closure

- ii. The TRAS provider shall ensure that the capacity offered, as a sell bid for energy market and for TRAS from a resource in the same time-block, shall be separate and non-overlapping
- The bids accumulated during bidding session shall be forwarded to Nodal Agency for price discovery

## 2.3. Bid matching by Nodal Agency:

Nodal Agency shall match the bids under provisions of Regulation 17 of AS Regulation 2022

## 2.4. Clearing by Nodal Agency:

Nodal Agency to communicate Market clearing price and cleared quantum (MW) separately for TRAS-Up and TRAS-Down. The Exchange shall inform the cleared quantum and clearing price to cleared TRAS participant on receipt of information from Nodal Agency.

The Exchange shall issue obligation report providing information on transaction fee and charges based on cleared and despatched quantity information received from Nodal Agency

## 2.5. Scheduling and Despatch

Scheduling and dispatch of TRAS services shall be as per Regulation 18 of AS Regulations 2022, IEGC 2023, other Regulations issued by CERC, Detailed Procedure issued by Nodal Agency and directives issued by Hon'ble Commission from time to time.

The instructions for scheduling and dispatch of TRAS services shall be issued by Nodal Agency directly to TRAS provider and the same shall be complied by the participant

#### 2.6. Settlement of Contract

The Accounting and Settlement of TRAS-Up and/or TRAS-Down services under Real Time AS Market shall be under provision of Regulation 21 of AS Regulation 2022, as



amended from time to time and the same shall be carried out by Nodal Agency directly with TRAS provider.

The Exchange shall not be obliged to settle and/or under take pay-in/pay-out as the case may be for TRAS services provided by TRAS participant on receipt of instructions made by Nodal Agency.

Further, the Bye-Laws, Rules and Business Rules of the Exchange, to the extent of Exchange assuming liability as counter party to each transaction shall not be applicable for the transactions carried out in the Ancillary Services Market and accordingly provisions with respect to Deposits, Settlement Guarantee Fund and all contractual terms with respect to delivery of transacted contracts at Exchange shall not be applicable in Ancillary Market Contract.

The decision of the Exchange on the applicability of any provision of the Bye Laws, Rules and Business Rules of the Exchange in the Ancillary Market Contract shall be final and binding.

### 3. Cancellation of Real Time AS Market clearance by NLDC

Under extreme circumstances including but not limited to failure of communication and/or any such other reason e.g., data transfer failure, if the bids are not received by Nodal Agency from the Power Exchange, the Nodal Agency has a right to declare zero (0) clearance for a particular AS session.

On receipt of zero (0) clearance information from Nodal Agency, the Exchange shall inform TRAS provider of such decision of NLDC for clearance being made zero(0) for particular AS session. The TRAS provider shall abide by such decision of NLDC for clearance being made zero (0).

#### 4. Indemnification

The TRAS provider shall keep Exchange indemnified at all times and shall undertake to indemnify, defend and save the Exchange harmless from any and all damages, losses, and claims arising out of or resulting from the activities carried out by Nodal Agency with respect to the Ancillary Services Market under provisions of AS Market Regulation 2022.



## 12. ANNEXURE II (A): Member Client Agreement

(Member – Client Agreement has to be executed on a Non-Judicial Stamp paper of the value prevailing in the state.)

## **Member – Client Agreement**

This agreement is made and executed at on this day of
Between:
Mr./Ms./M/s, an individual / a partnership firm / a body
corporate, registered / incorporated under the provisions of the Indian Partnership Act, 1932
/ Companies Act, 1956, being a Member of Power Exchange India Limited (hereinafter
referred to as "Exchange") and 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.



#### WHEREAS:

The Member is registered as Member of the Exchange.

The client is desirous of Trading in those Contracts admitted for dealing on the Exchange as defined in the Bye Laws, Rules, Business Rules of the Exchange and Circulars issued thereunder from time to time.

The client has satisfied itself of the capability of the Member to deal in those Contracts admitted for dealing on the Exchange and wishes to execute Orders through the Member and the client shall from time to time continue to satisfy of such capability of the Member before executing any Orders through the Member.

The Member has satisfied and shall continuously satisfy about the genuineness and financial soundness of the client and Trading objectives relevant to the services to be provided.

The Member has taken steps and shall take steps to make the client aware of the precise nature of the Member's liability for business to be conducted, including any limitations, the liability and the capacity in which the Member acts.

The Member and the client agree to be bound by all the Rules, Byelaws of the Exchange and Circulars issued thereunder from time to time and Rules and Regulations of Central Electricity Regulatory Commission (hereinafter referred to as CERC) and the relevant notifications of Government authorities as may be in force from time to time.

NOW, THEREFORE, IN CONSIDERATION OF THE MUTUAL UNDERSTANDING AS SET FORTH IN THIS AGREEMENT, THE PARTIES THERETO HAVE AGREED TO THE FOLLOWING TERMS AND CONDITIONS:

1. The client agrees to immediately notify the Member in writing if there is any change in the information in the 'client registration form' provided by the client to the Member at the time of opening of the account or at any time thereafter.



- 2. The Member declares that it has brought the contents of the risk disclosure document to the notice of client and made him aware of the significance of the said document. The client agrees that:
  - a. He has read and understood the risks involved in Trading on the Exchange.
  - b. He shall be wholly responsible for all his investment decisions and trades.
  - c. The failure of the client to understand the risk involved shall not render a Contract as void or voidable and the client shall be and shall continue to be responsible for all the risks and consequences for entering into trades in the segments in which the client chose to trade.
  - d. He is liable to pay applicable margins as are considered necessary by the Member or the Exchange or as may be directed by CERC from time to time. The Member is permitted in its sole and absolute discretion to collect additional margins (even though not required by the Exchange or CERC) and the client shall be obliged to pay such margins within the stipulated time.
  - e. Payment of margins by the client does not necessarily imply complete satisfaction of all dues. In spite of consistently having paid margins, the client may, on the closing of its trade, be obliged to pay (or entitled to receive) such further sums as the Contract may dictate/require.
- 3. The Client agrees to pay to the Member brokerage and statutory levies as are prevailing from time to time and as they apply to the Client's account, transactions and to the services that Member renders to the Client. The Member agrees that it shall not charge brokerage more than the maximum brokerage permissible as per the Rules and Bye laws of the Exchange/CERC if any.
- 4. The Client agrees to abide by the exposure limits, if any set by the Member or by the Exchange or CERC from time to time.
- 5. The Member agrees that the money deposited by the client shall be kept in a separate account, distinct from his/its own account and shall not be used by the Member for himself/itself or for any other client or for any purpose other than the purposes



mentioned in PXIL Rules and Byelaws or under any Rules, Regulations, Bye Laws, guidelines or directives specified by CERC.

- 6. The client agrees to immediately furnish information to the Member in writing, if any winding up petition or insolvency petition has been filed or any winding up or insolvency order or decree or award is passed against him or if any litigation which may have material bearing on his capacity has been filed against him.
- 7. The Member agrees that it shall co-operate in redressing grievances of the client in respect of transactions routed through it.
- 8. The client and the Member agree to refer any claims and/or disputes to arbitration as per the Rules, Byelaws and Business Rules of the Exchange as may be in force from time to time and Circulars issued thereunder from time to time.
- The client shall abide by provisions of Electricity Act, 2003, Grid Code or any Rules or Regulations made thereunder or any other applicable Act or any Rules or Regulations made thereunder.
- 10. The Client agrees to indemnify PXIL, NLDC, RLDCs, SLDCs against any claim for damages, losses and actions, including those relating to any injury to or to death of any person or damage to any property of any person demands, suits, recoveries, costs and expenses, attorney fees, against the third parties, arising out of or resulting from or attributable to the transactions on the Exchange.
- 11. The agreement entered into between the Member and the client shall stand terminated by mutual consent of the parties by giving at least one-month notice to each other. Such termination shall not have any effect on the transactions executed before the date of notice of termination and the parties shall enjoy same rights and shall have same obligations in respect of such transactions.



- 12. This agreement can be altered, amended and/or modified by the parties mutually in writing without derogating from the contents of this Agreement. Provided however, if the rights and obligations of the parties hereto are altered by virtue of change in the Rules, Byelaws and Business Rules of the Exchange, such changes shall be deemed to have been incorporated herein in modification of the rights and obligations of the parties mentioned in this agreement.
- 13. The Member hereby undertakes to maintain the details of the client as mentioned in the client registration form or any other information pertaining to the client in confidence and that it shall not disclose the same to any person/ authority except as required under any law/regulatory requirements; Provided however that the Member may so disclose information about its/his client to any person or authority with the express permission of the client.
- 14. All trades, transactions and Contracts are subject to the Rules, Bye Laws and Business Rules of the Exchange.

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

Client's Signature / Member's Signature /

Authorized Signatory Authorized Signatory

Signed by: Signed by:



Title:	Title:
Name of the Client:	Name of the Member:
Witness:	Witness:
1.	1.
2.	2.



## 13. ANNEXURE II (B): Facilitator Member – Client Agreement

(Facilitator Member – Client Agreement has to be executed on a Non-Judicial Stamp paper of the value prevailing in the state.)

## Facilitator Member - Client Agreement

This agreement is made and executed at on this day of 20
Between:
Mr./Ms./M/s
And
Mr./Ms./M/s
WHEREAS:
The Facilitator Member is registered as a Facilitator Member of the Exchange.
The Client is desirous of availing of Support Services as defined in the Bye Laws, Rules, Business Rules of the Exchange and Circulars issued thereunder from time to time.

The Client has satisfied itself of the capability of the Facilitator Member to provide Support Services and wishes to utilize the services of the Facilitator Member for providing Support Services and the Client shall from time to time continue to satisfy of such capability of the

The Facilitator Member has taken steps and shall take steps to make the Client aware of the precise nature of the Facilitator Member's liability for business to be conducted,

Facilitator Member before availing of such services from the Facilitator Member.

PXIL Business Rules - Physical segment



including any limitations, the liability and the capacity in which the Facilitator Member acts.

The Facilitator Member and the Client agree to be bound by all the Rules, Byelaws of the Exchange and Circulars issued thereunder from time to time and Rules and Regulations of Central Electricity Regulatory Commission (hereinafter referred to as CERC) and the relevant notifications of Government authorities as may be in force from time to time.

## NOW, THEREFORE, IN CONSIDERATION OF THE MUTUAL UNDERSTANDING AS SET FORTH IN THIS AGREEMENT, THE PARTIES THERETO HAVE AGREED TO THE FOLLOWING TERMS AND CONDITIONS:

- 1. The Client agrees to immediately notify the Facilitator Member in writing if there is any change in the information in the 'Client registration form' provided by the Client to the Facilitator Member at the time of opening of the account or at any time thereafter.
- 2. The Facilitator Member declares that it has brought the contents of the risk disclosure document to the notice of Client and made him aware of the significance of the said document. The Client agrees that:
  - a. He has read and understood the risks involved in trading on the exchange.
  - b. He shall be wholly responsible for all his investment decisions and trades.
  - c. He shall be responsible for all trades facilitated by the Facilitator Member and that such trades shall be deemed to have been placed by the Client.
  - d. The failure of the Client to understand the risk involved shall not render a contract as void or voidable and the Client shall be and shall continue to be responsible for all the risks and consequences for entering into trades in the segments in which the Client chose to trade.
- 3. The Client agrees to pay to the Facilitator Member brokerage and statutory levies as are prevailing from time to time and as they apply to the Client's account, transactions and to the services that Facilitator Member renders to the Client. The Facilitator Member agrees that it shall not charge brokerage more than the maximum brokerage permissible as per the rules and bye –laws of the Exchange/CERC if any.
- 4. The Client agrees to abide by the exposure limits, if any set by the Exchange or CERC from time to time.
- 5. The Client agrees that he shall place margins for and clear his trades directly with the Exchange or through a member authorized by the Exchange to provide him with clearing services as per the Rules, Byelaws and Business Rules of the Exchange as may be in force from time to time and Circulars issued thereunder from time to time.
- 6. The Client agrees to immediately furnish information to the member in writing, if any winding up petition or insolvency petition has been filed or any winding up or insolvency order or decree or award is passed against him or if any litigation which may have material bearing on his capacity has been filed against him.



- 7. The Facilitator Member agrees that it shall co-operate in redressing grievances of the Client in respect of transactions facilitated by it.
- 8. The Client and the Facilitator Member agree to refer any claims and/or disputes to arbitration as per the Rules, Byelaws and Business Rules of the Exchange as may be in force from time to time and Circulars issued thereunder from time to time.
- 9. The Client shall abide by provisions of Electricity Act, 2003, Grid Code or any Rules or Regulations made thereunder or any other applicable Act or any Rules or Regulations made thereunder.
- 10. The Client agrees to indemnify PXIL, NLDC, RLDCs, SLDCs against any claim for damages, losses and actions, including those relating to any injury to or to death of any person or damage to any property of any person demands, suits, recoveries, costs and expenses, attorney fees, against the third parties, arising out of or resulting from or attributable to the transactions on the Exchange.
- 11. The Client agrees to indemnify PXIL, NLDC, RLDCs, SLDCs against any claim for damages, losses and actions, including those relating to any injury to or to death of any person or damage to any property of any person demands, suits, recoveries, costs and expenses, attorney fees, against the third parties, arising out of or resulting from or attributable to any services received from the Facilitator Member.
- 12. The agreement entered into between the Facilitator Member and the Client shall stand terminated by mutual consent of the parties by giving at least one-month notice to each other. Such termination shall not have any effect on the transactions executed before the date of notice of termination and the parties shall enjoy same rights and shall have same obligations in respect of such transactions.
- 13. This agreement can be altered, amended and/or modified by the parties mutually in writing without derogating from the contents of this Agreement. Provided however, if the rights and obligations of the parties hereto are altered by virtue of change in the Rules, Byelaws and Business Rules of the Exchange, such changes shall be deemed to have been incorporated herein in modification of the rights and obligations of the parties mentioned in this agreement.
- 14. The member hereby undertakes to maintain the details of the Client as mentioned in the Client registration form or any other information pertaining to the Client in confidence and that it shall not disclose the same to any person/ authority except as required under any law/regulatory requirements; Provided however that the Facilitator Member may so disclose information about its/his Client to any person or authority with the express permission of the Client.



15. All trades, transactions and	contracts are	subject to the	e Rules, B	Bye Laws a	and Business
Rules of the Exchange.					

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

Client's Signature /	Facilitator Member's Signature /		
Authorized Signatory	Authorized Signatory		
Signed by:	Signed by:		
Title:	Title:		
Name of the Client:	Name of the Facilitator Member:		
Witness:	Witness:		
1.	1.		



### 14. ANNEXURE III: Risk Disclosure document

## RISK DISCLOSURE DOCUMENT (TO BE GIVEN BY THE MEMBER TO THE CLIENT)

This document is issued by the Member of the Power Exchange India Limited (hereinafter referred to as "PXIL"), and contains important information on Trading on the Exchange. All prospective Clients should read this document before Trading on PXIL. PXIL does neither singly or jointly and expressly nor impliedly guarantee nor make any representation concerning the completeness, the adequacy or accuracy of this disclosure document nor has PXIL endorsed or passed any merits of participating in the Trading segments. This brief statement does not disclose all the risks and other significant aspects of Trading.

In the light of the risks involved, you should undertake transactions only if you understand the nature of the contractual relationship into which you are entering and the extent of your exposure to risk.

You must know and appreciate that Trading, which has varying element of risk, is generally not an appropriate avenue for someone of limited resources/limited investment and/or Trading experience and low risk tolerance. You should therefore carefully consider whether such Trading is suitable for you in the light of your financial condition. In case you trade on PXIL and suffer adverse consequences or loss, you shall be solely responsible for the same and PXIL shall not be responsible, in any manner whatsoever, for the same and it will not be open for you to take a plea that no adequate disclosure regarding the risks involved was made or that you were not explained the full risk involved by the concerned Member. The Client shall be solely responsible for the consequences and no Contract can be rescinded on that account. You must acknowledge and accept that there can be no guarantee of profits or no exception from losses while executing Orders for purchase and/or sale of a security or derivative being traded on PXIL.

It must be clearly understood by you that your dealings on PXIL through a Member shall be subject to your fulfilling certain formalities set out by the Member, which may interalia include your filling the know your client form, client registration form, execution of an



agreement, etc., and are subject to the Rules, Byelaws and Regulations of PXIL, guidelines Prescribed by CERC and in force from time to time and Circulars as may be issued by PXIL and in force from time to time.

PXIL does not provide or purport to provide any advice and shall not be liable to any person who enters into any business relationship with any Member and/or any third party based on any information contained in this document. Any information contained in this document must not be construed as business advice/investment advice. No consideration to trade should be made without thoroughly understanding and reviewing the risks involved in such Trading. If you are unsure, you must seek professional advice on the same. In considering whether to trade or authorize someone to trade for you, you should be aware of or must get acquainted with the following:-

#### 1. BASIC RISKS INVOVLED IN TRADING ON THE EXCHANGE

## 1.1 Risk of Higher Volatility:

Volatility refers to the dynamic changes in price when Trading activity continues on the Exchange. Generally, higher the volatility of a Contract, greater is its price swings. As a result of volatility, your Order may only be partially executed or not executed at all, or the price at which your Order got executed may be substantially different from the last traded price or change substantially thereafter, resulting in notional or real losses.

## 1.2 Risk of Lower Liquidity:

Liquidity refers to the ability of market participants to buy and/or sell Contracts expeditiously at a competitive price and with minimal price difference. Generally, it is assumed that more the numbers of Orders available in a market, greater are the liquidity. Liquidity is important because with greater liquidity, it is easier for traders to buy and/or sell Electricity swiftly and with minimal price difference, and as a result, investors are more likely to pay or receive a competitive price for Contracts purchased or sold. As a result, your Order may only be partially executed, or may be executed with relatively greater price difference or may not be executed at all.

**1.2.1** Buying/selling without intention of giving and/or taking delivery of Electricity may also result into losses, because in such a situation, Electricity may have to be sold/purchased at a low/high prices, compared to the expected price levels, so as not to have any obligation to deliver/receive Electricity.

#### 1.3 Risk of News Announcements:



Generators/ Distributors of Electricity make news announcements that may impact the price of the securities / Contracts. These announcements may occur during Trading, and when combined with lower liquidity and higher volatility, may suddenly cause an unexpected positive or negative movement in the price of the Contract.

#### 1.4 Risk of Rumours:

At times rumors float in the market through word of mouth, newspapers, websites or news agencies, etc. The Members should be wary of and should desist from acting on rumours.

## 1.5 System Risk:

High volume Trading will frequently occur at the market opening and before market close. Such high volumes may also occur at any point in the day. These may cause delays in Order execution or confirmation.

**1.5.1** Under certain market conditions, it may be difficult or impossible to liquidate a position in the market at a reasonable price or at all, when there are no outstanding Orders either on the buy side or the sell side, or if Trading is halted in a security due to any action on account of unusual Trading activity or stock hitting circuit filters or for any other reason.

## 1.6 System/Network Congestion:

Trading on PXIL is in electronic mode, based on Internet based communications, combination of technologies and computer systems to place and route Orders. Thus, there exists a possibility of communication failure or system problems or slow or delayed response from system or Trading halt, or any such other problem/glitch whereby not being able to establish access to the Trading system/network, which may be beyond the control of and may result in delay in processing or not processing buy or sell Orders either in part or in full. You are cautioned to note that although these problems may be temporary in nature, but when you have unexecuted Orders, these represent a risk because of your obligations to settle all executed transactions.

#### 2. GENERAL

## 2.1 Commission and other charges

Before you begin to trade, you should obtain a clear explanation of all commission, fees and other charges for which you will be liable. These charges will affect your net profit (if any) or increase your loss.

## 2.2 Deposited cash and property

You should 284familiarize yourself with the protections accorded to the money or other property you deposit particularly in the event of a firm insolvency or bankruptcy. The extent



to which you may recover your money or property may be governed by specific legislation or local rules. In some jurisdictions, property which has been specifically identifiable as your 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 byelaws/regulations of the Exchange.

- **2.3** For rights and obligations of the clients, please refer to Annexure-1 enclosed with this document.
- **2.4** The term 'Client' shall mean and include a client, a customer or an investor, who deals with a Member for the purpose of acquiring and/or selling of securities through the mechanism provided by PXIL.
- 2.5 The term 'Member' shall mean and include a Trading Member who has been admitted as such by PXIL and who holds a valid certificate. I hereby acknowledge that I have received and understood this risk disclosure statement and APPENDIX-1 containing my rights and obligations .Customer Signature (If Partner, Corporate, or other Signatory, then attest with company seal.)

#### **APPENDIX-1**

#### **CLIENT'S RIGHTS AND OBLIGATIONS:**

- **1.1** You should familiarize yourself with the protection accorded to the money or other property you may deposit with your Member, particularly in the event of a default on the Exchange or in the Member's firm's insolvency or bankruptcy.
  - **1.1.1** Please ensure that you have a documentary proof of your having made deposit of such money or property with the Member, stating towards which account such money or property deposited.
  - **1.1.2** Further, it may be noted that the extent to which you may recover such money or property may be governed by the Bye-laws and Regulations of PXIL.
  - **1.1.3** Any dispute with the Member with respect to deposits, margin money, etc., and producing an appropriate proof thereof, shall be subject to arbitration as per the Rules, Byelaws/Business Rules of PXIL.
- **1.2** Before you begin to trade, you should obtain a clear idea from your Member of all brokerage, commissions, fees and other charges which will be levied on you for Trading. These charges will affect your net cash inflow or outflow.
- **1.3** You should exercise due diligence and comply with the following requirements of the PXIL and/or CERC:



- **1.3.1** Please deal only with and through registered Members of PXIL who are enabled to trade on the Exchange.
- **1.3.2** Demand any such information, details and documents from the Member, for the purpose of verification, as you may find it necessary to satisfy yourself about his credentials.
- **1.3.3** Furnish all such details in full as are required by the Member as required in "Know Your Client" form, which may also include details of PAN or Passport or Driving Licence or Voters Id, or Ration Card, bank account and depository account, or any such details made mandatory by PXIL/CERC at any time, as is available with the Client.
- **1.3.4** Execute a Member-client agreement in the form Prescribed by the Relevant Authority of PXI, because this may be useful as a proof of your dealing arrangements with the Member.
- **1.3.5** Give any order to the Member for any bids/offers on PXIL in writing or in such form or manner, as may be mutually agreed. Giving instructions in writing ensures that you have proof of your intent, in case of disputes with the Member.
- **1.3.6** Ensure that a Contract note is issued to you by the Member which contains minute records of every transaction. Verify that the Contract note contains details of order no., trade price, trade quantity, client code etc allotted to you and showing the brokerage separately. Contract notes are required to be given/sent by the Member to the Clients latest on the next working day of the trade. Contract note can be issued by the Member either in electronic form using digital signature as required, or in hard copy. In case you do not receive a Contract note on the next working day or at a mutually agreed time, please get in touch with the Investors Grievance Cell of PXI, without delaying.
- **1.3.7** Ensure that payment against Settlement is given to the concerned Member within one working day prior to the date of pay-in announced by PXIL. Payments should be made only by account payee cheque in favour of the firm/company of the Trading Member and a receipt or acknowledgement towards what such payment is made be obtained from the Member.
- **1.3.9** In case pay-out of money is not received on the next working day after date of pay-out announced by PXIL please follow-up with the concerned Member for its release. In case pay-out is not released as above from the Member within five working days, ensure that you lodge a complaint immediately with PXIL.
- **1.3.10** Every Member is required to send a complete 'Statement of Accounts', for funds Settlement to each of its Clients, at such periodicity as may be Prescribed by time to



time. You should report errors, if any, in the Statement immediately, but not later than 30 calendar days of receipt thereof, to the Member. In case the error is not rectified or there is a dispute, ensure that you refer such matter to PXIL, without delaying.

- **1.4** In case where a Member surrenders his membership, PXIL gives a public notice inviting claims, if any, from Clients. In case of a claim, relating to "transactions executed on the Trading System" of PXIL, ensure that you lodge a claim with PXIL within the stipulated period and with the supporting documents.
- **1.5** In case where a Member is expelled from Trading membership or declared a defaulter, PXIL gives a public notice inviting claims, if any, from Clients. In case of a claim, relating to "transactions executed on the Trading System" of PXI, ensure that you lodge a claim with PXIL within the stipulated period and with the supporting documents.

#### **1.6** Notes:

- The term 'Client' shall mean and include a client or a customer who deals with a Trading Member of PXIL
- 2. The term 'Member' shall mean and include a Member who has been admitted as such by PXIL
- 3. PXIL may be substituted with names of the relevant Exchanges, wherever applicable.



## 15. ANNEXURE IV: Contract note

# **CONTRACT NOTE** Tel. no. ..... Fax no. ..... (Subject to exclusive jurisdiction of the courts in Mumbai only) Name of the Member..... Dealing Office address/ Tel no. / Fax no . Name of the **Member/ Address of the Member Authorized Signatory** To, Client Name/ Code No./ Order Ref. No. Sir/ Madam, I/ We have this day done by order and on your account the following transactions Contract No: To be stamped as per the provisions applicable under the relevant Stamp Act Date:



## 16. Annexure V: Matching Rules

#### **Matching Rules**

- I. Uniform Market Clearing Price or Uniform Price Step Auction
- 1. Trading Session- The Exchange may launch more than one Trade Auction Session running either in parallel or at different time spans. Subject to the approval of CERC, the Exchange is also entitled to modify or change the matching rules relevant to any market or Trading Session any time where it is necessary to do so.

## 2. Types of Orders<sup>1</sup>

- 2.1. Normal Order A Normal order contains price-quantity pair(s), where a Buyer is willing to buy all quantity upto the value specified at or below the quoted price and Seller is willing to sell all quantity upto the value specified at or above the quoted price.
- 2.2. Block Order Exchange may allow different types of Block Orders as felt necessary from time to time like:
  - 2.2.1. "All Or None" type of Block Orders contains price-quantity pair(s) for a set of contiguous time slots and shall be considered indivisible whereby they shall either be included or excluded in totality based on the selection criteria of meeting the clearing prices on the average in their respective bid zone.

#### **Example:**

a. Case 1 – Adequate Quantity and Price in all Time Slots

	Type of Order	Time Slots	1	2	3	4	5	6	7	8
Sell	Block	Price					4			
	Order	Quantity				50	MW			

<sup>&</sup>lt;sup>1</sup> For all examples herein under, unless mentioned otherwise, all prices are expressed in Rs. per KWh and all Quantities are expressed in MW.

PXIL Business Rules - Physical segment



Buy	Normal	Price	6	6	5	5	6	5	4	5
	Orders	Quantity	50	50	70	50	60	50	50	60

In the above, since there are corresponding Buy Orders in all the time slots, at a better Average Price than the Sell Block Order, the Sale Block Order gets cleared fully.

## b. Inadequate Quantity in some Time Slots

	Type of Order	Time Slots	1	2	3	4	5	6	7	8
Sell	Block	Price				4	4			
	Order	Quantity	50 MW							
Buy	Normal	Price	6	5	4	5	5	5	4	5
	Orders	Quantity	50	20	70	30	60	50	30	10

In the above case, due to inadequate corresponding buy quantities in Time Slots 02, 04, 07 and 08, the Sale Block Order does not get cleared for any hour.

## c. Average Price Criteria

	Type of Order	Time Slots	1	2	3	4	5	6	7	8
Sell	Block	Price					4			
	Order	Quantity	50 MW							
Buy	Normal	Price	5	2	4	3	4.5	4	2.25	2.5
	Orders	Quantity	50	60	60	50	50	50	50	55

In the above case, due to inadequate corresponding buy prices in Time Slots 02, 04, 07 and 08, the Average Price criteria for the Block Order is not met and therefore the Sale Block Order does not get cleared for any hour.

## 2.2.2. Any other type of Block Orders



- 2.2.3. Buyer / Seller may place multiple block orders, each of which can be up to a maximum quantum of 25 MW. The Exchange may modify the quantity limit of each block order through further circular.
- 2.3. Any other Orders as may be notified from time to time
- **3. Order Matching Rules:** Without prejudice to the generality of the above, the Order matching rules will have the following features
  - 3.1. **All purchase Orders** can have only non-increasing quantity for every increase in the Order price, and every sale Order will have only non-decreasing quantity for every increase in the Order price.
  - 3.2. The Purchase or Sale Quantity would be considered to remain constant between consecutive price points as may be specified by an entity. Thus, for any order, the quoted volume would be held constant between one price point to the next quoted price point.

To clarify further,

3.2.1. If a Buyer Orders as follows:

Price (Rs/KWh)	Quantity (in MW)
1	100
3	40
5	20

The above Order implies the following:

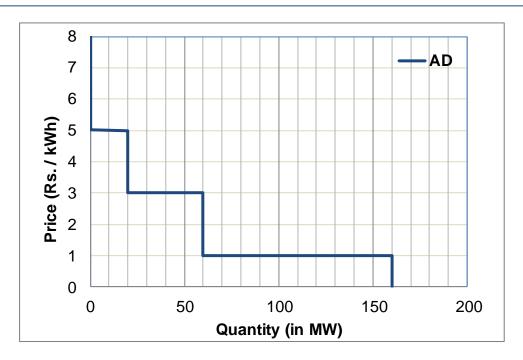
Buyer will buy quantity upto 20 MW if MCP is Rs. 5 per KWh or below

Buyer will buy quantity upto 60 MW (i.e. 40+20 = 60 MW and not 40 MW) if MCP is Rs. 3 per KWh or below

Buyer will buy quantity upto 160 MW (i.e. 20+40+100 = 160 MW and not 100 MW) if MCP is Rs. 1 per KWh or below

The Buyer's order curve would be as below:





## 3.2.2. If a Seller orders as follows:

Price (Rs/KWh)	Quantity (in MW)
5	100
3	40
2	20

The above Order implies the following:

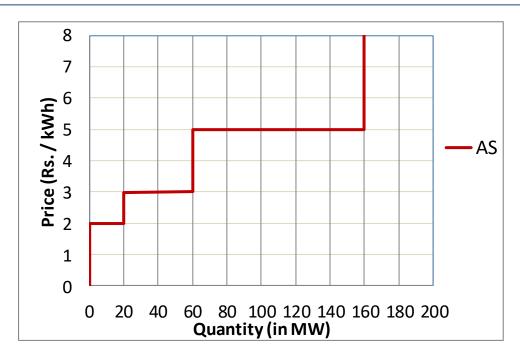
Seller will sell quantity upto 20 MW if MCP is Rs. 2 per KWh or above but less than Rs. 3 per kWh

Seller will sell quantity upto 60 MW (i.e. 20 + 40 = 60 MW and not 40 MW) if MCP is Rs. 3 per KWh or above but less than Rs. 5 per kWh

Seller will sell quantity upto 160 MW (i.e. 20+40+100 = 160 MW and not 100 MW ) if MCP is Rs. 5 per KWh or above

The Seller's order curve would be as below:





## 4. Matching Process

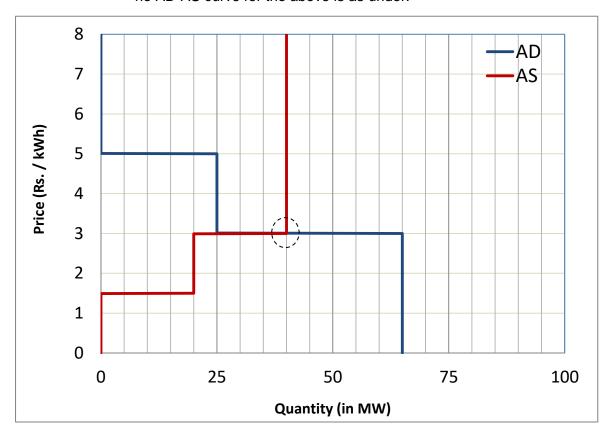
- 4.1. In the initial instance, all the buy and sell orders are aggregated at each price tick to arrive at the Aggregate Demand (AD) and Aggregate Supply (AS) curves respectively for each time slot.
- 4.2. The intersection of AD and AS curves is determined to arrive at the Market Clearing Price and Market Clearing Volume for each time slot.
- 4.3. In case of overlapping Supply and Demand Curves, the following would apply:
  - 4.3.1. In case of overlapping Supply and Demand curves for multiple executable volume points, the highest volume point will be Market Clearing Volume. This follows the principle of Maximum Executable Volume.

Eg: - Orders

Participant	Price (Rs. / kWh)	Quantity (MW)	Time
Buyer 1	5	25	11:00
Buyer 2	3	40	11:10
Seller 1	3	20	11:20
Seller 2	1.5	20	11:30



he AD-AS curve for the above is as under:



MCP = Rs. 3 per kWh and MCV = 40 MW

4.3.2. In case of overlapping Supply and Demand curves for multiple price ticks for the same executable volume, the clearing price would be determined based on social welfare maximisation, where in one of the feasible solution shall be the Average of the lowest price tick and the highest price tick within which such overlap was applicable, as the Market Clearing Price.

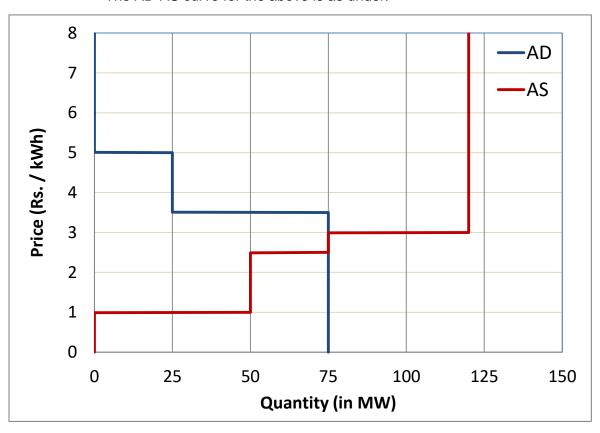
e.g. Exact Overlapping at multiple price points for Demand and Supply Curves

Participant	Price (Rs. / kWh)	Quantity (MW)	Time
Buyer 1	3.5	10	10:10
Buyer 2	5	25	10:50
Buyer 3	3.5	15	10:55
Buyer 4	3.5	25	10:59



Participant	Price (Rs. / kWh)	Quantity (MW)	Time
Seller 1	2.5	25	11:10
Seller 2	1.0	50	11:50
Seller 3	3.0	45	11.55

The AD-AS curve for the above is as under:



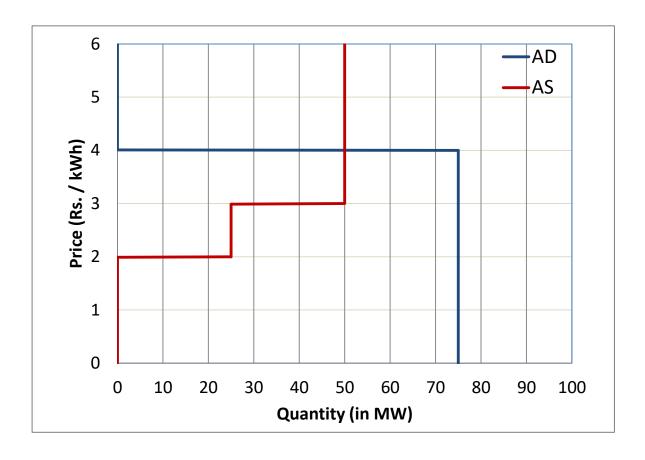
MCP = Rs 2.75 per kWh (mid-point of 2.5 & 3) and MCV = 75 MW

- 4.4. In case of Over-Supply or Over-Demand, the AD and AS curves would be drawn as follows:
  - 4.4.1. Over Demand Orders



Participant	Price (Rs. / kWh)	Quantity (MW)	Time
Buyer 1	4	25	10:10
Buyer 2	4	50	10:50
Seller 1	2	25	11:00
Seller 2	3	25	11:10

The AD-AS curve for the above is as under:



MCP = Rs 4 per kWh and MCV = 50 MW

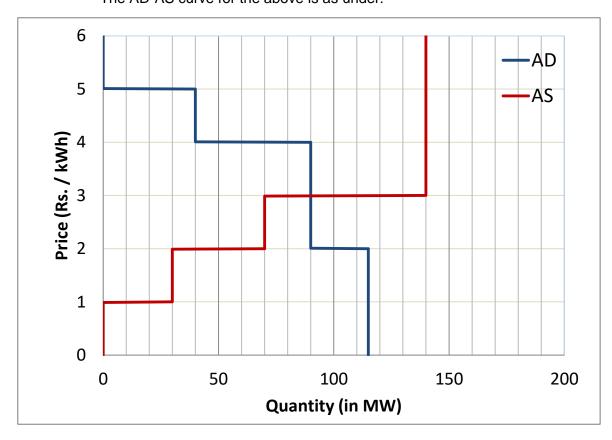
# 4.4.2. Over Supply Orders

Participant	Price (Rs / kWh)	Quantity (MW)	Time
Buyer 1	2	25	10:10
Buyer 2	4	50	10:30
Buyer 3	5	40	10:50



Participant	Price (Rs / kWh)	Quantity (MW)	Time
Seller 1	1	30	10:20
Seller 2	2	40	10:40
Seller 3	3	70	11:10

The AD-AS curve for the above is as under:



MCP = Rs. 3 per kWh and MCV = 90 MW

- 4.5. All the Sell Orders which have Price less than or equal to Market Clearing Price and all the Buy Orders which have Price more than or equal to Market Clearing Price qualify for matching.
- 4.6. All the Block orders would then be checked to see if the same can be included in all the hours in case the Average of MCP across the hours for which block order exist, fulfills the price of the block order.



- 4.7. Across all the time slots, the Block orders that are included as per step 4.6 above are traded first along with Normal orders which qualify both the price and volume criteria
- 4.8. In case of several equally placed orders, selection would be based on time precedence of the submitted orders. Order preference based on time precedence, in case of equally placed orders, shall be undertaken only for Block Orders. The order of priority is as below:
  - 4.8.1. Price Best quoted price shall be given highest preference
  - 4.8.2. Quantity Among equally priced orders, that block order which maximizes the executable volume is given higher preference
  - 4.8.3. Time Among equally priced orders with equal volume, the order submitted earlier would be given higher preference
- 4.9. Price Rounding off would be to the nearest defined price tick (as given in the Contract Specifications)
- 4.10. In some cases, an order may be rejected despite appearing to be a valid order on the basis of price. This happens in a situation where inclusion of such an order might result in change in MCP in an adverse direction or block orders getting unduly rejected. The reason for rejection is that in case if such order is accepted, the average price of market changes in such a way that the order is no longer justified to be in. This may be both due to price as well as volume harmonizing. Such orders are termed as paradoxically rejected orders.
- 4.11. In case of identification of a congested zone, the Market is split into multiple regions as per the congested corridor
- 4.12. For each Region the MCP and MCV is generated as per the above steps
- 4.13. The electricity flow from the Surplus Region is flown through the Congested corridor (subject to the available transmission capacity on the congested corridor) to the Deficit Region and helps in balancing the surplus / deficit mismatch to the extent of the flow in accordance with the principles detailed in Section 6 "Congestion Management Market Splitting"

## 5. The Matching Rules have been illustrated below:

5.1. Matching Rules – Flow

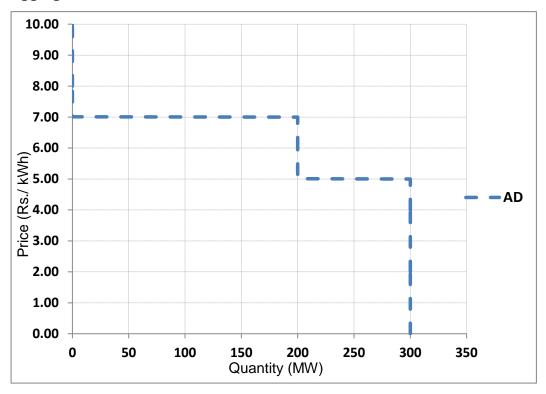
Orders

Sr. No	. Entity	Region	Buy/Sell	Quantity(MW)	Bid Price
					(Rs./KWh)



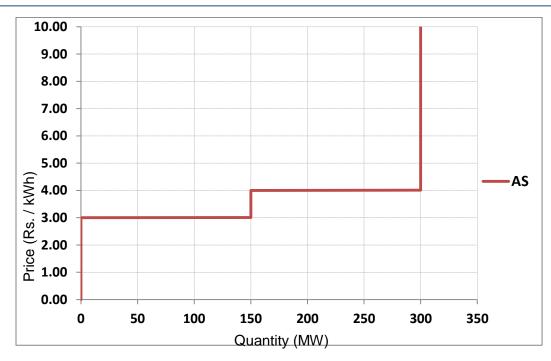
Sr. No.	Entity	Region	Buy/Sell	Quantity(MW)	Bid Price (Rs./KWh)
1	Α	North	Buy	100	5
2	В	South	Buy	200	7
3	С	West	Sell	150	4
4	D	West	Sell	150	3

# **Aggregate Demand Curve**

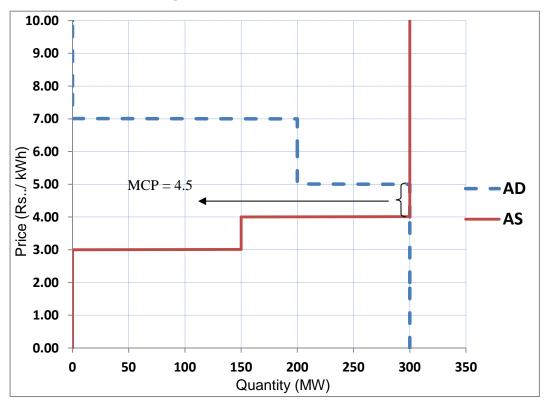


**Aggregate Supply Curve** 





# **Unconstrained Matching**



# **Trades after Unconstrained Matching would be:**



MCP = 4.5 (mid-point of 4 and 5)

Sr. No.	Buyer	Quantity
1	А	100
2	В	200

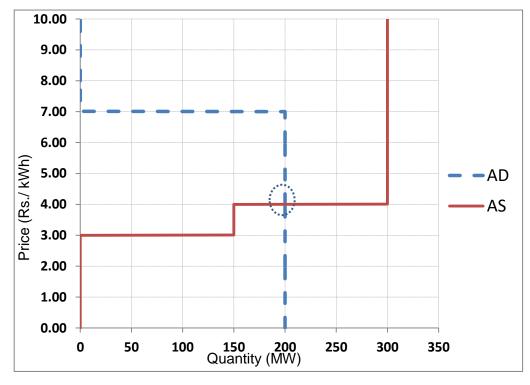
Sr. No.	Seller	Quantity	
1	D	100	
2	С	150	

## Congestion

However, after receipt of the constraints on various transmission corridors, let us assume that it is identified that there is congestion between the Northern Region and the Rest of India and only 50 MW can flow into the Northern Region from the Rest of India.

In such a case the overall market will be split into two markets, "Rest of India" and "Northern Region".

#### "Rest of India"

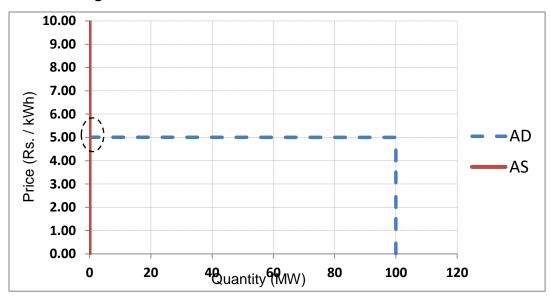


MCP = Rs. 4 per kWh and MCV = 200 MW



As we can see here, the MCP has shifted downwards to Rs. 4 per KWh from Rs. 4.5 per KWh, thus implying that there are more supplies available. Therefore "Rest of India becomes the "Surplus Region"

## **Northern Region**



## MCP = Rs. 5 per kWh and MCV = 0 MW

As we can see here, the MCP has shifted upwards to Rs. 5 per KWh from Rs. 4.5 per KWh, thus implying that there are more demand available than supply. Therefore the "Northern Region" becomes the "Deficit Region"

In view of the above, only 50 MW can flow into Northern Region while its demand was 100 MW. For this 50 MW, buyers at NR pay at Rs 5.00 per unit whereas the corresponding sellers from rest of the country are paid at Rs 4.00 per unit.

All the buyers bidding at a price equal or more than MCP of Surplus Region will get traded at MCP of the Surplus Region. However only the buyers at NR will get traded at MCP of Deficit Region.

Similarly, all the sellers bidding at a price equal or lower than MCP of Surplus Region will get traded at MCP of Surplus Region. All the sellers at Deficit Region (NR) will get traded at MCP of Deficit Region.

Therefore, the Final Obligations are

Sr. No.	Buyer	Quantity	Price
1	В	200	Rs. 4.00
2	А	50	Rs. 5.00 (MCP of Deficit Region)



Sr. No.	Seller	Quantity	Price
1	D	150	Rs. 4.00
2	С	50	Rs. 4.00
3	С	50	Rs. 5.00 (MCP of Deficit Region)

## 6. Congestion Management - Market Splitting

Congestion management on PXIL's system is handled through market splitting where the energy transaction and the associated transmission capacity between the bidding zones are handled concurrently.

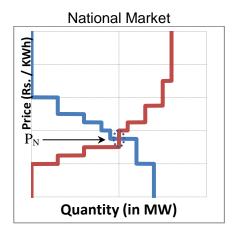
Once a congested zone is identified, based on unavailability of adequate transmission capacity to cater to the zone's demand, the congested zone is separated from the rest of the market.

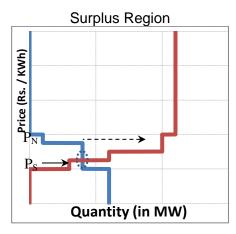
In the first instance, both the markets are cleared as standalone markets and then the deficit area which has the higher price is flown as much electricity as the capacity of the congested line will allow from the surplus area with the lower price.

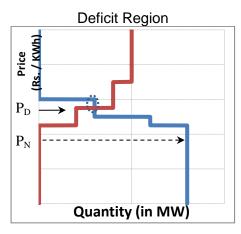
### A generic situation is described below:

In the first step, the unconstrained situation is run where all buy and sell orders are aggregated to form the aggregate demand (AD) and aggregate supply (AS) curves. The market clearing price of this unconstrained market is the Unconstrained Market Clearing Price (denoted by  $P_N$  herein below)

Once the congested zone is identified, the orders in the zones are taken separately and the price calculation done for each separately. The price curves for the two markets are as below:



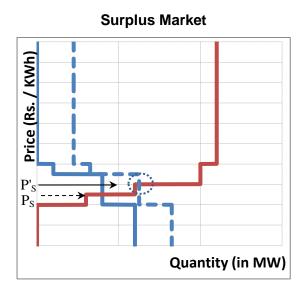


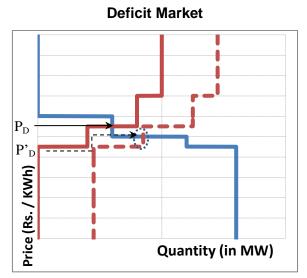




The MCP in the surplus region (denoted by  $P_S$  hereinabove) being lower than  $P_N$  indicates that extra sale capacity is available at  $P_N$  and therefore it is a surplus market. Conversely the MCP in the deficit region (denoted by  $P_D$  hereinabove) being higher than the  $P_N$  indicates that extra demand is available at  $P_N$  and therefore it is deficit market.

The available transmission capacity between the two markets is used such that electricity flow takes place from the surplus market to the deficit market. The available capacity is added as a demand in the surplus market and as supply in the deficit market. This results in the displacement of the price curves, as shown below.





The isolated market prices will now be at the intersection of the sale curve and displaced purchase curve in surplus market viz. P'<sub>S</sub> and at the intersection of the displaced sale curve and the purchase curve in the deficit market viz. P'<sub>D</sub>. As a result of the above action, the market prices in both the deficit as well as the surplus markets are evened out as much as possible and the transmission capacity is utilized so that the power flow exactly equals the available capacity.

The difference between the P'<sub>D</sub> and P'<sub>S</sub>, multiplied by the total electricity transfer carried out over the congested corridor, is the total congestion revenue.



## II. Continuous Trade Matching

In trading session of products with Continuous Matching methodology, the participants shall submit Orders on a continuous basis during the trading period. The Order will be matched on continuous basis with price-time priority.

Without prejudice to the generality of the above, in the Continuous Trading sessions, Buyers and Sellers will enter their Orders and the Orders will be matched as per the Order type, Price and Time of Order.

## 1. Rules for Continuous Matching: Price Time priority

- 1.1. In the contracts with Continuous matching, if two Orders entered in the terminals are eligible for a match as per the matching rules, then matching will take place instantly
  - 1.1.1. 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.
  - 1.1.2. The best buy Order is matched with the best sell Order for the same contract.
  - 1.1.3. The Orders are matched based on price and time priority. In case of more than one Order having the same price, the Order submitted at the earliest will get priority in matching.
  - 1.1.4. An order may match partially with another Order resulting in multiple trades.
  - 1.1.5. Members can proactively enter orders in the system, which will be displayed in the system till the full quantity is matched by one or more of counter-orders and result into trade(s) or is cancelled by the member.
  - 1.1.6. Alternatively, members may react to an order available in market watch and place orders. In a matched pair, the order lying unmatched is considered 'passive' (the one which was entered earlier) and the order that came later is considered 'active'.

## 2. Price matching (Traded Price):

- 2.1. Orders will always be matched at the passive order price.
  - 2.1.1. This ensures that the Orders with an earlier time stamping with same price get priority over the Orders that are entered later. The price of the first Order entered in the system will be considered as the traded price for the contract.



#### Illustration

Buy Order	Buyer Order Price	Sell Order Quantity	Sell Order Price
Quantity (MW)	(Rs./MWh)	(MW)	(Rs./MWh)
100	3,400	150	3,600
50	3,300	100	3,700
100	3,000	100	4,000
100	2,500	60	5,500
50	2,000	100	6,000

In the above, the 5 best Buy and 5 best Sell Orders are given. However, none of the Orders can match as the best buy Order price is lower than the best Sell Order price. These Orders will remain open and passive.

When a new participant enters a Buy Order for quantity 100 MW at price Rs. 3,650, this buy Order (active) shall match with the best passive Order i.e. at rate Rs. 3,600 and the matched quantity will be 100 MW. The Traded price shall be Rs. 3,600.

## 3. Types of Orders

The Order types that will be available for the contracts shall be notified through Circulars from time to time. Some of the Order Types that may be made available are as under:

3.1. Normal Order: A Normal order contains price-quantity pair(s) for a contract, where a Buyer is willing to buy all quantity up to the value specified at or below the quoted price and Seller is willing to sell all quantity up to the value specified at or above the quoted price.

## **Illustration:**

_	Buy Order	Buyer Order Price	Sell Order	Sell Order Price
Contracts	Quantity (MW)	(Rs./MWh)	Quantity	(Rs/MWh)
Contract 1	100	3,400	150	3,200

## MCV:

The entire 100 MW would get cleared against the resting Order quoted quantity, hence the MCV is 100 MW



## MCP:

The clearing price would be the resting order quoted price hence the MCP is Rs. 3,200 per MWh

3.2. Fill and Kill (FAK) Order: FAK means that the quantity which can be matched against resting order according to the matching rules of the selected product shall be matched and balance shall be immediately cancelled. FAK type orders would never rest in the order book.

#### Illustrations:

3.2.1. Entered FAK Sell quantity is more than Standing Buy order

Standing Limit order resting in system:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
Limit Order	Buy	100	2

FAK order is placed with below parameters:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
FAK	Sell	120	1.50

MCV is 100 MW, cancelled quantity is 20 MW and MCP is Rs. 2 per kWh

3.2.2. <u>Entered FAK Sell quantity is equal than Standing Buy order</u>
Standing Limit order resting in system:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
Limit Order	Buy	100	2

FAK order is placed with below parameters:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
FAK	Sell	90	1.50

MCV is 90 MW, cancelled quantity is 0 MW and MCP is Rs. 2 per kWh

3.2.3. Entered FAK Sell Order and no standing Buy order

FAK Order is placed with below parameters:



Order type	Side	Quantity (MW)	Price (Rs. / kWh)
FAK	Sell	120	2

MCV is 0 MW and cancelled quantity is 120 MW

## 3.2.4. Entered FAK Sell price is greater than standing Buy order

Standing limit Order resting in the system:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
Limit Order	Buy	100	2

## FAK Order is placed with below parameters:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
FAK	Sell	120	2.50

MCV is 0 MW and cancelled quantity is 120 MW

3.3. Fill or Kill (FOK) Order: FOK means that either the entire order quantity shall be matched against resting order according to the matching rules of the selected product or the order shall be cancelled i.e. either the order shall be matched fully or cancelled. FOK type orders would also never rest in the order book.

## **Illustrations:**

## 3.3.1. Entered FOK Sell quantity is more than Standing Buy order

Standing Limit order resting in system:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
Limit Order	Buy	100	2

## FOK order is placed with below parameters:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
FOK	Sell	120	1.50

MCV is 0 MW and cancelled quantity is 120 MW

## 3.3.2. Entered FOK Sell quantity is equal to standing Buy quantity



## Standing Limit order resting in system:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
Limit Order	Buy	100	2

## FOK order is placed with below parameters:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
FOK	Sell	100	1.50

MCV is 100 MW, cancelled quantity is 0 MW and MCP is Rs. 2 per kWh

## 3.3.3. FOK Sell quantity is less than standing Buy quantity

Standing Limit order resting in system:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
Limit Order	Buy	100	2

## FOK order is placed with below parameters:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
FOK	Sell	90	1.50

MCV is 90 MW, cancelled quantity is 0 MW and MCP is Rs. 2 per kWh

## 3.3.4. FOK Sell quantity is less than standing Buy quantity

FOK order is placed with below parameters:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
FOK	Sell	90	1.50

MCV is 0 MW and cancelled quantity is 90 MW

## 3.3.5. FOK Sell price is greater than standing Buy quantity

Standing Limit order resting in system:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
Limit Order	Buy	100	2



# FOK order is placed with below parameters:

Order type	Side	Quantity (MW)	Price (Rs. / kWh)
FOK	Sell	120	2.50

MCV is 0 MW and cancelled quantity is 120 MW

PXIL reserves the right to introduce other Order types in Continuous Matching methodology based on feedback received from participants. Any new order type or modification in the above will be communicated through Circular.



## III. Reverse Auction procedure

## 1. Procedure for conducting Reverse Auction session

## 1.1. Expression of Interest (EOI)

Buyer to create requisition for conducting Reverse Auction wherein it has to provide following information – Quantum, delivery duration (start and end date and start and end time slot), Minimum quantum to be Offered by Seller and Ceiling price above which no Sellers are eligible to participate in Reverse Auction

The Seller will submit their competitive Offers providing following information – Quantum, Offer price and Minimum Acceptable quantum for Sale

Reverse Auction	Particulars	
event parameter		
Quantum requisitioned	MW	
Type of Power	Conventional / RE-Solar / RE-Non Solar / Hydro	
Delivery period	Start Date and End Date of delivery	
Delivery period (time	a) RTC, or	
slot information)	b) Time block wise Start and end time block	
	During the delivery period	
Ceiling Price	Rs. / MWh	
Minimum quantum to	MW	
be Offered by Seller for		
participation		
Opening date and time	Start date and time for Offer submission	
of Offer submission		
Gate closure	Last date and time for Offer submission	
(i.e. Closing date and		
time of Offer		
submission)		
Reverse Auction	Start date and time	
timeline		
Number of auto-	nos. (if desired by Buyer)	
extension		

## 1.2. Submission of Interest Quantity (IQ) as response to EOI invited by Buyer

Sellers can participate in auction event by submitting their Interest Quantity (in MW) in Interest stage. Sellers who will submit margin money against their interest quantity to the Exchange during/after initiation of EOI by buyer will be allowed to participate in Initial Price Offer (IPO) stage.



#### 1.3. Initial Price Offer

The Sellers will submit their Offers (Quantum and Price) against the requisition created by Buyer with in the time lines applicable for each event.

Reverse Auction event	Particulars	
parameter		
Opening date and time of	Start date and time for Offer submission	
submitted Offers	Start date and time for Other submission	
Gate closure		
(i.e. Closing date and time	Last date and time for Offer submission	
of submitted Offer)		
Reverse Auction timeline	Start date and time	

The 'PRATYAY' system will analyse the prices Offered by different Seller and rank them. When two or more Offers are received at same price, the 'PRATYAY' system will rank the Offer based on time priority i.e. date and time of submitted Offers. The least cost Offer would be designated 'L-1', followed by 'L-2' and so on till all the Offers are listed.

All Offers received above Ceiling price will be rejected by 'PRATYAY' system at the time of Order entry and such Offers will not be considered in the Order book.

#### 1.4. Reverse Auction

During the auction session only prevailing lowest quoted price ('L-1') Offered by any Seller will be displayed. The Reverse Auction shall continue for period of 2 hours 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 ('L-1') the Reverse Auction would get auto extended by prescribed duration, e.g., if during the last 10 (ten) minutes before the scheduled close time of Reverse Auction, if an Offer is modified which is lower than the prevalent 'L-1', the close time of Reverse Auction will be automatically extended by 10(ten) minutes from the time of the last price Offer modified. This process of auto extension will continue till there is a period of 10 (ten) minutes during which no price Offer is modified which is lower than then prevailing 'L-1'.



The Sellers will be able to reduce their Offered price by Rs. 1/MWh or multiples thereof and increase their Offered quantum by 1MW or multiples thereof as may be specified by Exchange from time to time.

On closure of the Reverse auction process, all Offers will be ranked in ascending order of Offered prices.

Reverse Auction	Particulars	
event parameter		
Minimum Value	Rs. 1 per MWh	
Quotation step		
Minimum Volume	1MW	
Quotation Step		
Reverse auction	2 Hours or as defined by the Exchange	
duration		
Deadline period	10 minutes or as defined by the Exchange	
prior to close of	(In case Offered price is modified by any Seller during	
Reverse auction	the deadline period resulting in change in lowest selling	
duration	price, then the Reverse auction would be extended for	
	another duration of 10 minutes from the time of	
	modification)	
Buyer acceptance	The cut-off date and time prior to which the Buyer has to	
of Offer (s)	submit acceptance of Offer.	
	Non submission of acceptance of Offer prior to cut-off	
	period will result in cancellation of the Reverse Auction	
	event	

### 1.5. Allocation stage

During this stage the 'PRATYAY' system will enable Buyers to view the Sellers Offers ranked as 'L-1', 'L-2', 'L-3', ..., 'L-n' on completion of reverse auction session

## 1.6. Trade acceptance



Buyers shall communicate its acceptance / partial acceptance / rejection of the Offers in 'PRATYAY' software system within the cut-off period specified by Exchange applicable to such Reverse auction event.

Reverse Auction	Particulars
event parameter	
Buyer acceptance	The cut-off date and time prior to which the Buyer has to
of Offer (s)	submit acceptance of Offer(s)

The Buyer shall accept and procure power from Seller in the order of their ranking, such Offers not accepted by Buyer will stand rejected.

Non submission of acceptance of Offer prior to cut-off period will result in cancellation of the Reverse Auction event

## 2. Application for Scheduling

The Exchange shall submit application for Scheduling only for such Offers that have been accepted by Buyer. Application for Scheduling shall be submitted to the Nodal LDC 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 submitted on best effort basis on the first available date. The quantum approved by LDC shall be deemed to have been accepted by Buyer and Seller including variation between traded quantity and quantity as approved by LDC

## 3. Matching Rules for conducting Reverse auction

The matching Rules for conducting Reverse auction in Any Day Single Sided Contract shall be as under. PXIL shall reserve the right to amend the matching rules and inform the same to market participants by issuance of Circular from time to time.

#### 3.1. Reverse Auction

The auction step is initiated by creation of requisition by Buyer in 'PRATYAY' software system, an 'Expression of Interest' stage, after receipt of Offers in Initial Price Offer (IPO) stage, Reverse Auction stage is initiated. The principles of conduction Reverse Auction process are:



- a. For every Member/Client placing an Offer, the quoted price-volume combination would be held constant till the next quoted price-volume combination, if provided. Thus, a Sell quantity shall be assumed to remain constant between consecutive price points.
- b. Stacking of Offers would have price-time priority. In case of bids with same Offer price, stack would be prepared based on time priority i.e. allocation will be made to the Member/Client who has submitted earliest Offer. (Please refer Illustration 1 as provided later for better understanding on the matching priority)
- c. Trade acceptance: On conclusion of Reverse auction, the Buyer will have right to accept all or any Offer(s) based on raking. Such Offer(s) not accepted by Buyer will stand rejected
- d. Application for Scheduling: The Exchange shall submit application for Scheduling only for such Offers that have been accepted by Buyer

## 3.2. Rules for stacking of Offers in IPO and Reverse Auction stage

The Rules for stacking of Offers would go through the following steps:

- a. **Rule-1**: On announcement of 'Gate closure', all such Offers which have price less than or equal to Ceiling price are included for auction process. The submitted Offers are summed up at each price tick to arrive at aggregate quantum per price tick
  - Further, no Seller shall be allowed to submit their Offer at quantum less than the minimum quantum during the IPO stage and in case any Seller submits an Offer which is less than the prescribed minimum bid quantum, then such Offer shall not be accepted by 'PRATYAY' system
- b. Rule-2: The stack of Offers based on Price quoted by Sellers would be prepared. Least cost Seller would be designated 'L-1', followed by 'L-2', and so on till all Sell offers are ranked thus; ranking shall be in increasing order of their Offered price. If two or more Sellers submit the lowest priced Offer, then the Seller that had submitted the Offer earliest during the IPO stage will be ranked as 'L-1' and such Seller that had submitted Offer later would be ranked 'L-2', 'L-3', etc. based on time of submission of Offer. Such time based criteria is applicable for ranking all Offers that are submitted at same price during the auction session
- c. Rule-3: At the start of the auction process, the price of 'L-1' ranked Seller is displayed for all to view. Offers received from remaining Sellers ranked as 'L-2', 'L-3',



etc. as per Rule-2 above, shall not be displayed till the completion of auction session.

d. Rule-4: Reverse auction process commences for 2-hour period, or as defined by the Exchange, wherein all Sellers are allowed to revise their Offer by reducing their Offer price. With every modification in price the new ranking of Offer would be prepared and price of 'L-1' will be displayed. The reduction in Offer price during the reverse auction period or the extended session will enable such Seller to increase their Offer quantum, no Seller will be allowed to increase their Offered quantum unless reduction in Offer price has been made by such Seller.

When no revision in 'L-1' price is made within 10-minutes prior to scheduled close of auction window no extension in auction session will be made. On completion of 2-hour reverse auction window and the extended sessions, if any, the auction results will be declared capturing the last modified price entered by each Seller

- e. **Rule-5:** 10-minute prior to scheduled close of auction window, when a revised Offer is submitted which is lower than the lowest prevailing price i.e. Offer ranked as 'L-1' at that instant, the close time of auction window will be automatically extended by 10-minute or a period as defined by Exchange, from the time the new 'L-1' Offer was submitted by any Seller
- f. Rule-6: The process of auto extension will continue till there is a period of 10 (ten) minutes during which no price is received which is lower than the prevailing lowest price Offer.
  - i. Any revision in price within 10-minutes prior to scheduled close of auction window but if the revised price is not lesser than the prevailing lowest price then no extension would be provided
  - ii. The 'PRATYAY' system shall enable auto extension if there's revision in 'L-1' price. In case no revision in 'L-1' price occurs in any extended session then 'PRATYAY' system shall conclude the auction session
- g. Rule-7: If any Seller increases the Offered quantum as per Rule-4 above, then the revised quantum as Offered by such Seller would be considered as final Offered quantum for the auction event.

## 3.3. Trade allocation on completion of auction process



- a. **Rule-8:** The selection of Seller shall be on bucket filling basis as per their ranking at the close of auction session i.e., capacity quoted by 'L-1' Seller at 'L-1' price shall be allocated first, then capacity quoted by next lowest Seller (ranked as 'L-2') at price quoted by 'L-2' Seller shall be allocated and so on, till the purchase quantum requisitioned in the Reverse auction event is exhausted.
- b. **Rule-9:** The 'PRATYAY' system shall declare results displaying the price and quantum cleared as per bucket filling process provided in Rule-8 above. After declaration of auction result, the Buyer will have the following options:
  - Accept All Offers identified under bucket filling process upto the quantum requisitioned for purchase
  - ii. Accept any number of Offers whose cumulative quantum may be lesser than quantum requisitioned for purchase based on ranking provided in 'PRATYAY' system
  - iii. Reject all the Offers and not purchase any quantum from the auction event
  - iv. Buyer shall communicate the acceptance/rejection in the 'PRATYAY' system within the timeline and at least two days prior to start of delivery (after declaration of auction rankings for the current event) or as per timeline specified by the Exchange applicable to such Reverse auction event from time to time

#### **Illustration of matching in Reverse Auction**

1. The Buyer will initiate a Reverse auction by entering the following information in 'PRATYAY' trading system:

Reverse Auction event	Particulars	
parameter		
Quantum	400 MW	
Type of Power	Conventional power	
Delivery period (days	1 <sup>st</sup> October 2022 to 31 <sup>st</sup> October 2022	
information)		
Delivery period (time block	08:00 to 18:00 Hours	
information)		



Reverse Auction event	Particulars
parameter	
Ceiling Price (above which	Rs. 4,000 / MWh
Seller's Offer will be rejected	
in IPO stage)	
Minimum quantum to be	40 MW
Offered by Seller for	
participation	
Opening date and time of	Start date: 05-July-2022 at 10:00 Hours
Offer submission	
Gate closure	Last date: 26-July-2022 at 12:00 Hours
(i.e. Closing date and time of	
Offer submission)	
Reverse Auction timeline	26-July-2022 at 13:00 Hours
Minimum Volume Quotation	1 MW
step	
Minimum Value Quotation	Rs. 1 per MWh
step	

## 2. Offer entry session:

Sellers will submit Offers against the above auction event initiated by Buyer. At this stage at the time of Offer submission, as and when Offers are entered, the market watch window shall display the quantity information against each auction event, however, the identity of the Seller, quantum and price at which such Offers are received shall not be displayed to any other participants. Prior to 'Gate closure' the Seller shall have right to modify offered quantum or price or withdraw its Offer.

After 'Gate closure' no new Offer will be allowed to be submitted in 'PRATYAY' system. Later, Offer assimilation is undertaken by 'PRATYAY' system for Offers received for the auction event.

# 3. Illustration – 1: Ranking of Offers prior to start of auction

Consider the below Offers are submitted by different sellers during the bidding window allowed for the event

Table-1

Participant	Price (Rs. / MWh)	Quantity (MW)	Date of Offer submission	Time of Offer submission (in Hours)
Seller 1	3,250	50	05.07.2022	12:10



Participant	Price (Rs. / MWh)	Quantity (MW)	Date of Offer submission	Time of Offer submission (in Hours)
Seller 2	2,750	100	10.07.2022	14:50
Seller 3	2,900	120	14.07.2022	16:00
Seller 4	2,500	75	18.07.2022	13:59
Seller 5	3,750	100	22.07.2022	11:10
Seller 6	3,000	180	26.07.2022	12:50
Seller 7	2,900	60	12.07.2022	10:00
Seller 8	3,000	100	20.07.2022	11:30
Seller 9	3,000	50	26.07.2022	10:00
Total		835		

It is observed that two Sellers have offered quantity at price of Rs. 2,900 per MWh and three Sellers have offered quantity at price of Rs. 3,000 per MWh.

## Ranking prior to start of Auction session

After 'Gate closure' as per Rule-2 all the nine Offers are stacked based on price submitted by Sellers. The multiple Offers received at price Rs. 2,900/MWh are ranked based on date and time of their entry. Similarly, multiple Offers received at price Rs. 3,000/MWh are also ranked based on date and time of their entry.

Table-2

Participant	Price (Rs. / MWh)	Quantity (MW)
Seller 4	2,500	75
Seller 2	2,750	100
Seller 7	2,900	60
Seller 3	2,900	120
Seller 8	3,000	100
Seller 6	3,000	180
Seller 9	3,000	50
Seller 1	3,250	50
Seller 5	3,750	100
Total		835

The Offers submitted by Sellers are then ranked as under and the Offer of Seller ranked 'L-1' is displayed for all to view.

Table-3

Participant	Price (Rs. / MWh)	Quantity (MW)	Ranking
Seller S-4	2,500	75	L-1



Participant	Price (Rs. / MWh)	Quantity (MW)	Ranking
Seller S-2	2,750	100	L-2
Seller S-7	2,900	60	L-3
Seller S-3	2,900	120	L-4
Seller S-8	3,000	100	L-5
Seller S-6	3,000	180	L-6
Seller S-9	3,000	50	L-7
Seller S-1	3,250	50	L-8
Seller S-5	3,750	100	L-9
Total		835	

Based on Offer submission information received as Table-1 above, at price Rs. 2,900/MWh, the Seller S-7 is ranked as 'L-3' and Seller S-3 is ranked as 'L-4' since Seller S-7 had submitted Offer on 14.03.2022 and Seller 'S-3' has submitted on 12.03.2022. Similarly, the ranking for multiple Offers received at same price of Rs. 3,000/MWh is made based on date and time of Offer submission recorded in 'PRATYAY' system. Thus, in the above Offer set:

Lowest priced Offer: Rs. 2,500/MWh

Quantum fulfillment: Based on the ranking of Offers, the quantum offered by Sellers S-4, S-2, S-7, S-3 and part quantum of S-8 are sufficient to meet the purchase quantum requested by Buyer.

# 4. Illustration-2: Revised price lesser than prevailing lowest price before start of last 10-minute deadline

After the start of Reverse auction process, when during the 30-minute auction process, modifications in price are made by Seller within 20 minutes period from start of auction session and even if the revised price submitted by the Seller is lesser than the prevailing lowest price then auction session would not be extended.

Revision initiated by Sellers:

Two Sellers S-2 and S-3 revise their Offer price, then the system will verify two parameters:

(i) Price revision: Whether the revised price is lesser than the earlier lowest Offer price of Rs. 2,500/MWh to determine change in Ranking



(ii) Time of revision: Whether the revision is made during the schedule deadline of last 10-minute period prior to scheduled close of auction to determine if auction process is to be extended

Table-4

Participant	Earlier Price (Rs. / MWh)	Revised Price if any (Rs. / MWh)	Whether revised Price is lesser than earlier lowest Offer price
Seller S-4	2,500	No Change	Not Applicable
Seller S-2	2,750	2,450	Yes
Seller S-3	2,900	2,800	No
Seller S-7	2,900	No Change	Not Applicable
Seller S-8	3,000	No Change	Not Applicable
Seller S-6	3,000	No Change	Not Applicable
Seller S-9	3,000	No Change	Not Applicable
Seller S-1	3,250	No Change	Not Applicable
Seller S-5	3,750	No Change	Not Applicable

The 'PRATYAY' system will capture the time at which revision in Offer price has been made by the Seller and check if any revision in Offer price is made within the last 10-minute deadline of close of auction process.

Table-5

Participant	Earlier Price (Rs. / MWh)	Revised Price if any (Rs. / MWh)	Time at which revision is made after commencement of auction process	Whether the revision is made within the 10-minute deadline of close of auction
Seller S-2	2,750	2,450	10 <sup>th</sup> minute	No
Seller S-4	2,500	No Change	Not Applicable	Not Applicable
Seller S-3	2,900	2,800	16 <sup>th</sup> minute	No
Seller S-7	2,900	No Change	Not Applicable	Not Applicable
Seller S-8	3,000	No Change	Not Applicable	Not Applicable
Seller S-6	3,000	No Change	Not Applicable	Not Applicable
Seller S-9	3,000	No Change	Not Applicable	Not Applicable
Seller S-1	3,250	No Change	Not Applicable	Not Applicable
Seller S-5	3,750	No Change	Not Applicable	Not Applicable

From the above table it can be observed that Seller S-2 has entered revised price at 10<sup>th</sup> minute and Seller S-3 has entered revised price at 16<sup>th</sup> minute and no other



Sellers have entered revised prices. The system will then re-compute the revised ranking as under:

Table-6

Participant	Price (Rs. / MWh)	Quantity (MW)	Ranking
Seller S-2	2,450	100	L-1
Seller S-4	2,500	75	L-2
Seller S-3	2,800	120	L-3
Seller S-7	2,900	60	L-4
Seller S-8	3,000	100	L-5
Seller S-6	3,000	180	L-6
Seller S-9	3,000	50	L-7
Seller S-1	3,250	50	L-8
Seller S-5	3,750	100	L-9
Total		835	

Thus, the revised configuration would be as under:

Lowest priced Offer: Rs. 2,450/MWh

Quantum fulfillment: Based on the ranking of Offers, the quantum offered by Sellers S-2, S-4, S-3, S-7 and part quantity of S-8 are sufficient to meet the purchase quantum requisitioned by Buyer. Further, from the above table, it can be observed that revision in price made by Sellers S-2 and S-3 has improved their ranking.

Since no price revisions are made during the 10-minute deadline of close of auction session, the above ranking would be freezed and results would be informed to the Buyer as per Rule 4. The Buyer would convey acceptance/rejection of Offer as per Rule 9 in 'PRATYAY' system, based on response received from Buyer in 'PRATYAY' system, the Exchange will proceed with submission of application for Offer(s) accepted by the Buyer. In case the Buyer rejects all the Offers, the same would be informed to the Sellers.

# 5. Illustration-3: Revised price lesser than prevailing lowest price made within last 10-minute deadline

After the start of Reverse auction process, when during the 30-minute auction process, modifications in price are made by Seller during the last 10-minute period prior to scheduled close of auction and the revised price is lesser than the prevailing lowest price then as per Rule-5 auction session would be extended by 10-minutes.



Consider a case where the same Seller S-2 revises the price in 24<sup>th</sup> minute which is within the 10-minute period prior to scheduled close of auction as under:

Table-7

Participant	Earlier Price (Rs. / MWh)	Revised Price if any (Rs. / MWh)	Time at which revision is made after commencement of auction process	Whether the revision is made within the 10-minute deadline of close of auction
Seller S-2	2,750	2,450	24 <sup>th</sup> minute	Yes
Seller S-4	2,500	No Change	Not Applicable	Not Applicable
Seller S-3	2,900	2,800	16 <sup>th</sup> minute	No
Seller S-7	2,900	No Change	Not Applicable	Not Applicable
Seller S-8	3,000	No Change	Not Applicable	Not Applicable
Seller S-6	3,000	No Change	Not Applicable	Not Applicable
Seller S-9	3,000	No Change	Not Applicable	Not Applicable
Seller S-1	3,250	No Change	Not Applicable	Not Applicable
Seller S-5	3,750	No Change	Not Applicable	Not Applicable

From the above table it can be observed that Seller S-2 has entered revised price at 24<sup>th</sup> minute and Seller S-3 has entered revised price at 16<sup>th</sup> minute and no other Sellers have entered revised prices. The system will then re-compute the revised ranking as under:

Table-8

Participant	Price (Rs. / MWh)	Quantity (MW)	Ranking
Seller S-2	2,450	100	L-1
Seller S-4	2,500	75	L-2
Seller S-3	2,800	120	L-3
Seller S-7	2,900	60	L-4
Seller S-8	3,000	100	L-5
Seller S-6	3,000	180	L-6
Seller S-9	3,000	50	L-7
Seller S-1	3,250	50	L-8
Seller S-5	3,750	100	L-9
Total		835	

Thus, the revised configuration would be as under:

Lowest priced Offer: Rs. 2,450/MWh



As per Rule-5, since revision in 'L-1' has occurred during last 10-minute of the deadline, the auction session will be extended for another 10-minute, allowing Sellers to revise their prices. In case during the first extended session Seller S-4 revised the price in 3<sup>rd</sup> minute and Seller S-3 in the 4<sup>th</sup> minute of the new period and no other Seller revise their Offered price as under:

Table-9

Participant	Earlier Price (Rs. / MWh)	Revised Price if any (Rs. / MWh)	Time at which revision is made after commencement of auction process	Whether the revision is made within the 10-minute deadline of close of auction
Seller S-2	2,450	No Change	Not Applicable	Not Applicable
Seller S-4	2,500	2,450	20 <sup>th</sup> minute	No
Seller S-3	2,800	2,400	10 <sup>th</sup> minute	No
Seller S-7	2,900	No Change	Not Applicable	Not Applicable
Seller S-8	3,000	No Change	Not Applicable	Not Applicable
Seller S-6	3,000	No Change	Not Applicable	Not Applicable
Seller S-9	3,000	No Change	Not Applicable	Not Applicable
Seller S-1	3,250	No Change	Not Applicable	Not Applicable
Seller S-5	3,750	No Change	Not Applicable	Not Applicable

As per Rule-5 and Rule-6, the auction session would be extended for 2<sup>nd</sup> time for a 10-minute period since the revised Offer price submitted by Seller S-3 was lesser than the prevailing 'L-1' price. The 2<sup>nd</sup> extension of 10-minute duration would start from the time revised Offer of Seller S-3 was submitted in 'PRATYAY' system.

The system will then re-compute the revised ranking as under:

Table-10

Participant	Price (Rs. / MWh)	Quantity (MW)	Ranking
Seller S-3	2,400	120	L-1
Seller S-2	2,450	100	L-2
Seller S-4	2,450	75	L-3
Seller S-7	2,900	60	L-4
Seller S-8	3,000	100	L-5
Seller S-6	3,000	180	L-6
Seller S-9	3,000	50	L-7
Seller S-1	3,250	50	L-8
Seller S-5	3,750	100	L-9



Participant	Price (Rs. / MWh)	Quantity (MW)	Ranking
Total		835	

Then, the revised configuration would be as under:

Lowest priced Offer: Rs. 2,400/MWh

Quantum fulfillment: Based on the ranking of Offers, the quantum offered by Sellers S-3, S-2, S-4, S-7 and part quantity of S-8 are sufficient to meet the purchase quantum requisitioned by Buyer.

Since no price revisions were made during the 10-minute deadline of close of auction session, the above ranking would be freezed and results would be informed to the Buyer as per Rule-4. As per Rule-9, Buyer would convey acceptance/rejection of Offers in 'PRATYAY' system, based on response received from Buyer, the Exchange will proceed with submission of application for Offer(s) accepted by the Buyer. In case, Buyer rejects all the Offers, the same would be informed to the Seller and auction event will be closed.

# **6.** Illustration-4: Revised quantum more than Minimum quantity criteria After the start of Reverse auction process, when during the 30-minute auction process, modifications in Offered quantum is made by any Seller then the same would be considered as final Offered quantum during the auction event.

Consider the case where the Offered quantum by different Sellers at the start of Reverse auction is as under:

Table-11

Participant	Price (Rs. / MWh)	Quantity (MW)	Ranking
Seller S-4	2,500	75	L-1
Seller S-2	2,750	100	L-2
Seller S-7	2,900	60	L-3
Seller S-3	2,900	120	L-4
Seller S-8	3,000	100	L-5
Seller S-6	3,000	180	L-6
Seller S-9	3,000	50	L-7
Seller S-1	3,250	50	L-8
Seller S-5	3,750	100	L-9
Total		835	



In the above table the lowest priced Offer is: Rs. 2,500 / MWh

During the auction process Sellers S-4, S-2, S-7, S-3, S-8 and S-6 propose to increase their Offered quantum, then as per Rule-4 the system will verify whether simultaneous reduction in Offered price has been made by Seller. In case no reduction in Offered price is made by such Sellers, then 'PRATYAY' system will not allow increase in Offer quantum to such Seller.

Table-12

Participant	Price (Rs. / MWh)	Earlier Offer quantum (MW)	Revised quantum (MW)	Whether Seller has revised Offer price (Yes / No)	Quantum to be considered for auction session
Seller S-4	2,500	75	50	No	75
Seller S-2	2,750	100	50	No	100
Seller S-7	2,900	60	60 (i.e., no revision)	Not applicable	60
Seller S-3	2,900	120	80	No	120
Seller S-8	3,000	100	75	No	100
Seller S-6	3,000	180	120	No	180
Seller S-9	3,000	50	50 (i.e., no revision)	Not applicable	50
Seller S-1	3,250	50	50 (i.e., no revision)	Not applicable	50
Seller S-5	3,750	100	100 (i.e., no revision)	Not applicable	100
Total		835	635		835

Since in the above case the Sellers did not reduce their Offer price, the 'PRATYAY' system has not allowed Sellers to revise their Offer quantum as per Rule-4. However, when reduction in Offered price is made by Sellers then 'PRATYAY' system will allow increase in Offered quantum.

Table-13

Participant	Price (Rs. / MWh)	Earlier Offer quantum (MW)	Revised price (Rs. / MWh)	Whether revised price is lesser than earlier price submitted by Seller	Price to be considered for auction process (Rs. / MWh)
Seller S-4	2,500	75	2,495	Yes	2,495
Seller S-2	2,750	100	2,695	Yes	2,695
Seller S-7	2,900	60	2,899	Yes	2,899



Participant	Price (Rs. / MWh)	Earlier Offer quantum (MW)	Revised price (Rs. / MWh)	Whether revised price is lesser than earlier price submitted by Seller	Price to be considered for auction process (Rs. / MWh)
Seller S-3	2,900	120	2,899	Yes	2,899
Seller S-8	3,000	100	2,999	Yes	2,999
Seller S-6	3,000	180	2,999	Yes	2,999
Seller S-9	3,000	50	No change	Not Applicable	3,000
Seller S-1	3,250	50	No change	Not applicable	3,250
Seller S-5	3,750	100	No change	Not applicable	3,750
Total		835			

Such entities that have reduced their Offer price will be allowed by 'PRATYAY' system to increase their Offer quantum and the increased quantum will then be considered for auction process, thus Sellers S-4, S-2, S-7, S-3, S-8 and S-6 are allowed to increase their Offer quantum.

Table-14

Participant	Price (Rs. / MWh)	Earlier Offer quantum (MW)	Revised quantum (MW)
Seller S-4	2,495	75	80
Seller S-2	2,695	100	105
Seller S-7	2,899	60	75
Seller S-3	2,899	120	125
Seller S-8	2,999	100	101
Seller S-6	2,999	180	181
Seller S-9	3,000	50	50 (i.e., no change)
Seller S-1	3,250	50	50 (i.e., no change)
Seller S-5	3,750	100	50 (i.e., no change)
Total		835	

The above revised Offer price and quantum of different Sellers would be considered for auction process. As per Rule-7 the revised Offer quantum would be considered by 'PRATYAY' system to prepare new ranking as under

Table-15:

Participant	Price (Rs. / MWh)	Revised quantum (MW)	Ranking
Seller S-4	2,495	80	L-1



Participant	Price (Rs. / MWh)	Revised quantum (MW)	Ranking
Seller S-2	2,695	105	L-2
Seller S-7	2,899	75	L-3
Seller S-3	2,899	125	L-4
Seller S-8	2,999	101	L-5
Seller S-6	2,999	181	L-6
Seller S-9	3,000	50	L-7
Seller S-1	3,250	50	L-8
Seller S-5	3,750	100	L-9
Total		867	

It is observed that with revision in Offered quantum made by few Sellers, the cumulative quantum available in auction process has increased from earlier quantum of 835 MW to 867 MW. The above revised cumulative quantum of 867 MW offered by different Sellers would be considered for auction process.

The increased quantum shall be considered as final quantum and such Seller shall have opportunity to further increase its Offered quantum prior to completion of the auction process.



# 17. Annexure VI: Terms and conditions applicable for Term Ahead Market Contracts These Terms and Conditions are applicable for Contracts operating under provision of Regulation 5(2) and Regulation 5(3) of CERC (Power Market) Regulations, 2021

#### 1. Margin

The payment security mechanism shall be as follows:-

Members would have to make available Margins at different phases of transaction cycle, including pre-bid margin, post trade margin and/or delivery margin, as specified by Exchange without fail before submission of Bids/Offers. Bids/Offers will not get executed in case sufficient margins are not maintained by Members. The Exchange reserves its rights to change the margin requirements from time to time as felt necessary and will be notified to members through the issue of circular. The margins may be in the form of Bank Guarantee, FD, Cash, Bank Limit or any other such instrument as may be notified by the exchange from time to time. For the unmatched trades, the margin will be released to the Buyer.

When Buyer/Seller fails to submit margins after conclusion of transaction, as per timelines applicable for each Contract, the Exchange at its discretion may cancel the transaction and impose penalty on defaulting entity.

In case of any default in payment Deposits/Margins placed with the Exchange will invoke the same to make good the default in payment. All other forms of margin collected for other products by the Exchange till such time may also be impounded. Exchange reserves its right to change the margin requirements from time to time as felt necessary.

#### 2. Adherence to Contract

Members are notified that, all Contracts (transactions) shall be for delivery of power as per the request submitted by the Exchange and scheduled by NLDC / RLDCs / SLDCs subject to following conditions:

- i. The contracts are settled only by physical delivery without netting
- ii. The rights and liabilities of parties to the Contracts are not transferable
- iii. No such Contract is performed either wholly or in part by any means whatsoever, as a result of which the actual delivery of electricity covered by the Contract or payment of the full price therefor is dispensed with



- iv. No Circular trading shall be allowed and the rights and liabilities of parties to the specific delivery contracts shall not be transferred or rolled over by any other means whatsoever
- v. The trading shall be done only by authorized grid connected entities or trading licensees on behalf of grid connected entities, as participants
- vi. The Contracts can be annulled or curtailed, without any transfer of positions, due to constraints in the transmission system or any other technical reasons, as per the principles laid down by CERC in this regard. However, once annulled, the same contract cannot be reopened or renewed in any manner to carry forward the same transaction.
- vii. The capacity offered, as a sell bid in the Contracts from a resource in the same time-block, shall be separate and non-overlapping. Non-compliance of the same by any of the parties to the transaction shall lead to its debarment as a member or client and/or revocation or suspension of registration, along with the other actions for market abuse taken under the CERC (Power Market) Regulations, 2021 and other applicable Regulations of the Commission

# 3. Penalty

The Contract is a physical delivery contract between specific entities. To deter default motivated by commercial considerations of participants due to market price variation a stringent Penalty structure will be put into place. Sanctity of Contract needs to be maintained and hence Penalty will be levied for wilful default in payment or delivery to profit from better price in other markets or any action contrary to the rules of the exchange or any other law / regulation in force.

On failure to deliver obligated quantum as provided in the Contract by the Seller, the difference between the obligated quantity and actual delivery will be settled by Seller under Deviation Settlement Mechanism.

Exchange reserves its right to modify the penalty from time to time as felt necessary.

#### 4. Settlement

There would be a Daily Billing Cycle and Daily Payment for each of the valid contracts transacted during the day. Buyer will make the payment on the delivery day and the Seller will receive payment one day after the delivery day for all the



Contracts. The detailed settlement cycle will be notified by the Exchange from time to time.

Exchange reserves its right to change the settlement cycle from time to time as felt necessary.

# 5. Validity and Tenure

The Contract Period and validity will be notified by the Exchange from time to time.

#### 6. T-GNA from relevant LDCs

Both the Buyer and Seller agree to provide all the details and/or enter into any agreement as may be required by the concerned RLDC/SLDC for providing Open Access.

#### 7. NOC from SLDC

Buyer and Seller shall obtain necessary Concurrence from SLDC and/or SEB / Distribution licensee / Electricity department /any Nodal agency as nominated by the SERCs / Joint ERCs of the State / Uts and/or any other authority of the State / UT for undertaking third party sale of power and/or energy transaction on the Exchange platform, if necessary. In case, the Member doesn't receive SLDC concurrence or receives concurrence for part of the quantity, the balance quantity will get closed out and Exchange will seek explanation from the member.

The penalty amount will be equivalent to pre-bid margin of the Buyer/Seller whichever is higher capped at Rs. 100/MWh, the Exchange shall deduct exchange administrative charge being lower of 10% of penalty amount or Rs. 10,000/(including taxes) and credit the balance penalty amount to non-defaulting party as compensation.

The Exchange reserves the right to amend the penalty structure by issuing a Circular from time to time.

# 8. E-Bidding

The Exchange reserves its right to participate in E-bidding as per the existing "Procedure for T-GNA" or any amendment made from time to time. The Exchange will have the right to participate in the e-bidding on behalf of the Members subject to the maximum transmission charges as may be notified by the Member

#### 9. Transaction Fee

Transaction Fee for Contracts operating under provisions of Regulation 5(2) and Regulation 5(3) of CERC (Power Market) Regulations, 2021 shall be prescribed by Exchange by issuance of Circular from time to time.



#### 10. Revision in Schedule

The Exchange shall not revise the schedule once application for schedule has been made. In case System Operator on account of reasons other than force majeure or constraints in the transmission corridor revises the schedule, a penalty shall be imposed on defaulting Member or Client, as the case may be.

The penalty amount will be equivalent to shortfall in contracted quantity at the rate of 20% of the trade price i.e. ([contracted quantity-delivered quantity] \* trade price\*0.20) or as may be specified by the Exchange from time to time. The penalty amount shall be passed on to counterparty as compensation after adjustment of applicable charges, if any, and deducting administrative charges for the Exchange which will be 5% of the penalty amount or Rs. 10,000 (including taxes).

The penalty amount shall be passed on to the counterparty at the end of the contract duration or at the time of cancellation of the contract.

# 11. T-GNA Surrender & Penalty

In case Buyer surrenders T-GNA application on request of Seller then all the penalties, damages, Trading margin, T-GNA Charges, application fees, processing fees shall be borne by Seller and vice versa. Exchange reserves its right to change the settlement cycle from time to time as felt necessary.

# 12. Default in Payment

Non maintenance of sufficient margin required for a transaction shall be considered as default in payment by Member for the transaction, then the Exchange will apply to the concerned RLDC / SLDC for cancellation of transaction and/or schedule and levy penal charges on the defaulting Member who has failed to maintain the specified margin. The defaulting Member's transmission charges so refunded by the LDC (RLDC/SLDC) to the Exchange in lieu of the cancellation of trade shall be forfeited, paid to the counterparty (non-defaulting entity of transaction) after deduction of the Exchange transaction charges.

#### 13. DSM Charges

The Schedule and Despatch of power shall be coordinated with respective RLDCs/SLDCs as per the relevant provisions of CERC (Indian Electricity Grid Code) Regulations, 2023, CERC (Deviation Settlement Mechanism and related matters) Regulations, 2022 and its amendment from time to time, various statutory Regulations/Orders /Directives/Procedures/Guidelines/Notifications issued by CERC / RLDCs / RPCs and/or any other relevant authority.



In the event Seller/Buyer does not adhere to the schedule prepared and adopted by various RLDC / SLDC (with the consent of Seller and Buyer at the time of scheduling), and the nonadherence to the adopted schedule results in deviation of power which results into Deviation Settlement Mechanism charge (DSM charges), the same shall be borne by Seller/ Buyer for that respective matched trade. Buyer shall pay to Seller for the energy based on the implemented (final) schedule.

# 14. Power Supply & Scheduling

The evacuation of power is subject to technical and transmission corridor constraints and Force Majeure conditions. Scheduling and despatch of the power shall be coordinated by Exchange with the respective RLDC/SLDC as per relevant provisions of IEGC / State Grid Code and the decision of RLDCs / RPCs and/or SLDC. Buyer and Seller party to the transaction should submit Schedule to RLDC/SLDC as provided in the Obligation report.

Any shortfall between the obligation issued by Exchange and the scheduled quantum will be settled by respective Buyer and/or Seller under Deviation Settlement mechanism as per the procedure laid down by CERC or any other settlement system / procedure /guidelines prescribed by concerned SERC.

The Exchange shall reserve the right to amend the treatment of shortfall by issuing a Circular from time to time.

#### 15. Liability and Default Compensation

Defaulting party will compensate the counter party as per the norms Prescribed by the Exchange from time to time.

#### 16. Force Majeure

The supply of power from Seller to Buyer shall be subject to "Force Majeure" conditions, as defined below.

- Any situation which in the opinion of System Operator is a Force majeure condition including curtailment imposed by System Operator in scheduling of power due to constraints in the transmission system
- b) The contracted power will be treated as deemed reduced for the period of Force majeure as may be validated by the concerned System Operator without any liability on Buyer and Seller.

#### 17. Indemnification

Both Buyer and Seller (referred to as Parties and individually as Party) Each Party shall indemnify, defend and hold harmless the other, its directors, members of the



Board, partners, assigns, trustees, agents, officers and employees, against all claims, demand, judgments and associated costs and expense, related to property damage, bodily injuries or death suffered by third parties resulting from breach of its obligation by such Party under this Agreement except to the extent that any such claim has arisen due to a negligent act or omission, breach of contract or breach of statutory duty on the part of the other Party, its contractors, servants or agents.

Both the Parties agree to indemnify PXIL, NLDC, RLDCs, SLDCs against any claim for damages, losses and actions, including those relating to any injury to or to death of any person or damage to any property of any person demands, suits, recoveries, costs and expenses, attorney fees, against the third parties, arising out of or resulting from or attributable to the transactions on the Exchange.

#### 18. Dispute Resolution

If any dispute or difference of any kind whatsoever ("Dispute") shall arise between the Parties in connection with or arising out of this Agreement or out of the breach, termination or invalidity of the Agreement hereof, resolution of the same shall be in accordance with the Bye laws of the Exchange.

## 19. Termination of Agreement

a. In case Buyer doesn't make timely payment, Seller shall have right to terminate prevailing arrangement without prejudice to all the rights to recover the amounts due to Seller. Buyer may be given a Cure Period wherein he can inform the Exchange about the default and can make good the default. If the Buyer makes good the default within the Cure Period then the schedule will continue as per scheduled. In case the Buyer doesn't make good the default then the schedule will be cancelled and Seller will get 25% of the outstanding trade value below 80% of the schedule.

Provided however that the Buyer can avail of the cure period only for some specific instances during the entire duration of the delivery of the Product. The duration of the Cure Period and the number of instances of the cure period will be notified by the Exchange and would be subject to modification by the Exchange from time to time.

b. In case Seller defaults consistently for 2 days or the term of power contracted, whichever lower in supply of power, then Buyer shall have right to terminate prevailing arrangement and recover full cost of T-GNA charges till drawal point.



- c. In case of default by either party, the other party will issue a notice with a period of 2 days before terminating the agreement.
- d. Extended Force Majeure wherein Party uses all reasonable efforts to remedy, as soon as practicable, its inability to perform the affected obligations

In case of termination of agreement due to clause a, b and c, the non-defaulting party shall be paid the penalty amount. However in case of termination of agreement due to clause d, no penalty shall be paid to any of the parties involved.

# 20. Notices and Correspondence

All notices for billing, load dispatch and correspondence must be delivered personally, by registered or certified mail or facsimile to Exchange at the following addresses mentioned: Sumer Plaza, 9<sup>th</sup> floor, Unit no – 901, Marol Maroshi Road, Andheri(East), Mumbai-400 059, India.

## 21. Authority

Both Parties agree, that they have all the legal power and authority to execute this Agreement and carry out the terms, conditions, provisions and covenants hereof.

#### 22. Survival

The expiry or termination of this Agreement shall not affect any right of the party to receive payment as per the terms of this Agreement.

#### 23. No Consequential or Indirect Loss

The liability of the Buyer and Seller shall be limited to that explicitly provided in this Agreement. Notwithstanding anything contained in this Agreement, under no event shall Buyer or the Seller claim from one another any indirect or consequential losses or damages.

#### 24. No Waiver

No failure or neglect on the part of either Party to exercise any right or remedies under this Agreement and no single or partial exercise thereof shall preclude any further or other exercise of such rights and obligations. Further any delay or omission by either Party to exercise any right or power arising from any breach or default by the other Party in any of the terms and conditions or provisions of this Agreement shall not be construed to be a waiver of such breach or default or subsequent default of the same or other terms, conditions, provisions and covenants.

#### 25. Governing Law



This Agreement shall be governed by and construed in accordance with laws of India.



# 18. Annexure VII: Certificate of Purchase of Renewable Energy

Certificate issued for transaction in different Contracts for purchase to Renewable Energy to a Buyer

	PXIL Transforming Power Markets		
POWER	EXCHANGE INDIA LIN	IITED	
Certificate	of Purchase of Renewabl	e Energy	
Number C - PXNS082201400	6 Issued On: Da	ite ]	
Serial No PXI/01082022/N	S/00140		
Buyer name: []			
	Energy pure	chased: [	MWh
	Energy Type (Solar / Win	nd /Hydro / Biomass	etc.)
: [	s purchased [quantum in MWh]source during the period ia Limited.	50000000000000000000000000000000000000	
	ereby is issued and shall be held		
	of Hon'ble CERC as amended from		ne
Bye - laws, Rules and Busine	ss Rule of Power Exchange India	a Limited.	
Power Exchange India Limited			
Regd. Office: Power Exchange India Ltd 9th Floor, 901	, Sumer Plaza, Marol Maroshi Road, Marol Andheri (East), N	Aumbai 400 059, India	
CIN- U74900MH2008PLC179152, Phone no. + 91 22 4 Email: pxi_mktops@pxil.co.in	4009 6867/87; Fax: + 91 22 40098690/33; Web Site:www.pc	werexindia com.	
ENVERTED TO THE PROPERTY.	generated statement hence doc	esn't require signatu	ire.

The Exchange reserves the right to add or delete and/or modify any additional information mentioned in the above template of Certificate to meet market participants requirement from time to time



# 19. Version Control

S No.	Version number	Date	Particulars
1	1 Series	15 <sup>th</sup>	Compliance to CERC (Power Market) Regulations,
		September	2010
		2010	
		onwards	
2	2.0	11 <sup>th</sup> May	Revision in Rules, Bye Laws, Business Rules to align
		2022	with CERC (Power Market) Regulations, 2021
3	2.1	5 <sup>th</sup> August	i. Introduction of longer tenure contracts for
		2022	transacting in Conventional and Renewable
			energy
			ii. Introduction of Hydro Green Term Ahead
			Contracts
			iii. Introduction of Hydro bid type Contingency
			Contracts and Hydro bid type Term Ahead Contracts
4	2.2	16 <sup>th</sup>	i. Removal of cap prescribing number of
7	2.2	December	session extensions applicable in Reverse
		2022	Auction event
		2022	ii. Non-display of 'L-1' Offered quantum
			during Reverse auction and extended
			session, if any
			iii. Non-display of cumulative quantum
			Offered by all Sellers during Reverse
5	2.3	19 <sup>th</sup> April	auction and extended session, if any
5	2.3	19 <sup>th</sup> April 2023	Introduction of High Price Day Ahead Market ('HP-DAM') Contract
6	2.4	30 <sup>th</sup> May	Introduction of Tertiary Reserve Ancillary Services
U	۵.٦	2023	(TRAS) Contract
7	2.5	29 <sup>th</sup>	i. Introduction of High Price Bilateral Contract
,	2.0	September	ii. Implementation of T-GNA
		2023	