BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION

PETITION NO. ....../MP/2022

IN THE MATTER OF:

Petition under Section 66 of The Electricity Act, 2003 read with the Regulation 25 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 for approval of introduction of Hydropower Contracts in Green Contingency Contracts and Green Term Ahead Contracts and additional Term Ahead Contracts and Green Term Ahead Contracts beyond T + 11 days.

AND

IN THE MATTER OF:

Hindustan Power Exchange Limited (HPX)
(Formerly Pranurja Solutions Limited)
25th Floor, P J Towers
Dalal Street, Mumbai 400001 --------- Petitioner

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PETITIONER

THROUGH

RAVI KISHORE
ADVOCATE
G-33, LOWER GROUND FLOOR,
JANGPURA EXTENSION,
NEW DELHI-110014
MOB. NO.9811292550
EMAIL: ravi@rnslegal.in

PLACE: NEW DELHI
DATED: 19TH JULY, 2022

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION

PETITION NO. ....../MP/2022

IN THE MATTER OF:

Petition under Section 66 of The Electricity Act, 2003 read with the Regulation 25 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 for approval of introduction of Hydropower Contracts in Green Contingency Contracts and Green Term Ahead Contracts and additional Term Ahead Contracts and Green Term Ahead Contracts beyond T + 11 days.

AND

IN THE MATTER OF:

Hindustan Power Exchange Limited (HPX)
(Formerly Pranurja Solutions Limited)
25th Floor, P J Towers
Dalal Street, Mumbai 400001 --------- Petitioner

MOST RESPECTFULLY SHOWETH:

1. That the Petitioner- Hindustan Power Exchange Limited is a company incorporated under the provisions of the Companies Act, 1956 and having its registered office at 25th Floor, P J Towers, Dalal Street, Mumbai - 400001.

2. This Hon'ble Commission vide order dated 12.05.2021 was pleased to grant registration to the Petitioner to establish and operate a power exchange and subsequently vide order dated 27.06.2022, accorded permission to commence operations of its Power Exchange in Integrated Day Ahead Market, Real Time Market, Day Ahead Contingency, Intra-Day, Daily and Weekly Contracts.

3. That consequently the Petitioner commenced operation from 06.07.2022 in Contingency (Day Ahead and Intra-day) and Green Contingency (Day Ahead and Intra-day) Contracts.

4. That this Hon'ble Commission, vide its order dated 24.02.2022 in petition no. 169/MP/2021 (Indian Energy Exchange Ltd. Vs. Power System Operation Corporation) has approved introduction of Hydropower contracts in Green Term-Ahead Market (GTAM) contracts to facilitate Hydropower Purchase Obligation (HPO) compliance of obligated entities.

A copy of the order dated 24.02.2022 in petition no. 169/MP/2021 is enclosed herewith and marked as **ANNEXURE – I.**

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5. That this Hon'ble Commission, vide its orders dated 07.06.2022 in petition no. 229/MP/2021 (Power Exchange of India Ltd. Vs. Power System Operation Corporation) and in Petition No. 219/MP/2021 (Indian Energy Exchange Ltd. Vs. Power System Operation Corporation) has approved following contracts to be traded on power exchanges:-

a. **Daily Contracts:** Uniform Price Step Auction based daily (T) bidding for pre-specified and pre-notified time blocks delivery from T + 2 to T + 90 days.

b. **Weekly Contracts:** Uniform Price Step Auction based bidding from Monday to Friday of every week (TW) for pre-specified and pre-notified time blocks for delivery from TW + 1 to TW + 12 weeks.

c. **Monthly Contracts:** Uniform Price Step Auction based bidding in a month (TM) for pre-specified and pre-notified time blocks for delivery from TM + 1 to TM + 3 months.

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Mumbai Maharashtra
Reg. No. 15376
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d. **Any-Day(s) Single Sided Contracts:** Reverse Auction based bidding for user defined days and time blocks for delivery from T + 2 to T + 90 days.

Copies of the orders dated 07.06.2022 in Petition no. 229/MP/2021 and in Petition no. 219/MP/2021 are enclosed herewith and marked as **ANNEXURE - II (Colly).**

6. That the Petitioner herein seeks approval of this Hon'ble Commission to introduce Hydropower Contracts in Green Contingency (Day Ahead and Intra-day) and Green Term Ahead Market contracts and Daily, Weekly, Monthly and Any Day contracts in Term Ahead Market and Green Term Ahead Market contracts.

7. That the framework of the proposed contracts and the salient features of the proposed contracts are enumerated in the following paragraphs.

8. **Hydropower Contracts in Green Contingency (Day Ahead and Intra-day) and Green Term Ahead Market**

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a. Following contracts are proposed to be introduced by the Petitioner:

i. Green Day Ahead Contingency Contracts (Hydro): These will be hourly/block-wise contracts to be traded on D-1 day for delivery on D day. Continuous matching will be followed as price discovery methodology.

ii. Green Intra-day Contingency Contracts (Hydro): These will be hourly/block-wise contracts to be traded on D day for delivery on the same day and as may be allowed by the System Operator. Continuous matching will be followed as price discovery methodology.

iii. Green Daily Contracts (Hydro): These contracts are proposed to be traded on T day for delivery from T + 2 day onwards. Uniform Price Step Auction will be used as price discovery methodology.

iv. Weekly Contracts (Hydro): These contracts are proposed to be traded from Monday to Friday of

TW week for delivery from TW + 1 week onwards. Uniform Price Step Auction will be used as price discovery methodology.

b. **National or Regional**: Presently, in Green Contingency contracts, the contracts are being executed at National level. However, Regional contracts may be suitable in cases of transmission congestion. Thus, it is proposed that the Exchange may launch National or Regional contracts based on feedback from the market. Accordingly, the Hydropower Contracts are proposed to be National or Electrical Region specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.

c. **Eligible Entities**: As noticed by the Hon'ble Commission in order dated 24.02.2022 in petition no. 169/MP/2021, buyers need to procure power from Large Hydro Plants

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(LHPs) (> 25 MW) commissioned on or after 08.03.2019 and up to 31.03.2030. Thus, it is proposed that only such LHPs will be eligible to participate in Hydro Contingency and Hydro GTAM contracts.

d. **Minimum Volume Quotation:** The Minimum Volume Quotation is proposed as 0.1 MW.

e. **Bidding Process:** It is proposed that the bidding be carried out based on quantum (MW) and price (Rs.) of power similar to the bidding process for conventional power in Contingency segment.

f. **Price Discovery Methodology:** In line with the directions of Hon'ble Commission, price discovery methodology for Hydro Contingency contracts (Day Ahead and Intra-day) shall be Continuous matching and for Daily Hydro and Weekly Hydro contracts shall be Uniform Price Step Auction.

g. Other items like Revision of Schedule, Application for Scheduling, Pay-in & Pay-out etc. shall be as per existing procedure followed for Contingency and Term Ahead Market contracts on the exchanges and as approved by the Hon'ble Commission. However, risk management will have additional features for long duration contract (monthly/Single side reverse auction) same are detailed subsequently under long duration contracts.

The detailed contract specifications for Hydro Contingency Contracts are annexed as **Annexure - III.**

9. **Long Duration Contracts in Term Ahead Market and Green Term Ahead Market**

a. Following contracts are proposed to be introduced by the Petitioner:

i. **Daily Contracts:** These contracts are proposed to be traded on T day for pre-specified and pre-notified time blocks for delivery from T + 2 day to T + 90 days onwards.

ii. **Weekly Contracts:** These contracts are proposed to be traded from Monday to Friday of every week

(TW) for pre-specified and pre-notified time blocks for delivery from TW + 1 to TW + 12 weeks.

iii. **Monthly Contracts:** These contracts are proposed to be traded in a month (TM) for pre-specified and pre-notified time blocks for delivery from TM + 1 to TM + 3 months. Bidding days will be different for the three different months as specified in following paragraphs.

iv. **Any-Day (s) Single Sided Contracts:** These contracts are proposed to be for user defined days and time blocks for delivery from T + 2 to T + 90 days.

b. **Price Discovery and Matching Methodology:** Petitioner proposes to follow the methodologies as directed by Hon'ble Commission while approving Long Duration Contracts for other Exchanges. For Daily, Weekly and Monthly Contracts, Petitioner proposes to use Uniform Price Step Auction as price discovery methodology. And for Any Day Single Sided Contracts, Petitioner proposes to use Initial Price Offering (IPO) and Reverse Auction (RA) based bidding as price discovery methodology.

c. **Reverse Auction (RA)**: In this methodology, Buyer will specify the requisitions (quantum, time period with minimum acceptable bid from a seller) and Sellers will submit their offers (quantum and price) against each requisition. There would be one Buyer and multiple Sellers in each auction. The auction shall be conducted in two stages namely Initial Price Offer (IPO) and Reverse Auction and would be similar to the mechanism followed at DEEP portal:

i. In the IPO stage, the Sellers will submit their price and quantity (Seller can view, modify and delete in this stage) against each requisition. The system will rank the Bidders according to their price bids. If two or more Sellers quote the same price, the ranking shall be done on a time priority basis. The Bidder with the highest price bid in IPO stage will

NOTARY Adv. S.N. Dhanage Mumbai Maharashtra Reg. No. 15376 GOVT OF INDIA be called the H1 Bidder. The Highest Bidder(H1) will be eliminated provided that the total quoted quantity after elimination is not less than or equal to twice the requisitioned quantity. The elimination process will be carried out for each of the requisition separately. One event may have more than one requisition.

ii. After completion of IPO stage, Reverse Auction will be conducted. During the auction session only prevailing lowest price (L1) will be displayed to the market. The Reverse Auction shall continue for a period of 120 minutes or as may be notified by the Exchange from time to time. The Exchange shall also from time to time notify the duration before the scheduled closure of Reverse Auction during which if there is a change in the lowest quoted price the Reverse Auction would get extended by that duration. For example if during the last 10 (ten) minutes before the scheduled close time of Reverse Auction, if a price bid is received which is lower than the L1, the close time of Reverse Auction will be automatically extended by another 10(ten) minutes from the time of the last price bid received. This process of auto extension will continue till there is a period of 10 (ten) minutes during which no price bid is received which is lower than the prevailing L1. These timelines may be reviewed by the Exchange based on feedback of market participants.

iii. During the Reverse Auction the Seller will have the option of reducing the price quoted by them in decrements of Re. 1/Mwh or multiples thereof and to increase the quantum quoted by them by 1 MW or multiples thereof.

iv. The Seller after the Reverse Auction process will be ranked in accordance with the price offered in ascending order. The Sellers, in order of their rankings, combinedly offering the quantum of power up to the requisitioned capacity would be the Successful Bidders.

v. In the event, if two or more Sellers quote the same price during Reverse Auction stage, the ranking of the Sellers will be done on time priority basis.

vi. The Buyer will procure power from the Successful Bidders in the order of their rankings decided on the basis of price quoted by them until the entire requisitioned capacity is met.

vii. Buyers will communicate its acceptance/rejection of discovered price to exchange within the number of days (after the closure of RA) as may be specified by the Exchange from time to time.

d. **Timelines for Bidding and Delivery**: These contracts are proposed for a maximum duration of three months with trading in prior month. Daily, Weekly and Any Day Single Sided contract for third month can be traded on rolling basis in zero month (M0), first month (M1),

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Adv.
S.H. Dhanage
Mumbai Maharashtra
Reg. No. 15376
GOVT OF INDIA

second month (M2) and third month (M3). Daily, Weekly and Monthly Contracts will be made available for pre-specified time blocks only which will be notified to the market participants in advance.

The physical delivery of electricity is proposed to commence on a day more than one day ahead (T + 2 or more) of the last day of bidding in accordance with Regulation 2 (ba) of the Power Market Regulations 2021.

The following table summarizes the trading and delivery timelines for the proposed contracts which are in line with the approval of Hon'ble Commission for similar contracts with respect to other exchanges:

<table>
<tr><th>Contract</th><th>Trading start day</th><th>Last day of trading</th><th>Trading time</th><th>Delivery</th><th>Trading time blocks</th></tr>
<tr><td>Daily</td><td>On daily basis (T)</td><td>Two days before day of delivery</td><td>1200 to 1700 hours</td><td>T + 2 to T + 90 days</td><td rowspan="2">For pre-specified time blocks notified to market participants in advance</td></tr>
<tr><td>Weekly</td><td>Monday of prior week</td><td>Friday of prior week</td><td>1200 to 1700 hours</td><td>TW + 1 to TW + 12</td></tr>
</table>

	(TW0)	(TW0)		weeks	
Monthly	First day of month zero (M0)	Ten days before close of M0 for delivery in M1 Five days before close of M0 for delivery in M2 Last day of M0 for delivery in M3	1200 to 1700 hours	TM + 1 to TM + 3 months	
Any Day Single Sided	On daily basis	Two days before delivery day	0000 to 2400 hours	T + 2 to T + 90 days	For user defined days and time blocks

e. **Risk Management**: It is proposed that the Exchange will collect an "Initial margin' at the time of bidding equivalent to 5% of the order value for Daily and Weekly Contracts and 1%of the order value for Monthly Contracts. For Any Day Single Sided Contracts, sellers will be required to provide an Initial Margin at the rate of Rs.

30000/MW/month or part thereof. After the bidding, an 'Additional margin' will be collected by the Exchange before the scheduling application is made to the Load Dispatch Center. Additional Margin will be equivalent to 50%, 25% and 20% of trade value for contracts up to 7 days, 15 days and beyond 15 days respectively. In case a party defaults then the Margins collected shall be utilized to pay the compensation to the counterparty. The Margins will be collected in both cash and non-cash.

f. **Pay-In & Pay-Out:** Pay-in and Pay-out for the all the proposed contracts under TAM and G-TAM will be as per existing practice i.e. Pay-in on D-1 day and Pay-out to the generator on the D+1 day basis. Netting-off of the positions will not be allowed.

g. **National or Regional**: Presently, in Contingency contracts, the contracts are being executed at National level. However, Regional contracts may be suitable in cases of transmission congestion. Thus, it is proposed that the Exchange may launch National or Regional contracts based on feedback from the market. Accordingly, the Hydropower Contracts are proposed to be National or Electrical Region specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.

h. **Minimum Volume Quotation:** Minimum Volume quotation is proposed as 1 MW in TAM contracts as per existing practice and in GTAM Contracts this limit is proposed to be 0.1 MW based on the feedback received from the market.

i. **Revision:** For Monthly Contracts, it is proposed that the contracts may be allowed to be annulled or curtailed, without any transfer of positions, due to transmission constraints or force majeure. This is proposed considering the length of proposed contracts and prevailing practices in the bilateral OTC market.

However, as directed by Hon'ble Commission in order dated 07.06.2022, this revision will be subject to validation by system operator and default mechanism of Petitioner's Exchange.

j. **Cancellation/Rejection of trade:** In Any Day Single Sided contracts, it is proposed that buyer may partially or fully reject the trade up to two days before the day of delivery. During this time, the bid will remain valid and the successful bidders will not be able to change their bids. If no communication is received from the buyer or the seller during this time regarding acceptance of the trade or on non-payment of Additional Margin, the trade shall be deemed to be rejected by the buyer/seller.

k. **Default penalty/compensation:** In case of default, the future delivery under the concerned contract shall be reduced/ cancelled/ suspended and penalty may be imposed on the defaulting entity as may be specified by the Exchange in advance. Such penalty will be paid to the counter party as compensation against cancellation/

revision of the contract after adjustment of charges and deduction of Exchange administrative charges.

l. Other items Application for Scheduling, SLDC clearance etc. shall be as per the procedure approved by the Hon'ble Commission in petitions 219/MP/2021 and 229/MP/2021.

The detailed contract specifications for these contracts are annexed as **Annexure - IV to Annexure - XII.**

PRAYER:

In view of the aforementioned facts and circumstances, it is most humbly prayed that this Hon'ble Commission may be pleased to:

a. allow the present petition;

b. approve introduction of Hydropower Contracts in Contingency and Green Term Ahead Market Contracts at the Petitioner's Exchange platform;

c. approve introduction of Long Duration Contracts (Daily, Weekly, Monthly and Any Day Single Sided) in Term Ahead

Market and Green Term Ahead Market Contracts at the Petitioner's Exchange platform;

d. allow the Petitioner to suitably amend its Business Rules to include the proposed contracts;

e. pass such other and further order(s) as this Hon'ble Commission may deem fit and proper under the facts and circumstances of the present case and in the interest of justice.

PETITIONER

NOTARY
Adv.
S.N. Dhanage
Mumbai Maharashtra
Reg. No. 15376
GOVT OF INDIA

THROUGH

RAVI KISHORE
ADVOCATE

PLACE: MUMBAI/NEW DELHI
DATED: 19 JULY, 2022

BEFORE ME

Adv. Shivaji. N. Dhanage
Notary Govt. Of India
Regd. No. 15376 MUMBAI (MS)
404-405, 4th Floor, Davar House,
197/199, Near Central Camera Bldg.,
D.N Road, Fort, Mumbai - 400001

NOTED & REGISTERED
PageNo. 12 Sr.No. 75
Dated 19 JUL 2022

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NOTARIAL NOTARIAL

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION

PETITION NO. ....../MP/2022

IN THE MATTER OF:

Petition under Section 66 of The Electricity Act, 2003 read with the Regulation 25 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 for approval of introduction of Hydropower Contracts in Green Contingency Contracts and Green Term Ahead Contracts and additional Term Ahead Contracts and Green Term Ahead Contracts beyond T + 11 days.

AND

IN THE MATTER OF:

Hindustan Power Exchange Limited (HPX)
(Formerly Pranurja Solutions Limited)
25th Floor, P J Towers
Dalal Street, Mumbai - 400001 --------- Petitioner

AFFIDAVIT

I, Piyush S. Chourasia, aged about 38 years, S/o Sh. Sudhir Umashankar Chourasia, having Office at 25th Floor, P J Towers, Dalal Street, Mumbai – 400001, do hereby solemnly affirm and state as under:-

1. I say that I am the Director of the Petitioner and am competent to swear the present affidavit on behalf of the Petitioner.

2. I say that I have read and understood the contents of the Petition and the same has been drafted by my counsel under my instruction and are believed by me to be true to my personal knowledge being based on the records of the Petitioner.

3. I say that the facts stated in the aforesaid affidavit are true to my knowledge. No part of the same is false and nothing material has been concealed there from.

DEPONENT

VERIFICATION:-

I, the abovenamed deponent, do hereby verify that the facts stated in the above affidavit are true to my knowledge. No part of the same is false and nothing material has been concealed there from.

Verified at Mumbai on this the 19 day of July, 2022

BEFORE ME **DEPONENT**

Adv. Shivaji. N. Dhanage
Notary Govt. Of India
Regd. No 15376 MUMBAI (MS)
404-405, ..., Dawar House,
197/199, Near Central Camera Bldg.,
D.N. Road. Fort, Mumbai - 400001.

NOTED & REGISTERED
PageNo 12 Sr.No. 76
Dated 19 JUL 2022

19 JUL 2022

ANNEXURE – I

CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 169/MP/2021

Coram:
Shri P. K. Pujari, Chairperson
Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri P. K. Singh, Member

Date of Order: 24th February 2022

IN THE MATTER OF:

Petition under Section 66 of The Electricity Act, 2003 read with the Regulation 25 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 for approval of introduction of the Hydropower Contracts in Green Term-Ahead Market (GTAM) at Indian Energy Exchange Ltd. to facilitate Hydropower Purchase Obligation (HPO) compliance of obligated entities.

And in the matter of

Indian Energy Exchange Limited (IEX),
Plot No. C-001/A/1,
9th Floor, Max Towers, Sector 16 B,
Noida ...Petitioner

Vs

Power System Operation Corporation,
B-9, Qutab Institutional Area, Katwaria Sarai,
New Delhi ...Respondent

Parties Present
Mr. Jogendra Behera, Petitioner
Mr. Gaurav Maheshwari, Petitioner
Mr. Subhendu Mukherjee, Respondent
Mr. Alok Mishra, Respondent

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ORDER

The Petitioner has filed the present Petition seeking approval of the Commission to introduce Hydropower Contracts in Green Term-Ahead Market (GTAM) on its platform to facilitate the compliance of Hydropower Purchase Obligation (HPO) of the obligated entities.

2. The Petitioner has made the following prayers:

a. Accord approval for introduction of proposed Hydropower Contract in GTAM market on IEX platform.
b. Accord approval for proposed amendments in Business Rules of IEX for the introduction of Hydropower Contract in GTAM Market.
c. Pass such further order or orders as may be considered necessary in the facts and circumstances of the case.

3. The case was called out for a virtual hearing on 27.08.2021 and 30.11.2021.

Submissions by the Petitioner

4. To accelerate the growth of hydropower in the country, the Ministry of Power (MoP) has set a target of 30000 MW hydro capacity addition by 2030. On 8.03.2019, MoP has declared Large Hydro Power Plants (LHPs) with the installed capacity > 25 MW as a renewable energy source. The MoP has also notified Hydro Purchase Obligation (HPO) as a separate category to Non-Solar RPO.

5. As per the guidelines notified by the MoP, HPO may be met from the power procured from eligible LHPs commissioned on and after 08.03.2019 and up to 31.03.2030 in respect of 70% of the total generated capacity for a period of 12 years from the date of commissioning. HPO may also be met out from the free power being provided to the State from such LHPs. In case of any gap, States have to buy the corresponding amount of Hydro Energy Certificates to meet their HPO.

6. State Commissions of Uttar Pradesh, Himachal Pradesh, Haryana and Kerala have already notified HPO for their respective states, while SERCs of Punjab, Chhattisgarh and Odisha have issued draft HPOs. The other States may also come up with similar notifications.

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Moreover, approximately 444 MW of hydro generation capacity eligible to fulfill HPO is untied till date. Therefore, it is envisaged that sufficient capacity and demand would be available for the proposed Hydro Contracts at Power Exchange.

7. In continuance of the efforts towards the growth of hydel power sector in the country, the Petitioner proposes Hydropower Contracts in GTAM in addition to existing Solar & Non-Solar Contracts. The Petitioner enlists the following benefits of Hydro Contracts at Power Exchange:

a) The capacity addition in the hydropower sector has slowed down in the recent past due to various reasons, including the financial constraints and DISCOMs' reluctance to sign long-term PPAs to purchase hydropower.

b) It is required to give appropriate signals to the market to create an enabling environment to achieve the target of commissioning 30000 MW hydro capacity by the year 2030.

c) Hydropower is critical for the integration of large capacities of solar and wind power as it supplies balancing power to maintain grid stability.

d) Gradually, all obligated entities will be mandated to purchase a certain percentage of their energy consumption from hydropower plants commissioned after 08.03.2019.

e) In pursuance of the above and to further facilitate promotion of hydropower capacity addition and off-take through the market mechanism, Hydropower Contracts in the GTAM will support.

f) Hydro GTAM Contracts will provide avenues to the existing and prospective Hydro Generators for sale through the exchange platform. The Contracts will provide more options to the Obligated Entities to fulfill their HPO.

g) It will lessen the burden on hydro rich States to absorb all hydropower generated within the State. Small participants (OA/CPP) can buy hydropower at competitive rates to meet their HPO as well as energy requirement.

8. In the proposed Hydro GTAM Contracts, participants will be able to transact across all time periods, i.e., Intra-day, Day-ahead contingency, Daily and Weekly currently allowed for existing GTAM with the following Contract specifications:

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- Minimum volume quotation is proposed as 1 MW, keeping in view the large size of hydro generating stations.
- The exchange may launch National or Regional Contracts based on the market feedback.
- Bidding is proposed based on the quantum (MW) and Price (Rs.) similar to conventional TAM.
- Revision of Schedule, Application for Scheduling, Risk Management, Pay-In & Pay-Out and Bid Matching Mechanism shall be as per the existing procedure of the existing GTAM Contracts.

9. In Hydro GTAM Contracts, large hydropower projects (>25 MW) commissioned after 08.03.2019 will be eligible to participate. To ascertain the eligibility of participation, respective RLDC/SLDCs may issue a Non-Objection Certificate (NoC)/Standing clearance. On the other hand, all the entities which are eligible to procure power through Open Access shall be eligible to participate as a buyer in Hydro GTAM Contracts. A certificate will be issued by the exchange, detailing various trades undertaken by the buyers, which shall be used for meeting their HPO compliance.

<u>Hearing dated 27.08.2021</u>

10. During the hearing of the Petition on 27.08.2021, in response to the specific query of the Commission as to the need for introducing separate Hydro Power Contracts despite already existing Non-Solar Contracts in GTAM, the Petitioner submitted that the proposal to introduce separate hydropower contracts in GTAM to match hydropower sellers and buyers has been made in the wake of MoP's notification on HPO trajectory. In case the Hydro Power Contracts are not introduced as separate contracts and kept in the existing Non-solar Contracts, there is a likelihood that the buyers of non-solar other than hydro segment would end up buying hydropower and vice-versa in the continuous matching mechanism. Thus, a separate purchase obligation in the form of HPO will be difficult to establish in the absence of separate Hydro Power Contracts.

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11. After hearing the Petitioner, the Commission admitted the Petition and directed the Petitioner to implead POSOCO as a party to the Petition. The Petitioner was also directed to give wide publicity to the proposed hydro contracts by uploading the same on its website for inviting comments from stakeholders, on which the Petitioner may file its rejoinder.

12. To comply with the directions of the Commission, the Petitioner impleaded POSOCO as a party to the Petition, and also hosted the Petition on its website for inviting Stakeholders Comments. The Petitioner received comments from POSOCO and some stakeholders, namely, (i) Renew Power Private Ltd., (ii) Teesta Urja Ltd., and (iii) Tata Power Delhi Distribution Ltd..

13. The Petitioner has filed a rejoinder responding to the comments received.

Comments of POSOCO &Response of the Petitioner

14. POSOCO has commented that portfolio sales by the Discoms in the proposed Hydro Contracts should not be allowed in accordance with paragraph four (4) of the MoP's O.M. dated 8.3.2019 regarding the eligibility of HPO.

15. The Petitioner has responded that MoP in its O.M. dated 8.3.2019 has not put any specific restrictive condition for sale of surplus hydropower by Discoms. It is settled that obligated entities can meet their RPO through buying renewable power either directly from RE Generators or by purchasing surplus RE Power from the Discoms. A similar approach has been proposed in hydro GTAM to enable the hydro rich Discoms to sell their surplus hydropower to hydro deficit States for fulfilling their HPO.

16. POSOCO has commented that while it is good to have a hydro product in the short-term market, HPO Contracts in TAM alone may not be enough to drive adequate returns on the investments made on the hydro projects.

17. The Petitioner has responded that the proposed hydro GTAM Contracts will provide an additional avenue to eligible hydro generators to sell their power, and to the beneficiaries

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purchasing hydropower to meet their small HPO requirements. It will be useful for both buyers and sellers who are not able to enter into long-term agreements.

Comments of Stakeholders &Response of the Petitioner

18. Stakeholders have commented that waiver of ISTS Charges may be provided to the hydro GTAM transactions following the MoP's O.M. which would promote RE development and broaden the market operations.

19. The Petitioner has responded that the Commission is requested to consider waiver of ISTS charges to the hydro GTAM Contracts. However, such waiver is not a pre-requisite for the launch of the proposed Contract.

20. Stakeholders have commented that RE sellers in hydro GTAM contracts may be allowed to buy power from RTM to manage their variations.

21. The Petitioner has responded that the Commission is requested to consider the suggestion of allowing the hydro generators to buy power from the RTM to manage their variations. However, such provision is not a prerequisite for the introduction of the proposed Contract.

22. Stakeholders have commented that Hydro Energy Certificates (HECs) may be issued for the hydropower sold in DAM/RTM.

23. The Petitioner has responded that the Commission is requested to consider the suggestion. However, such provision is not a prerequisite for the introduction of the proposed contract.

24. Stakeholders have sought clarity on the sequence of curtailment based on the source of generation i.e., the inter-se priority of curtailment between Solar, Non-Solar and Hydro transactions and also inter-se priority between Renewable and Conventional bilateral transactions.

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25. The Petitioner has responded that the proposed hydro GTAM Contracts will result in bilateral transactions and in that case, it is the RLDC who decides the real-time curtailment as per the Grid Code. However, the Commission may further examine the curtailment based on the source of RE generation.

26. Stakeholders have sought clarity on the definition of the untied power of the LHPs. The stakeholders have requested to include such untied power within the ambit of GTAM Hydro Contracts for the balance period during which their capacity is untied.

27. The Petitioner has responded that the eligibility of the seller to participate in the proposed contract will be ascertained by the RLDC/SLDC while giving NOC to the sellers based on the MoP's directions. The MoP's O.M. dated 8.03.2019 has specified that HPO shall cover all LHPs commissioned after 8.03.2019 as well as the untied capacity of the commissioned projects. However, there is no mention about the untied capacity in the latest O.M. issued on 29.01.2021. Therefore, the Commission is requested to give directions to RLDCs/SLDCs to ascertain the eligibility of Hydro generators while issuing the NOC for sale of power through the GTAM hydro segment.

Hearing dated 30.11.2021

28. During the hearing of the Petition on 30.11.2021, the representative of the Petitioner submitted that under the directions of the Commission vide ROP for the hearing dated 27.8.2021, the Petitioner impleaded POSOCO as the Respondent to the Petition and had also hosted its proposal for introduction of Hydropower Contracts in GTAM on its website vide public notice dated 3.9.2021 seeking comments/ suggestions from the stakeholders by 20.9.2021. In response, the Petitioner has received the comments/ suggestions from three stakeholders, all of whom have given positive feedback and have raised certain additional issues such as waiver of ISTS charges for Hydro GTAM transactions, permitting buying of power from Real-Time Market and eligibility, etc. The Petitioner has already filed an affidavit with a detailed study incorporating the comments/ suggestions of these stakeholders and the response of IEX thereon. He further added that the Respondent, POSOCO in its reply has mainly raised the issue of not allowing

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portfolio sale by the Discoms. However, the said issue has already been considered by the Commission while allowing the portfolio sale by Discoms under GTAM and GDAM.

29. The representative of the Respondent, POSOCO, submitted that the respondent has already filed its reply, which may be taken into the consideration. He further submitted that the limited concern of the Respondent is that in case of portfolio sale by hydro-rich States, the power sold is from a mix of generators and it becomes difficult to identify and tag such power as hydropower. The representative of POSOCO further submitted that it is difficult for them to ascertain the actual despatch of such power from the point of injection from where the Discoms are selling the power. Accordingly, SLDCs may be directed to provide the point of injection in the NOCs themselves so that the source of power can be traced, and non-transparency can be avoided.

30. In response to the specific query of the Commission regarding the Petitioner having any means to ascertain the eligibility of Hydro Power Projects as per the MoP's letter dated 29.1.2021, the representative of the Petitioner replied in the negative and submitted that for the above purpose, the exchange has to rely upon the NoCs to be issued by the concerned SLDCs. In response to the further observation of the Commission regarding any mandate under which the SLDCs may provide such certification verifying the various eligibility criteria, the representative of the Petitioner submitted that in the case of GTAM, based on the direction of theCommission, source of renewable energy is being mentioned by RLDCs/SLDCs in the NoCs being granted.

31. Considering the submissions made by the representative of the Petitioner and the Respondent, the Commission reserved the matter for order.

Analysis and Decision

32. The Petitioner has proposed to introduce Hydropower Contracts in the existing Green Term Ahead Market (GTAM) on its platform for exclusive trading of hydro energy. The Petitioner has submitted that the proposed contract will provide an additional avenue to the eligible hydro generators for sale of hydro energy and obligated entities to fulfill their Hydro Purchase Obligations (HPOs). The Petitioner has highlighted that the proposed contract will

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provide a market-based mechanism where hydro surplus and hydro deficit States can trade hydro power and balance their HPO targets. The Petitioner has also submitted that this proposal would lessen the burden on hydro-rich States and incentivize them to develop hydro capacity beyond their own HPO. The proposed contract will enable obligated entities to procure hydro power at competitive prices at the power exchanges. The Petitioner has also highlighted that the proposed contract will promote hydro merchant capacity addition which will eventually help in achieving hydro capacity addition targets of the country.

33. In pursuance of the directions of the Commission, the Petitioner has carried out stakeholder's consultation and submitted its point-wise reply to the comments/suggestions given by the stakeholders. Further, the Petitioner has also impleaded POSOCO and submitted its point-wise reply to the observations made by POSOCO.

34. We have considered the submissions of the Petitioner, and the comments/suggestions of the stakeholders along with the reply of the Petitioner. We observe that there are no objections by stakeholders to introduction of Hydro GTAM Contracts at the exchange platform, though the stakeholders have sought clarity on some points. We agree with the submissions of the Petitioner that the introduction of Hydropower Contracts in existing GTAM at the power exchange will provide an additional avenue to the existing and prospective Hydro Generators to sell the hydro power at the exchange platform. Through the Hydro GTAM Contracts, the obligated entities would be able to procure hydro green power and thus be able to meet their HPO requirements. In the long-term, it may promote hydropower capacity.

35. Considering the above, we are of the view that, grant of approval to the Petitioner to introduce Hydropower Contracts in existing GTAM on its platform can be considered. However, before according the approval, it is necessary to examine the comments/suggestions received from the stakeholders including POSOCO during the stakeholders' consultation. The different aspects of the proposed contract have been dealt with in the succeeding paragraphs keeping in view the submissions made by the Petitioner and comments/suggestions given by the stakeholders.

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(i) HPO fulfillment through Hydropower contracts in GTAM

36. The Petitioner has submitted the proposal for introducing Hydropower Contracts in existing GTAM on its platform for trading of hydro energy on short-term basis. The Petitioner has proposed separate window for Hydro Contracts (other than Solar and Non-Solar) in GTAM so that the procurement of hydro power by the obligated entities through the exchange platform can be differentiated and the buyer of such hydropower can be considered for meeting HPO.

37. We agree with the proposal of the Petitioner to introduce separate window for Hydropower Contracts in existing GTAM along with the already existing windows for Solar and other Non-Solar Contracts. A dedicated window for Hydro Contracts in GTAM will facilitate the matching of hydro buy bids with hydro sell bids. Also, the obligated entities procuring RE through Hydropower Contracts through the proposed separate window in the GTAM shall be eligible for meeting their HPO in view of the fact that only Hydropower with green attributes shall be available for sale through such window. Further, as the transactions through GTAM are bilateral in nature with clear identification of corresponding buyers and sellers, there will not be any difficulty in accounting for HPO.

(ii) Type of Contracts

38. The Petitioner has proposed for Intraday Hydro Contract, Day Ahead Contingency Hydro Contract, Daily Hydro Contract and Weekly Hydro Contract. The intraday contract will allow trading for delivery of electricity on the same day, Day Ahead Contingency for delivery in the next day, Daily Contract for delivery on a daily basis during T+2 to T+10 days, and Weekly Contract for delivery during the forthcoming week from Monday to Sunday. The Petitioner has proposed these contracts to be of 15-minutes duration or multiples thereof.

39. As regards the duration of contracts, as the proposed hydro contracts are on the same lines as the existing contracts under GTAM, we allow the Petitioner to introduce Intraday Hydro Contract, Day Ahead Contingency Hydro Contract, Daily Hydro Contract and Weekly Hydro Contract in GTAM. We also agree to the proposal of 15-minute contracts or combination thereof likewise they are currently being offered in the Solar and Non-Solar windows of GTAM.

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(iii) Price Discovery Methodology and Matching Rules

40. The Petitioner has proposed that for Hydro GTAM contracts, the bidding will take place based on 15-minute quotation of quantity (MW) and price (Rs/MWh). The price discovery and matching of the bids will take place on the basis of 'Continuous Trade' for Intraday, Day Ahead Contingency and Daily Contracts. The Petitioner proposed matching of the bids on the basis of 'Continuous Trade' or 'Uniform Price Step Open Auction' for Weekly contracts.

41. We agree with the Petitioner's proposal for price discovery methodology and matching rules for the hydro GTAM contracts. The methodology proposed by the Petitioner is the same as that of the methodology followed in the existing Term Ahead Market.

(iv) Portfolio Sale by Discoms

42. POSOCO has expressed concern that in case of portfolio sale by a Discom, the power sold is from a mix of generators and it is not possible for them to identify and tag this power as hydro power. Hence, such sale of power cannot be used for fulfillment of HPO by the buyer. The Petitioner, in its reply, has submitted that the sellers participating in the Hydro GTAM Contracts will have to produce NOC from RLDC/SLDC indicating the source of generation which would establish that the power to be sold is truly hydro power and that it will go towards the fulfillment of HPO compliance of the buyer.

43. We note that for existing GTAM contracts, details of source and quantum etc. are being mentioned in the NOCs issued to RE generators by the respective SLDCs/RLDCs. We further note that to meet their HPO, buyers have to procure hydro power from the LHPs >25 MW commissioned on and after 08.03.2019 and up to 31.03.2030. Therefore, initially, such hydro power plants which are commissioned on and after 08.03.2019 and upto 31.03.2030 and having installed capacity greater than 25 MW, would be able to participate in Hydro Contracts of GTAM. In this regard, the eligibility of hydro power project to participate in hydro segment of GTAM shall be ascertained by the respective RLDC/SLDCs, while issuing the NOC/eligibility certificate. Moreover, respective RLDCs/SLDCs are directed to provide the point of injection in the NOC itself so that the source of power and actual dispatch from that source can be traced in a transparent manner, as being done in case of existing GTAM.

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(v) Waiver of ISTS charges and losses

44. Some stakeholders have suggested for waiver of transmission charges and losses for the transactions under Hydro GTAM Contracts.

45. We note that waiver of inter-State transmission charges and losses for RE generation are available in accordance with provisions of the CERC (Sharing of Inter-State Transmission Charges and Losses Sharing) Regulations, 2020. Any such waiver shall be admissible to the entities which fulfill the conditions specified under the Sharing Regulations.

(vi) Buying power at RTM to manage variations

46. Some stakeholders have suggested that RE sellers in Hydro GTAM Contracts may be allowed to buy power from RTM to manage their variations.

47. We note that Regulation 6(3) of PMR 2021 provides as under:

> *"(3) In the event of a forced outage of a generating station or unit thereof, or any other event as may be notified by the Commission, wherein the obligation of the generating station to supply electricity continues under an existing contract, such generating station may fulfil its obligation under the said contract by entering into a contract(s) covered under clause (1) or (2) or (3) of Regulation 5 of these regulations."*

48. Thus, the suggestions of the stakeholders have to be dealt in accordance with Regulation 6(3) of PMR 2021 as cited above. As per the said regulation, a separate notification may be issued by the Commission to deal with a situation (other than the event of forced outage of a generating station or unit thereof) wherein the obligation of the generating station to supply electricity continues under an existing contract. The proposal of the Petitioner requires detailed examination as it will have implications on the existing scheduling and accounting practice as have been pointed out by some of the stakeholders in their comments. Accordingly, we hold that the proposal of the Petitioner seeking flexibility to RE generators to manage their variation by buying from RTM is beyond the scope of the present petition.

(vii) Hydro Energy Certificates

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49. Some stakeholders have suggested that Hydro Energy Certificates (HECs) may be issued for the hydropower sold in DAM/RTM.

50. We hold that the same is beyond the scope of the present Petition.

(viii) Sequence of Curtailment

51. Some stakeholders have sought clarity on the sequence of curtailment based on the source of generation i.e., the inter-se priority of curtailment between Solar, Non-Solar and Hydro transactions and also inter-se priority between Renewable and Conventional bilateral transactions.

52. We direct that the inter-se priority of curtailment between Solar, Non-Solar and Hydro transactions and also inter-se priority between Renewable and Conventional bilateral transactions shall be governed by the CERC (Open Access in inter-State Transmission) Regulations, 2008 or the CERC (Indian Electricity Grid Code) Regulations, 2010, as amended from time to timc,or any other applicable regulations in force as notified by the Commission and the Procedure for Scheduling of Bilateral Transactions therein, as the case may be.

53. In the light of the analysis and decision on the various issues arising out of the proposal for introduction of Hydropower Contracts in GTAM, the Commission approves the proposal of the Petitioner to introduce Hydropower Contracts in GTAM subject to compliance of the directions given in this Order.

54. The Petitioner is directed to incorporate appropriate provisions in its Bye-laws, Rules, and Business Rules concerning the introduction of Hydropower Contracts in GTAM and submit to the Commission for records within 2 (two) weeks from the date of this order.

55. Petition No. 169/MP/2021 is disposed of in terms of the above.

Sd/-	Sd/-	Sd/-	Sd/-
(P.K. Singh)	**(Arun Goyal)**	**(I.S. Jha)**	**(P. K. Pujari)**
Member	**Member**	**Member**	**Chairperson**

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ANNEXURE –II (Colly)

39

CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 229/MP/2021

along with

IA No. 25/2022

Coram:
Shri P. K. Pujari, Chairperson
Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri P. K. Singh, Member

Date of Order: 7th June, 2022

IN THE MATTER OF:

Petition under Section 66 of The Electricity Act, 2003 read with Regulation 25 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 for approval of introduction of Month(s) Ahead Contracts at Power Exchange India Limited.

And in the matter of

Power Exchange India Limited,
9th Floor, 901, Sumer Plaza,
Marol Maroshi Road, Marol Andheri (East),
Mumbai 400059, India ......Petitioner

Vs

Power System Operation Corporation,
B-9, Qutab Institutional Area,
Katwaria Sarai,
New Delhi ....Respondent

Parties Present

Mr. Sakya Singha Chaudhuri, Petitioner
Mr. Nithya Balaji, Petitioner
Mr. Prabhajit Kumar Sarkar, Petitioner
Mr. Shekhar Rao, Petitioner
Mr. Anil V Kale, Petitioner
Mr. Sunil Hingwani, Petitioner

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Mr. Chandrashekhar Bhat, Petitioner
Mr. Ambrish Kumar Khare, Petitioner
Mr. Mukti Marchino, Petitioner
Mr. Ketan Chawda, Petitioner
Mr. Shubhendu Mukherjee, Respondent
Mr. Alok Kumar Mishra, Respondent

ORDER

The Petitioner has filed the present Petition seeking approval for introduction of Month(s) Ahead Contracts at Power Exchange India Limited under Section 66 of The Electricity Act, 2003 read with the Regulation 25 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 (in short "the PMR 2021").

2. The Petitioner has made the following prayers:

a) To allow the Petitioner to introduce Monthly Contracts which can be traded on Three (3) Month, Two (2) Month and One (1) Month Ahead basis;

b) To allow the Petitioner to introduce Power Exchange-specific seasonal duration contracts which can be traded on Three (3) Month, Two (2) Month and One (1) Month Ahead basis;

c) To allow the Petitioner to introduce Monthly Contracts in Renewable Energy in the GTAM segment for transaction in Renewable Energy for the benefit of the obligated entities to meet their Renewable Purchase Obligation, based on the approval accorded by this Hon'ble Commission for introduction of GTAM contracts on the Petitioner's platform, vide an order in Petition No. 228/MP/2020;

d) To allow Petitioner to extend the approval accorded to month(s) ahead contract to hydro segment under GTAM and consequently, allow the Petitioner to customize the Contract specifications to introduce Hydro Monthly Contract.

e) To adjust the filing fees for processing this Petition against the fees paid earlier by the Petitioner in Petition No. 59/MP/2021;

3. The case was called out for virtual hearing on 30.11.2021 and on 12.04.2022.

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Submissions by the Petitioner

4. Presently, the Petitioner offers Day Ahead Contracts, Intraday Contracts, Day Ahead Contingency Contracts, Real Time Contracts and Term Ahead Contracts for trading in electricity. It also offers exchange of Renewable Energy Certificates and Energy Saving Certificates. Under the Term Ahead segment, Weekly Contracts and Any Day contracts are offered for the period up to 11 days.

5. For the period extending beyond 11 days, participants enter into bilateral contracts in isolation which do not provide end-to-end service. These contracts vary a lot in terms of structure and do not necessarily have an equitable risk sharing mechanism. Furthermore, in some cases, even if the market platform is available and auctions are undertaken, it may not necessarily transform into actual transactions thereby raising the overall transaction cost. In this regard, introducing these contracts at Power Exchanges for duration beyond 11 days will be helpful to address the existing inefficiencies as they shall provide price discovery, power scheduling, clearing and settlement in transparent and efficient manner.

6. In view of the above, the Petitioner has proposed to introduce delivery based Monthly Contracts which can be traded on One Month, Two Month and Three Month Ahead basis both in conventional and renewable energy segments of the Term Ahead Market. The Petitioner has also proposed modification in the delivery/trading timeline of Any-Day Contracts and Weekly Contracts through its affidavit dated 17.11.2021. For Any-Day Contracts, it has proposed to increase the delivery period to last day of the fourth month while for Weekly Contracts, it has proposed to start auction session on Friday two weeks prior to the delivery and close it on Thursday of the following week. With regard to matching methodology, the Petitioner sought flexibility in choosing the same and change it after intimating sufficiently in advance to the market participants.

7. The Petitioner has proposed that the Month(s) Ahead Contracts would operate under provisions of the CERC (Open access in inter State Transmission) Regulations, 2008 (in short 'STOA Regulations, 2008') and Procedure for Scheduling Bilateral transactions. Once matched the power shall be delivered physically as per timelines of scheduling.

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Exchange shall ensure that the total purchase or sell quantity does not exceed the quantum indicated in the SLDC clearance. However, the contracts shall be subject to constraints in transmission system and real time curtailment by NLDC/RLDC/SLDC. The delivery point for the Contract(s) shall be on Seller's Regional / State periphery. Seller will have to deliver electricity on the periphery of its region and buyer has to take delivery at this point. The transmission charges and losses for usage of transmission network shall be as per CERC (Sharing of transmission charge and loss in Inter State transmission) Regulations, 2020 and STOA Regulations, 2008. The Petitioner has annexed the draft Contract Specifications seeking approval of the Commission.

<u>Hearing Dated 30.11.2021</u>

8. The Petition was first heard on 30.11.2021. During the hearing, the Petitioner submitted that the present Petition has been filed in view of the Judgment dated 6.10.2021 of the Hon'ble Supreme Court in Civil Appeal Nos. 5290-5291 of 2011 and Ors on delineating the respective jurisdiction of SEBI and CERC. In response to a specific observation of the Commission, the Petitioner confirmed that the proposed contracts do not have any element of derivative contracts and that they are Non-Transferable Specific Delivery (NTSD) Contracts.

9. After considering the submissions made by the Petitioner, the Commission admitted the Petition and directed the Petitioner:
   a) to implead POSOCO as Respondent to the Petition and to file revised memo of parties immediately;
   b) to serve copy of the Petition on the Respondent to file its reply, if any, within two weeks after serving copy of the same to the Petitioner, who may file its rejoinder, if any, within two weeks thereafter; and
   c) to give wide publicity to its proposed contracts by uploading the same on its website for inviting comments from the stakeholders and general public and file an affidavit with detailed study incorporating the comments received from the stakeholders and the response thereon.

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10. In compliance to the Commission's directions, the Petitioner impleaded POSOCO as Respondent and served a copy of the Petition. Also, the Petitioner uploaded the copy of Petition on its website for seeking comments/ suggestions from the stakeholders. In response to the same, the Petitioner received comments/suggestions from the following 5 stakeholders: i) MSEDCL, ii) NTPC, iii) Prayas Energy Group, iv) Teesta Urja Limited, and v) Sembcorp Energy India. However, no suggestion/reply was received from the Respondent.

Stakeholders' Comments & Response of the Petitioner

11. The stakeholders have given positive feedback on the proposal of introduction of additional Term Ahead Contracts and Green Term Ahead Contracts beyond T+11 days. The stakeholders have affirmed that introduction of these contracts would provide more avenues to market participants to trade power beyond 11 days. However, some of the stakeholders have also expresses concerns and sought some clarifications. Major comments of the stakeholders and the Petitioner's view on them are discussed in subsequent paragraphs.

12. Stakeholders have suggested that the Month Ahead Contract(s) suggested by the Petitioner should have provisions like bid security, compensation towards liquidated damages, contract performance guarantee, letter of credit, etc., similar to the DEEP portal. The proposed contracts should be in line with the MoP's Guidelines for short term power procurement. In response, the Petitioner has agreed to anaylse the suggestions on bid security, compensation towards liquidated damages, contract performance guarantee, letter of credit and mentioned that the proposed contracts shall operate under provisions of Regulation 4 and Regulation 5 (3) of the PMR 2021.

13. Some stakeholders suggested to make Any-day contracts limited to one month and Week-ahead contracts for three weeks, for example: i) Daily contracts be available from T+2 days to T+30 days, ii) Weekly contracts be available from T+1 week to T+3 weeks, and iii) Monthly contracts be available from T+ 1 month to T+3 months. In response, the Petitioner

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has mentioned that the suggested timelines shall be analysed in detail to appropriately incorporate in the trading calendar.

14. Some stakeholders suggested that a longer duration contract (up to 1 year) may also be introduced in order to have better planning both from procurer as well as from seller's point of view. In response, the Petitioner has submitted that Open Access Regulations provide for advance scheduling for up to fourth month, the month in which an application is made being the first month. Accordingly, the Petitioner has made proposal for monthly contracts. Once GNA Regulations are notified, the Petitioner may be allowed to introduce contracts up to 11 months.

15. Stakeholders have also commented on flexible matching mechanism proposed by the Petitioner for different contracts. As the matching mechanism is critical to the contract design, it should be pre-specified in the Petition before launch of the contract and should be adopted after Commission's approval. In response, the Petitioner has replied that matching mechanism shall be as per the contract specifications and Business Rules approved by the Commission.

16. Some stakeholders suggested that once the price discovery happens in the month ahead contracts, the terms should be such that both the procurer and the seller have to take/provide delivery of the power. If such contracts are not adhered to by any of the participants, a suitable penalty mechanism or Take/Pay mechanism may be introduced. In this regard, a Bank Guarantee equivalent to 20% of contract value may be deposited with the Exchange. In response, the Petitioner has welcomed the suggestion to collect Bank Guarantee equivalent to 20% of the contract value from the buyer and the seller, as precautionary measure to avoid defaults in fulfilling obligation by any contracting party and agreed to re-assess the margin and settlement procedure proposed by it.

17. Stakeholders have also suggested that Pre-bid Margin should be Rs. 30,000 per MW per month RTC as prescribed in the guidelines issued by MoP instead of 10 paise /kWh proposed by the Petitioner. In response, the Petitioner has mentioned that Pre-bid Margin

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of 10 paise per kWh is prevalent in the existing Weekly and Any day Contract and the same is proposed to be maintained.

18. Some stakeholders commented that priority of curtailment of the executed volume in various segments such as DAM, TAM, RTM and month ahead needs to be clarified and the same should be specified in NLDC procedure. In response, the Petitioner has submitted that in case of constraints in transmission corridor, the curtailment of transactions concluded on Exchange platform shall be effected by RLDC(s) and shall be in accordance with Regulation 15 of Open Access Regulations and procedures issued therein.

19. Some of the stakeholders suggested to specify treatment to the revisions and compensation/liquidated damages in case of renewable energy as it is varying in nature. In response, the Petitioner has submitted that revisions in schedules due to variability of renewable energy shall be addressed in accordance with Regulation 14 of the Open Access Regulations.

20. Stakeholders also suggested to have weekly billing cycle with the provision of due date of 30 days. Moreover, they suggested to provide rebate for the prompt payment within due date as per the MoP guidelines for procurement of power on short term basis. In response, the Petitioner has submitted that it shall discuss the suggestion with market participants and then will decide if revisions are to be made in settlement cycle.

IA No. 25/2022 dated 8.04.2022

21. On 08.04.2022, the Petitioner filed an IA No. 25/2022 to the present Petition. Through the IA, the Petitioner made following additional prayers:

    f) To allow the Petitioner to introduce different matching mechanisms in existing Contract and new Contracts in Term Ahead Market including Green Term Ahead Market and the proposed Hydro Green Term Ahead Market where delivery is one day more than one day ahead i.e. 'T +2' or more to meet market participants requirement, by issuance of a Circular from time to time;

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g) To allow the Petitioner to change the nomenclature from "Discriminatory Price matching" to "Multiform Price matching" in the Business Rules of the Petitioner;

h) To allow the Petitioner to increase the tenure of Month(s) Ahead Contract from the existing one (1) month till such duration to be prescribed by the Hon'ble Commission, after the General Network Access Regulations are duly notified.

22. The Petitioner has proposed different matching and price discovery mechanisms for the existing and new contracts in Term Ahead Market on the basis of the feasibility and efficiency of these mechanisms for a particular segment and contract type. The Petitioner sought flexibility in adopting these matching mechanisms. The Petitioner has proposed matching mechanism and type of Order entry based on parameters given as under:

a.	Auction Type	i) Batch Auction ii) Continuous Matching Mechanism
b.	Order Visibility	i) Open Type ii) Closed Type
c.	Participation Rights	i) Single Sided ii) Double Sided
d.	Price Discovery mechanism	i) Uniform Price ii) Pay-as-bid iii) Get-as-Offered iv) Average of best-Buy and best-Sell
e.	Order Types	i) Normal Order ii) Block Order iii) Fill or Kill Order iv) Fill and Kill Order v) Linked Orders

23. The Commission in its Order dated 19.11.2010 in Petition no L-1/13/CERC-2010 for approving Business Rules of the Petitioner as per Power Market Regulations 2010, had directed that the name of price discovery mechanism be provided as 'Discriminatory Price – Double sided auction'. The Petitioner has now urged to change its nomenclature from "Discriminatory price – Double sided auction" to "Multiform Price Matching" without any change in the procedure for price discovery as provided in the Business Rules of the Petitioner.

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24. The Petitioner has submitted that presently it has sought approval to introduce Monthly Contracts which can be traded on One Month, Two Month and Three Month Ahead. The timelines of contracts are designed keeping in mind the scheduling timelines permitted under Open Access Regulations, 2008. That after notification of General Network Access Regulations, the delivery period for Month(s) Ahead Contract shall be in compliance to the new Regulations and their amendments from time to time. In this regard, the Petitioner has requested to allow him to introduce contracts up to 11 months after the notification of GNA Regulations.

Hearing Dated 12.04.2022

25. During the hearing held on 12.04.2022, the Petitioner made detailed submissions in support of the price discovery and proposed matching mechanisms. The Petitioner submitted that it has filed IA seeking amendments to the pleading and prayers for seeking approval on different matching mechanisms in existing contracts and new contracts in Term Ahead Market to meet the market participants requirement by the issuance of a circular from time to time, and to allow its Exchange to increase the tenure of Month(s) Ahead Contract from the existing one month till such duration to be prescribed by the Commission after the General Network Access Regulations are duly notified.

26. After hearing the submissions of the learned counsel and the representative of the parties, the Commission directed the Petitioner to file on affidavit by 28.4.2022 the complete and detailed specifications of the proposed contracts as under:
    a) Contract-wise proposed price discovery and matching methodology;
    b) Timelines, including commencement of bidding and duration of bidding session till delivery commences;
    c) Delivery mechanism (including provision for revisions) and delivery duration;
    d) Risk management mechanism including margining and final price settlement mechanism; and
    e) Price discovery and matching methodology for the existing weekly, daily/any day contracts across TAM/GTAM/Hydro GTAM.

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27. On 5.05.2022, the Petitioner, in compliance of the Commission's directions, has provided limited information.

Analysis and Decision

28. The Commission notes that the issue of longer duration contracts (beyond T+11 days) and financial derivatives was sub-judice since 2011. On 26.10.2018, the Ministry of Power constituted a Committee to examine the technical, operational and legal framework for futures/forward and derivative contracts in electricity and to give recommendation in this regard. The Committee submitted its report on 30.10.2019 with the following recommendations:

    (a) All Ready Delivery Contracts and Non-Transferable Specific Delivery (NTSD) Contracts as defined in the Securities Contracts (Regulation) Act, 1956 (SCRA) in electricity, entered into by members of the Power Exchanges shall be regulated by CERC.

    (b) Commodity Derivatives in electricity other than Non-Transferable Specific Delivery (NTSD) Contracts as defined in SCRA shall fall under the regulatory purview of SEBI.

    (c) A Joint Working Group between SEBI and CERC shall be constituted with Terms of Reference as agreed in the Report of the Committee.

29. Based on the recommendations of the Committee, both SEBI and CERC have come to an agreement that CERC will regulate all the physical delivery based forward contracts whereas the financial derivatives will be regulated by SEBI.

30. The Supreme Court of India, in its Order dated 06.10.2021 for Civil Appeals 5290-5291 of 2011 favorably disposed of the matter of futures/forward and derivative contracts in electricity in terms of the agreement reached upon by SEBI and CERC. The relevant extract of the Order is as under:

> "……
> *The present applications have been placed on record in all the appeals which have been listed before this Court seeking the disposal of the appeals based on the settled terms agreed upon by the parties. These terms, delineating the respective*

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jurisdictions of SEBI and CERC have been formulated by the Committee on Efficient Regulation of Electricity Derivatives constituted by the MoP during the pendency of the present appeals before this Court.

....

We have perused the applications and the settled terms placed on record. Without commenting on the proposed terms, we permit the authorities to take the necessary steps in pursuance of the same, in accordance with law.

....

The parties are directed to abide by the terms and conditions as recommended by the Committee on Efficient Regulation of Electricity Derivatives and the Office Memorandum dated 10.07.2020 issued by the MoP in its letter and spirit......"

31. We note that the Petitioner, earlier on 19.02.2021, filed a Petition No. 59/MP/2021 seeking approval on the long term ahead contracts beyond 11 days. The Petition was disposed of by the Commission vide Order dated 27.07.2021 with liberty to the Petitioner to approach the Commission with fresh Petition after the decision of Hon'ble Supreme Court in the referred Civil Appeals. Accordingly, by virtue of disposal of the Civil Appeals by Hon'ble Supreme Court on 06.10.2021, the Petitioner filed the present Petition on 25.10.2021. During the first hearing on 30.11.2021, the Petition was admitted and the Petitioner was directed to invite stakeholders' comments and file its reply on the comments. During the second hearing on 12.04.2022, the Commission reserved the matter for Order.

32. Regulation 25 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 (in short "the PMR 2021") provides for "Approval or Suspension of Contracts by the Commission". In accordance with Regulation 25 of PMR 2021, the proposal of the Petitioner on the long term ahead contracts beyond 11 days has been evaluated in subsequent paragraphs. The Regulation 25 is reproduced as under:

*"25. **Approval or Suspension of Contracts by the Commission***

(1) The Commission may, on its own or on an application made in this behalf, permit any Power Exchange to introduce new contracts as specified in clause (1) of Regulation 4 of these regulations:

....

....

(2) Any Power Exchange seeking permission to introduce a new contract under clause (1) of this Regulation, shall submit to the Commission complete and detailed contract specifications including the following:

(i) Type of contract;

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(ii) Price discovery and matching methodology proposed;
(iii) Timelines, including commencement of bidding and duration of bidding session till delivery commences;
(iv) Delivery mechanism and delivery duration i.e. whether delivery is for intraday, daily, weekly, monthly, seasonal, yearly or beyond;
(v) Risk management mechanism including margining and final price settlement mechanism;

……."

(i) Types of Contracts

33. The Petitioner has proposed to introduce delivery based Monthly Contracts which can be traded on One Month, Two Month and Three Month Ahead basis both in conventional and renewable energy segments of Term Ahead Market. The Petitioner has also proposed Fortnightly Contracts and modification in the delivery/trading timeline of the existing Any-Day Contracts and Weekly Contracts to make them available beyond 11 days. The Petitioner submitted to operate these Monthly/Fortnightly/Weekly/Any-day contracts with different nomenclatures based on different price discovery methodologies to distinguish one variant from the other variant (e.g. operating weekend uniform and weekend continuous contracts simultaneously). The Petitioner has also prayed for Exchange specified seasonal duration contracts to be traded on month ahead basis.

34. We have analyzed the details of procurement of power through DEEP portal of the Ministry of Power for the period from 01.01.2020 to 30.04.2022. We find that during the period, out of 660 tenders, 396 tenders (~60%) were there for monthly procurement of power. These monthly tenders were raised for 61% of the total tendered capacity at the DEEP portal during the said period. This indicates the preference of monthly contracts among stakeholders.

35. We have examined the contracts, their types and specifications submitted by the Petitioner. We note that the Monthly Contracts (for One Month, Two Month and Three Month Ahead basis), Fortnightly Contracts proposed by the Petitioner and the Any Day Contracts and Weekly Contracts with proposed modification in timelines are physical delivery based forward contracts and/or NTSD Contracts. Therefore, in line with the judgment of Hon'ble

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Supreme Court dated 06.10.2021 and further in terms of the agreement arrived between the the CERC and the SEBI, the CERC has jurisdiction to regulate these contracts.

36. The Petitioner has sought approval to introduce the proposed contracts both in Term Ahead Market and Green Term Ahead Market. Considering that the conventional and renewable energy have their own significance, we permit the contracts as per the discussion in subsequent paragraphs to be introduced in both Term Ahead Market and Green Term Ahead Market.

37. The Commission is of view that any new segment in a market should be introduced gradually. The Petitioner, in the segment of additional term ahead market, has proposed multiple contracts and/or their variants to be introduced on its Exchange platform. Considering that initially this market may have low liquidity and the contracts and/or their variants proposed by the Petitioner may have overlapping effect over each other further impacting the volume/s per contract, we are of the view that not all the contracts and/or their variants proposed by the Petitioner merit consideration right at the inception of the longer duration contracts. Therefore, keeping in mind the need for gradual approach, we are inclined to restrict the contracts proposed by the Petitioner. We are of the considered view that the performance of the contracts approved in the present Petition (subsequent to their introduction at Exchange) should be examined first before extending the segment further upon receiving fresh application by the Petitioner.

38. We hereby accord approval to the Petitioner's proposal to introduce Monthly Contracts, Any-day and Weekly Contracts with modified timelines for pre-specified time blocks notified to the market participants well in advance subject to the directions given in the subsequent paragraphs. We direct the Petitioner to change the name of Any-day contracts (based on Uniform Price Step Auction as decided in Paragraph 40 and Paragraph 44 of this Order) to Daily contracts to ensure parity across the Exchanges. However, the fortnightly contracts (as being similar to two weekly contracts on rolling basis / or user defined days in Any-day single sided contract), variants in Weekly contracts i.e. weekend contracts (as being similar to daily contracts on rolling basis), and other contract variants based on the

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price discovery methodology are not approved at this stage, excluding Any-day contract with Reverse Auction Methodology as decided in Paragraph 41 and Paragraph 44 of this Order (which is directed to be named as Any-day Single Sided Contract). Therefore, effectively approval is granted for Daily Contracts, Weekly Contracts, Monthly Contracts and Any-day Single Sided Contracts to be traded at Petitioner's Exchange. Notwithstanding the above, these contracts are approved for the maximum duration of three months, considering the month in which transaction is made as the zero month. Accordingly, in the zero month, the monthly contract can be transacted for first month/ second month/ third month.

(ii) Price Discovery and Matching Methodology

39. The Petitioner has sought flexibility in introducing different price matching methodologies for the proposed contracts. The Petitioner sought to introduce Weekly and Monthly Contracts with Uniform Price Auction, and Any day contracts with Continuous Matching Mechanism. Once these contracts are introduced with these methodologies, variants of these contracts will be introduced with different price matching methodologies. Accordingly, the Petitioner sought additional approvals on Weekly and Monthly Contracts with Continuous Matching, Reverse Auction, and Forward Auction; and Any day contracts with Reverse Auction, Forward Auction, and Uniform Price Auction. The Petitioner submitted that these contracts will operate under different nomenclatures based on the price discovery mechanism they follow so as to distinguish one from the other. These contracts with different price discovery mechanisms would be introduced only after issuance of circular two weeks prior to the introduction. On the other hand, the Petitioner also prayed for changing the nomenclature of "Discriminatory price – Double sided auction" being followed in existing term ahead contracts to "Multiform Price Matching" without any change in the procedure for price discovery.

40. We note that presently the Petitioner is following Discriminatory price matching mechanism for its existing Any-Day and Weekly Contracts. For Any-day contracts, it also has a variant on continuous price matching mechanism. We note, in the present petition, the Petitioner has proposed Any-Day and Weekly Contracts with Uniform Price Auction.

Since, in terms of transparency and efficiency in price discovery, the Uniform Price Auction has merits over the Discriminatory price matching and Continuous price matching; we approve the use of Uniform Price Auction only, as a matching methodology for price discovery in Daily Contracts (as approved in Paragraph 38 of this Order), Weekly Contracts and Monthly Contracts. We direct it to be renamed as Uniform Price Step Auction and follow the principles of matching accordingly. We further direct the Petitioner to use open auction for Uniform Price Step Auction so that the participants while bidding for these contracts can take informed decision after seeing buy and sale bids offered by the anonymous participants.

41. We note that the Petitioner's proposal of Any-day contracts with Reverse Auction on buyer's requisition is similar to the contracts currently executed at DEEP Portal, wherein multiple sellers compete against each other for matching with the requisition of a buyer. We are of the view that such contract at the Exchange will facilitate discovery of competitive prices, and also provide counterparty risk management by ensuring timely payments on the day close to delivery. On the other hand, the Petitioner's proposal of Forward Auction follows the price discovery on the basis of incremental price quotes by the buyers wherein the highest prevailing buy price shall be selected. We feel the proposal of Forward Auction does not strictly go with the spirit of efficient price discovery. Therefore, in the interest of the consumers, we only approve Reverse Auction as price discovery matching methodology for Any-day Contract at Petitioner's Exchange which as provided in Paragraph 38 of this Order shall be named as Anyday Single Sided Contract.

42. We have taken note of the Petitioner's submission on the mechanism of reverse auction as provided in the IA No 25/2022 dated 08.04.2022. After examining, we notice that the Petitioner has not provided mechanism of reverse auction, particularly for the Anyday Single Sided Contract. Therefore, we decide the same. For Reverse Auction, the buyer shall specify its requirement in terms of quantum in MW and duration. The sellers shall bid their offers specifying quantum in MW and Price in Rs/MWh against the requirement of buyer during the auction window. Then, the bidding shall take place in two stages i.e. Initial Price Offering (IPO) and Reverse Auction.

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43. The approval given here in the price discovery and the matching methodology for Daily (earlier Any day) and Weekly Contracts shall supersede the earlier approvals of the Commission for these contracts. Accordingly, henceforth, Daily and Weekly Contracts will only follow Uniform Price Step Auction based on open auction for the price discovery. With this, there would not be any application of 'Discriminatory price – Double sided auction' in these contracts and therefore, the prayer of the Petitioner on its name change becomes redundant and is decided accordingly. Moreover, the request of the Petitioner for additional price matching mechanisms and contracts to be introduced under different nomenclatures based on these additional price discovery mechanisms, is not approved as provided in Paragraph 38 of this Order.

44. As discussed above, henceforth, the contracts and their price discovery methodologies in the term ahead market (including green term ahead market) at the Petitioner's Power Exchange shall be as follows:

Name of the Contract	Approved Price Discovery Methodology
Daily Contract	Uniform Price Step Auction
Weekly Contract	Uniform Price Step Auction
Monthly Contract	Uniform Price Step Auction
Any-day Single Sided Contract	Reverse Auction

(iii) Timelines - commencement of bidding and duration of bidding session

45. The Petitioner, in terms of Regulation 25 of the PMR 2021 was required to provide timelines of the proposed contracts, including commencement of bidding and duration of bidding session till delivery commences. During the second hearing, among other things, it was noticed that the Petitioner has not submitted the requisite details on timelines of the proposed contracts. Accordingly, vide ROP for the hearing dated 12.04.2022, the Commission directed the Petitioner to submit the same. However, we note that the Petitioner in its latest submission only provided envisaged timelines, i.e., first day and last day of the bidding, not the firm timelines along with bidding timings for the respective contracts. Therefore, in view of the incomplete submission made by the Petitioner, we are

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inclined to stipulate timelines including commencement of bidding and duration of bidding session for the approved contracts as under:

Name of the Contract	Commencement of Bidding	Last day of bidding	Bidding Time
Daily Contracts	On Daily Basis	Two days before delivery day	00:00 – 24:00 hours
Weekly Contract	Monday of the week prior to delivery	Friday of the one week prior to delivery	12:00 – 17:00 hours
Monthly Contract	First Day of the zero month	For the first month (M_1) contract – ten days prior to the close of zero month (M_0); For the second month (M_2) contract – five days prior to the close of zero month (M_0); For the third month (M_3) contract – last day of zero month (M_0).	12:00 – 17:00 hours
Any-Day Single Sided Contract	On Daily Basis	Two days before delivery day	00:00 – 24:00 hours

46. In Paragraph 38 of this Order, these contracts are approved for the maximum duration of the three months. Considering the month prior to these three months as the zero month, trading for these contracts can be commenced in zero month. That means Daily, Weekly, and Any-day Single Sided Contracts for third month can be traded on rolling basis in zero month (M_0), first month (M_1), second month (M_2) and third month (M_3) subject to the timelines specified in the above table. A monthly contract would be available for trading as per the timelines specified in above table. The Petitioner is directed to make Daily, Weekly and Monthly Contracts available only for pre-specified time blocks notified to the market participants well in advance with the help of circulars.

47. The Petitioner is directed to commence the physical delivery of electricity on a day more than one day ahead (T + 2 or more) of the last day of bidding in accordance with the Regulation 2 (ba) of the PMR 2021.

48. The approval given here in the contract timelines for Daily (earlier Any day) and Weekly Contracts shall supersede the earlier approvals of the Commission for these contracts. Accordingly, Daily and Weekly Contracts approved prior to this Order shall not run on the

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Exchange after introduction of these contracts with modified timelines and contract specifications. However, the transactions made under the present form of Daily and Weekly Contracts, before the launch of these contracts with new timelines will not be affected and shall be delivered and settled as per the earlier terms and conditions.

(iv) Delivery Mechanism and Delivery Duration

49. For the contracts as approved above, the delivery duration proposed by the Petitioner is: i) T+2 to T+ last day of fourth month for daily/anyday contracts (considering the month in which application is made as the first month) ii) Calendar Week (Monday to Sunday) for weekly contracts, and iii) One month at a time for monthly contracts. The Petitioner submitted that duration shall be customised to the provisions of General Network Access Regulations as and when they are notified and it may be increased up to 11 months.

50. With respect to Paragraph 38 and Paragraph 46 of this Order, we approve these contracts for the maximum duration of three months, considering the month in which transaction is made as the zero month. Therefore, the Petitioner's proposal for extending delivery duration of these contracts upon issuance of GNA Regulations is not approved. However, after examining the performance of contracts approved in this Order, we may consider reviewing the segment further upon receiving fresh application from the Petitioner. Accordingly, the approved delivery duration for these contracts (for the pre-specifiedtime blocks notified to the market participants well in advance) is: i) T+2 to T+90 days for daily contracts, ii) TW+1 to TW+12 for weekly contracts, iii) TM+1 to TM+3 months for Monthly contracts; and iv) T+2 to T+90 days for anyday single sided contracts for user defined days and hours, wherein T denotes the zero day of trading, TW denotes the zero week of Trading and TM denotes the zero month of the trading and physical delivery of electricity starts on a day more than one day ahead.

51. A table summarizing the timelines including commencement and duration of bidding, and delivery duration for the approved contract is provided as under:

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Name of the Contract	Commencement of Bidding	Last day of bidding	Bidding Time	Delivery Duration	Remarks
Daily Contracts	On Daily Basis	Two days before delivery day	00:00 – 24:00 hours	T+2 to T+90 Days	For pre-specified time blocks notified to the market participants well in advance through circulars
Weekly Contract	Monday of the week prior to delivery	Friday of the one week prior to delivery	12:00 – 17:00 hours	TW+1 to TW+12 Weeks	
Monthly Contract	First Day of the zero month	For the first month (M_1) contract – ten days prior to the close of zero month (M_0); For the second month (M_2) contract – five days prior to the close of zero month (M_0); For the third month (M_3) contract – last day of zero month (M_0).	12:00 – 17:00 hours	TM+1 to TM+3 Months	
Any Day Single Sided Contract	On Daily Basis	Two days before delivery day	00:00 – 24:00 hours	T+2 to T+90 Days	For user defined days and time blocks

52. We hereby direct that the delivery mechanism for these contracts shall be in accordance with the CERC (Open Access in inter-State Transmission Regulations), 2008 as amended from time to time including reenactment thereof; CERC (Indian Electricity Grid Code) Regulations, 2010 as amended from time to time including reenactment thereof; CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time including reenactment thereof; CERC (Power Market Regulations), 2021 as amended from time to time including reenactment thereof; Procedure for Scheduling of Bilateral Transaction and Procedure for Short Term Open Access in inter-State Transmission System through National Open Access Registry (NOAR) as amended from time to time including reenactment thereof.

(v) Risk Management Mechanism including Margin and Final Price Settlement Mechanism

53. The Petitioner, in its original submission, has provided Pre-bid Margin at the rate of 10 paisa per kWh from both buyers and sellers while Additional Margin was proposed as equivalent to 5 days of matched trade or 20% of the total trade value whichever is higher from the buyer. However, in its submission dated 05.05.2022, the Petitioner proposed that it shall specify margins based on risk management framework for each contract approved

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by Risk Assessment and Management Committee (RAMC). In its submission dated 05.05.2022, while providing the contract specifications, it kept the Additional Margin same as proposed in its original submission, however, deleted the proposal on Pre-bid Margin.

54. We note that Regulation 26 of the PMR 2021 permits a Power Exchange to develop and implement a prudent risk management framework which shall be dynamic based on the changing risk profiles of the market. However, in terms of Regulation 19(1)(b) and Regulation 25 of the PMR 2021, the Petitioner seeking permission to introduce a new contract, is required to provide risk management mechanism including margining and final price settlement. We further note that even after the instructions given in this regard, the Petitioner has failed to provide the same for the contracts on which it is seeking approval of the Commission. Therefore, we direct the Petitioner to submit to the Commission, the details of risk management mechanism including margining as per the requirement specified under Regulation 25(2)(v) of the PMR 2021.

55. Regarding the final price settlement, the Petitioner has proposed that it will be based on the type of matching methodology adopted for each of the contract. The Petitioner submitted that in case of Uniform Price Auction, price would be settled at Uniform Market Clearing Price. For Reverse Auction and Forward Auction, it would be settled at 'Get-as-Offered' and 'Pay-as-Bid' respectively. The Petitioner proposed that funds pay-in by the buyers equivalent to one day's obligation shall be collected on day D (D being delivery day) whereas funds pay-out to the seller equivalent to one day's obligation shall be disbursed on D+1 basis for each delivery day.

56. The Petitioner has proposed that final price settlement shall be based on the price discovery methodology followed for the respective contracts. While, we agree with the proposal, we direct the Petitioner to undertake the same as per the price matching methodologies approved in the Paragraph 44 of this Order. We also direct that the final price equivalent to the 'Traded price x Quantity scheduled' to be settled at delivery point. We note that the mechanism of pay-in and pay-out as proposed by the Petitioner has been in practice for the existing term ahead contracts at the Power Exchange. We further note that no adverse

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feedback regarding the said mechanism has been received in this context. Accordingly, we approve the price settlement as discussed above, subject to the condition that the netting off of the positions shall not be allowed.

57. We hereby direct the Petitioner to schedule these contracts, viz., Daily, Weekly, Monthly and Any-day Single Sided contracts on the first available day following the transaction day and to strictly abide by the following conditions of NTSD contracts:
    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.

58. We find that for these contracts, the Petitioner has proposed variation in percentage terms for scheduled energy. As per the condition (vi) of the NTSD contracts, the contracts can be annulled or curtailed, without any transfer of positions, due to constraints in the transmission system or due to force majeure; however, this will be subject to validation by the system operator and default mechanism of the Petitioner's Exchange. Accordingly, we direct that any downward revision in the contracted quantity (MWh) shall be subject to the aforesaid conditions.

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59. For Any-Day Single Sided contracts, the Petitioner has proposed that after the Reverse Auction, the buyer may partially or fully reject the trade. We find that this proposal of the Petitioner is a part of the trading activity (i.e. before transaction takes place) and therefore, we direct the Petitioner to complete the same two days before of the day of delivery. Once a transaction takes place and the contract is entered into, no partial or full rejection of the contracted quantity shall be allowed except in the cases of force majeure or constraints in the transmission corridor subject to the validation by the system operator and default mechanism of the Petitioner's Exchange.

60. The capacity offered, as a sell bid in Power Exchange under the Daily, Weekly, Monthly and Any-day single sided 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 PMR 2021 and other applicable Regulations of the Commission.

61. We hereby direct the Petitioner to make appropriate changes in its software before the commencement of these physical delivery based forward contracts. The Commission directs the Petitioner to revise its Business Rules, Rules and Bye-Laws according to approvals granted in this Order and as per the detailed procedure for scheduling of bilateral transactions. We further direct the Petitioner to submit the compliance report of the same on affidavit within two weeks from the date of issuance of the Order. The Petitioner is also directed to upload the revised Business Rules, Rules and Bye-Laws including the risk management mechanism as directed in Paragraph 54 of this Order, on its website before the commencement of these contracts. Needless to mention, if any discrepancy is noticed or if it appears that the revised Business Rules, Rules and Bye-Laws do not conform to the Regulations and/or to this Order in any respect, necessary directions may be issued for such compliance. We also direct POSOCO to submit a report within three months from the date of introduction of the contracts as approved in this Order, after seeking feedback from the Power Exchanges on the experience and performance of the said contracts.

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62. The Petition 229/MP/2021 along with IA No. 25/2022 is disposed of in terms of the above.

Sd/-	Sd/-	Sd/-	Sd/-
(P.K. Singh) Member	(Arun Goyal) Member	(I.S. Jha) Member	(P. K. Pujari) Chairperson

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CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 219/MP/2021

Coram:
Shri P. K. Pujari, Chairperson
Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri P. K. Singh, Member

Date of Order: 7th June, 2022

IN THE MATTER OF:

Petition under Section 66 of the Electricity Act 2003 read with Regulation 25 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 for approval of introduction of additional Term Ahead Contracts and Green Term Ahead Contracts beyond T+11 days at Indian Energy Exchange Limited.

And in the matter of

Indian Energy Exchange Limited (IEX),
Plot No. C-001/A/1, 9th Floor, Max Towers,
Sector 16 B, Noida ......Petitioner

Vs

Power System Operation Corporation,
B-9, Qutab Institutional Area,
Katwaria Sarai,
New Delhi ....Respondent

Parties Present
Mr. Jogendra Behera, Petitioner
Mr. Gaurav Maheshwari, Petitioner
Mr. Subhendu Mukherjee, Respondent
Mr. Alok Mishra, Respondent

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ORDER

The Petitioner has filed the present petition seeking approval for introduction of additional Term Ahead Contracts and Green Term Ahead Contracts beyond T+11 days at the Indian Energy Exchange Limited.

2. The Petitioner has made the following prayers:

   a) Accord approval for introduction of the proposed additional contracts and modifications in the existing Term Ahead Contracts and Green Term Ahead Contracts at IEX platform.

   b) Accord approval to amendments in the Business Rules of IEX.

   c) Pass such further order or orders as may be considered.

3. The case was called out for virtual hearing on 30.11.2021 and on 12.04.2022.

Submissions by the Petitioner

4. Presently, the Petitioner offers Day Ahead Contracts, Intraday Contracts, Day Ahead Contingency Contracts, Real Time Contracts and Term Ahead Contracts for trading of electricity. It also offers exchange of Renewable Energy Certificates and Energy Saving Certificates. Under the Term Ahead segment, Weekly Contracts and Daily contracts are being offered for the period up to 11 days.

5. The endeavor of the distribution companies (Discoms) in recent times has been to arrive at a judicious mix of long-term and short-term contracts which could optimize their power procurement costs. They are preferring short term contracts to avoid fixed charges and entering into contracts for duration up to one year on the DEEP portal of the Ministry of Power (MoP) which are currently not available at the Power Exchanges.

6. Longer duration contracts at Exchanges can provide another avenue to the Discoms to fulfill their short-term demand and to optimize their power purchase cost. Discoms would be able to hedge their risk against volatility in spot prices and availability of transmission corridor. These contracts will provide an avenue for sellers to sell surplus power with

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robust payment security mechanism. These contracts will also provide an opportunity to small participants like open access consumers to buy power at competitive rates to meet energy requirement for a longer period.

7. In view of the above, the Petitioner has proposed to introduce delivery based Monthly Contracts to be available for calendar Months or combination thereof on a rolling basis, e.g., Monthly, Quarterly, Half Yearly, Yearly contracts both in conventional and renewable energy segments of the Term Ahead Market. The Petitioner has also proposed that the Fortnightly Contracts will be available for blocks of 15 Days of calendar Months starting from 1^{st} or 16^{th} of a Month on a rolling basis and, Any-Day(s)/ Any-Day(s) Single Sided Contracts be available for user defined Day(s) and duration (time-blocks). The Petitioner has also proposed modification in the delivery/trading timeline of the existing Daily Contracts and Weekly Contracts to make them available beyond 11 days. With regard to matching methodology, the Petitioner sought flexibility in introducing Continuous Trade Session or Uniform Price Open Auction for Daily, Weekly, Fortnightly, Monthly and Any-Day(s) Contracts and Reverse Auction for Any-Day(s) Single Sided Contracts.

8. The Petitioner has proposed a 15% downward quantity variation in energy against contracted quantity by both buyer and seller when the minimum contract period is 7 days and the delivery of contract is beyond T+11 days. The Petitioner has also proposed uniform revision in schedules as per the Procedure of Bilateral transactions and submitted that the cancellation of trade or revision in schedules beyond the permitted variation shall be considered as default and will be penalized. If the contract is cancelled before the submission of scheduling application, the penalty amount will be 5% and 1% of the trade value when the duration of the contract is up to 15 and beyond 15 days respectively. If the revision/cancellation of contract takes place after the application for scheduling is submitted, then the penalty amount will be 20% of the value of remaining quantity to be delivered subject to a cap of maximum 30 days of equivalent scheduled quantity value. Such penalty will be paid to the counter party as compensation against cancellation/ revision of the contract.

9. The Petitioner has proposed that as part of risk management mechanism, it will collect 'Initial Margin' at the time of bidding and then 'Additional Margin' before the scheduling

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application is made to the Load Dispatch Centre. In case a party defaults, the Margins collected shall be utilized to pay compensation to the counterparty. Initial Margin equivalent to 5% and 1% of the order values shall be collected for the contract duration up to 15 days and beyond 15 days respectively. After the trade gets executed an 'Additional Margin' equivalent to 50%, 25%, and 20% of the trade value shall be collected for contracts up to 7 days, 15 days and beyond 15 days respectively. In case of Any Day(s) Single Sided contract an 'Initial Margin' equivalent to Rs. 30,000/MW/month will be collected considering the nature of the contract and the proposed Reverse/Forward auction mechanism. Though, in the Any-Day(s) Single Sided Contracts, the buyer/seller who has initiated auction shall have the right to partially accept or cancel the trade before the application is made to the concerned Load Despatch Centre for scheduling. The Petitioner has annexed the draft Contract Specifications seeking approval of the Commission.

Hearing Dated 30.11.2021

10. The Petition was first heard on 30.11.2021. During the hearing, the Petitioner submitted that the present Petition has been filed in view of the Judgment dated 6.10.2021 of the Hon'ble Supreme Court in Civil Appeal Nos. 5290-5291 of 2011 and Ors on delineating the respective jurisdiction of SEBI and CERC. The Petitioner confirmed, in response to a specific observation of the Commission, that the proposed contracts do not have any element of derivative contracts and that they are Non-Transferable Specific Delivery (NTSD) Contracts.

11. After considering the submissions made by the Petitioner, the Commission admitted the Petition and directed the Petitioner:
    a) to implead POSOCO as Respondent to the Petition and to file revised memo of parties immediately;
    b) to serve copy of the Petition on the Respondent to file its reply, if any, within two weeks after serving copy of the same to the Petitioner, who may file its rejoinder, if any, within two weeks thereafter; and
    c) to give wide publicity to its proposed contracts by uploading the same on its website for inviting comments from the stakeholders and general public and file an affidavit

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with detailed study incorporating the comments received from the stakeholders and the response thereon.

12. In compliance to the Commission's directions, the Petitioner impleaded POSOCO as Respondent and served a copy of the Petition. Also, the Petitioner uploaded the copy of Petition on its website for seeking comments/ suggestions from the stakeholders. In response to the same, the Petitioner received comments/suggestions from the following 8 stakeholders: i) CER-IIT Kanpur, ii) NTPC, iii) Prayas Energy Group, iv) Mytrah Energy, v) Jindal India Thermal Power Limited, vi) ReNew Power, vii) Teesta Urja Limited, viii) MSEDCL. However, no suggestion/reply was received from the Respondent.

Stakeholders' Comments & Response of the Petitioner

13. The stakeholders have given positive feedback on the proposal for introduction of additional Term Ahead Contracts and Green Term Ahead Contracts beyond T+11 days. The stakeholders have affirmed that introduction of these contracts would provide more avenues to market participants to trade power beyond 11 days. However, some of the stakeholders have also expressed concerns and sought some clarifications. Major comments of the stakeholders and the Petitioner's view on them are discussed in subsequent paragraphs.

14. Stakeholders have commented that introduction of multiple contracts and overlapping of these contracts may cause loss of liquidity in the market. In response, the Petitioner has submitted that availability of different contracts will provide flexibility to the market participants to meet their specific needs. The issue related to overlapping of contracts shall be taken care of while issuing the Trading and Settlement calendar.

15. Some stakeholders have suggested that the forced outage of a generating station/unit should be considered as a force majeure event and therefore, if any shortfall occurs in the contracted quantity due to it, penalties should not be levied. In response, the Petitioner has submitted that those events which are completely beyond the control of the generator, viz., cyclone, flood, earthquake, grid breakdown, etc., have been considered as a part of force

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majeure events. It is envisaged that the generator will be able to manage any shortfall arising due to forced outage within the 15% quantity variation allowed in these contracts.

16. There have been suggestions from some stakeholders that the proposed Margins being on higher side should be reconsidered by the Exchange. In response, the Petitioner has submitted that Margins play an important role in counterparty risk management. In case a buyer or a seller defaults, the Margin will be used for paying compensation to the counterparty. The proposed Margins are in line with the MoP's Short Term Bidding Guidelines. Margins can be provided in the form of non-cash collateral, viz., Bank Guarantee, Letter of Credit, etc.

17. Some stakeholders have suggested risk management mechanism to mitigate the risk of default wherein either the buyer or seller reneges on one contract to take advantage of another contract. The stakeholders have referred to the draft amendment proposed to short term bidding guidelines and suggested stringent penalty on the defaulting sellers including debarment from Exchange. In response, the Petitioner has also submitted that the proposed penalty mechanism will address the defaults. Initial and Additional Margins shall be collected from both the buyers and the sellers, and shall be used for paying compensation in case of any default. However, the Commission may consider incorporating measures, viz., debarment from scheduling of power through open access, etc., in the regulations to further strengthen the sanctity of contracts.

18. Some stakeholders have also suggested that reverse auction bidding for RE Power in Any Day Single Sided Contracts can be carried out based on percentage per block commitment of RE generators or on energy basis to address the intermittency and non-uniform nature of RE generation. In response, the Petitioner has agreed to the suggestion and made necessary changes in the draft contract specifications to conduct the reverse auction for RE power on energy (MU) basis.

19. Some stakeholders have suggested that the proposed contracts should be approved after the finalization of major proposals namely the GNA Regulations, Amendments to the Short Term Bidding Guidelines and Green Open Access Rules. In response, the Petitioner has

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submitted that finalization of GNA Regulations, etc., may slightly change the way the open access is availed but it will not change the nature of the contracts. As and when these Regulations are finalized, the respective changes shall be incorporated in the proposed contracts.

20. On the basis of stakeholders' comments, the Petitioner has proposed a few changes in its initial proposal of contract specifications. The Petitioner submitted that now the Initial Margin equivalent to 5% and 1% of the trade value would be required for contracts up to 15 days and beyond 15 days respectively whereas Additional Margin equivalent to 50%, 25%, 15% of the trade value would be required for the contracts up to 7 days, 15 days, and beyond 15 days respectively. No cancellation or revision in the contracted quantity would be allowed for the contracts with duration below 15 days. For the contracts with duration 15 days or beyond downward variation up to 15% of the contracted quantity would be allowed beyond which penalty at the rate of 20% of the traded price will be imposed on the defaulting entity. In case of Any Day(s) Single Sided contract, an Initial Margin of Rs. 30000/MW/month would be required.

Hearing Dated 12.04.2022

21. During the hearing held on 12.04.2022, the Petitioner submitted that it has complied with the directions of the Commission given vide Record of Proceedings for the hearing dated 30.11.2021. In response to the specific query of the Commission regarding having multiple price discovery mechanisms, the Petitioner submitted that the proposed price discovery mechanisms have already been approved by the Commission and are currently in use in the existing term ahead contracts. Since, liquidity will initially be low in the longer duration contracts, continuous matching method may be required. However, later when there will be an increase in the liquidity, auction methodology may be used. The Petitioner also clarified that only one methodology will be implemented at a time and in case of any change in methodology, the same will be informed to the market participants well in advance.

22. After hearing the submissions of the learned counsel and the representative of the parties, the Commission directed the Petitioner to file on affidavit by 28.4.2022 complete and detailed specifications of the proposed contracts as under:

    a) Contract-wise proposed price discovery and matching methodology;

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b) Timelines, including commencement of bidding and duration of bidding session till delivery commences;
c) Delivery mechanism (including provision for revisions) and delivery duration;
d) Risk management mechanism including margining and final price settlement mechanism; and
e) Price discovery and matching methodology for existing weekly, daily/any day contracts across TAM/GTAM/Hydro GTAM.

23. On 11.05.2022, the Petitioner, in compliance of the Commission's directions, has provided limited information.

Analysis and Decision

24. The Commission notes that the issue of longer duration contracts (beyond T+11 days) and financial derivatives was sub-judice since 2011. On 26.10.2018, the Ministry of Power constituted a Committee to examine the technical, operational and legal framework for futures/forward and derivative contracts in electricity and to give recommendation in this regard. The Committee submitted its report on 30.10.2019 with the following recommendations:
    a) All Ready Delivery Contracts and Non-Transferable Specific Delivery (NTSD) Contracts as defined in the Securities Contracts (Regulation) Act, 1956 (SCRA) in electricity, entered into by members of the Power Exchanges shall be regulated by the CERC.
    b) Commodity Derivatives in electricity other than Non-Transferable Specific Delivery (NTSD) Contracts as defined in SCRA shall fall under the regulatory purview of SEBI.
    c) A Joint Working Group between SEBI and CERC shall be constituted with Terms of Reference as agreed in the Report of the Committee.

25. Based on the recommendations of the Committee, both SEBI and CERC have come to an agreement that the CERC will regulate all the physical delivery based forward contracts whereas the financial derivatives will be regulated by SEBI.

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26. The Supreme Court of India, in its Order dated 06.10.2021 for Civil Appeals 5290-5291 of 2011 favorably disposed of the matter of futures/forward and derivative contracts in electricity in terms of the agreement reached between SEBI and CERC. The relevant extract of the Order is as under:

> "……
> *The present applications have been placed on record in all the appeals which have been listed before this Court seeking the disposal of the appeals based on the settled terms agreed upon by the parties. These terms, delineating the respective jurisdictions of SEBI and CERC have been formulated by the Committee on Efficient Regulation of Electricity Derivatives constituted by the MoP during the pendency of the present appeals before this Court.*
> ………
> *We have perused the applications and the settled terms placed on record. Without commenting on the proposed terms, we permit the authorities to take the necessary steps in pursuance of the same, in accordance with law.*
> …….
> *The parties are directed to abide by the terms and conditions as recommended by the Committee on Efficient Regulation of Electricity Derivatives and the Office Memorandum dated 10.07.2020 issued by the MoP in its letter and spirit……*"

27. We note that the Petitioner, earlier on 3.10.2020, filed a Petition No. 635/RC/2020 seeking approval on the long term ahead contracts beyond 11 days. The petition was disposed of by the Commission vide Order dated 27.07.2021 with liberty to the Petitioner to approach the Commission with fresh Petition after the decision of Hon'ble Supreme Court in the referred Civil Appeals. Accordingly, by virtue of disposal of the Civil Appeals by Hon'ble Supreme Court on 06.10.2021, the Petitioner filed the present Petition on 8.10.2021. During the first hearing on 30.11.2021, the Petition was admitted and the Petitioner was directed to invite stakeholders' comments and file its reply on the comments. During the second hearing on 12.04.2022, the Commission reserved the matter for Orders.

28. Regulation 25 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 (in short "the PMR 2021") provides for "Approval or Suspension of Contracts by the Commission". In accordance with Regulation 25 of PMR 2021, the proposal of the Petitioner on the long duration term ahead contracts beyond 11 days has been evaluated in subsequent paragraphs. Regulation 25 is reproduced as under:

"*25. **Approval or Suspension of Contracts by the Commission***

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(1) The Commission may, on its own or on an application made in this behalf, permitany Power Exchange to introduce new contracts as specified in clause (1) ofRegulation 4 of these regulations:

…….

…….

(2) Any Power Exchange seeking permission to introduce a new contract under clause(1) of this Regulation, shall submit to the Commission complete and detailedcontract specifications including the following:

(i) Type of contract;

(ii) Price discovery and matching methodology proposed;

(iii) Timelines, including commencement of bidding and duration of biddingsession till delivery commences;

(iv) Delivery mechanism and delivery duration i.e. whether delivery is forintraday, daily, weekly, monthly, seasonal, yearly or beyond;

(v) Risk management mechanism including margining and final price settlement mechanism;

……."

(i) Types of Contracts

29. The Petitioner has proposed to introduce delivery based Monthly Contracts to be available for calendar Months or combination thereof on a rolling basis, e.g. Monthly, Quarterly, Half Yearly, Yearly contracts both in conventional and renewable energy segments of Term Ahead Market. The Petitioner has also proposed Fortnightly Contracts and Any-Day(s)/ Any-Day(s) Single Sided Contracts. The Petitioner has also proposed modification in the delivery/trading timeline of the existing Daily Contracts and Weekly Contracts to make them available beyond 11 days.

30. We have noted the Petitioner's submission, indicating that the majority of bids received at DEEP Portal of the MoP for the period January 2020 to August 2020, were for the delivery duration of 15 days and 1 month; which corroborates well with the need for introducing contracts beyond 11 days at the Exchange platform. In this regard, we have also analyzed the details of procurement of Power through DEEP portal for the period from 01.01.2020 to 30.04.2022. We find that during the period, at DEEP portal, out of 660 tenders, 396 tenders (~60%) were there for monthly procurement of power. These monthly tenders were raised for 61% of the total tendered capacity at the DEEP portal during the said period. This indicates the preference of monthly contracts among stakeholders.

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31. We have examined the proposed contracts, their types and specifications as submitted by the Petitioner. We note that the contracts proposed by the Petitioner, i.e. Monthly Contracts (for calendar Months or combination thereof on a rolling basis, e.g. Monthly, Quarterly, Half Yearly, Yearly contracts), Fortnightly Contracts, Any-Day(s) Contracts and Any-Day(s) Single Sided Contracts, and the Daily Contracts and Weekly Contracts with proposed modification in timelines are physical delivery based forward contracts and/or NTSD Contracts. Therefore, in line with the judgment of Hon'ble Supreme Court dated 06.10.2021 and further in terms of the agreement arrived between the CERC and the SEBI, the CERC has jurisdiction to regulate these contracts.

32. The Petitioner has sought approval to introduce the proposed contracts both in Term Ahead Market and Green Term Ahead Market. Considering that the conventional and renewable energy have their own significance, we permit the contracts as per the discussion in subsequent paragraphs to be introduced in both Term Ahead Market and Green Term Ahead Market.

33. The Commission is of view that any new segment in a market should be introduced gradually. The Petitioner, in the segment of additional term ahead market, has proposed multiple contracts to be introduced on its Exchange platform. Considering that initially this market may have low liquidity and the proposed contracts by the Petitioner may have overlapping effect over each other further impacting the volume/s per contract, we are of the view that not all the contracts proposed by the Petitioner merit consideration right at the inception of the longer duration contracts. Therefore, keeping in mind the need for gradual approach, we are inclined to restrict the contracts proposed by the Petitioner. We are of the considered view that the performance of the contracts approved in the present Petition (subsequent to their introduction at the Exchange) should be examined first before extending the segment further upon receiving fresh application by the Petitioner.

34. We hereby accord approval to the Petitioner's proposal to introduce Monthly Contracts, and existing Daily Contracts / Weekly Contracts with modified timelines for pre-specified time blocks notified to the market participants well in advance subject to the directions given in the subsequent paragraphs. We also approve Any day Single sided contracts

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(based on Reverse Auction Methodology as decided in Paragraph 39 and Paragraph 40 of this Order) at the Exchange. However, fortnightly contracts (as being similar to two weekly contracts on rolling basis / or user defined days in Any day single sided contract) and Any day contracts (as being similar to Daily Contracts) and variants in Weekly contracts i.e. Weekend/ Week days (as being similar to daily contracts on rolling basis) are not approved at this stage. Therefore, effectively approval is granted for Daily Contracts; Weekly Contracts; Monthly Contracts; and Any day Single Sided Contracts (based on reverse auction methodology) to be traded at Petitioner's Exchange. Notwithstanding the above, these contracts are approved for the maximum duration of the three months, considering the month in which transaction is made as the zero month. Accordingly, in the zero month the monthly contract can be transacted for the first month, second month, and for the third month.

(ii) Price Discovery and Matching Methodology

35. The Petitioner has sought flexibility in introducing Continuous Trade Session or Uniform Price Step Auction for Daily, Weekly, and Monthly Contracts. The Petitioner has submitted that since liquidity will initially be low in the longer duration contracts, continuous matching method may be required. However, later when there is an increase in the liquidity, auction methodology may be used. Only one methodology will be implemented at a time and in case of any change in methodology, market participants will be informed well in advance. The Petitioner has submitted that for Uniform Price Step Auction; either closed auction or open auction may be adopted at any point of time.

36. We note that presently adequate liquidity is not there in the Weekly contracts offered by the Petitioner's Exchange. For these weekly contracts, the Petitioner, since inception is using Uniform Price Step Auction. However, the Petitioner has never approached the Commission to change its price discovery and matching mechanism to Continuous trade session on account of low liquidity in these contracts. This could be indicative of the fact that Uniform Price Step Auction can also be used in low liquidity scenarios. Moreover, since the Uniform Price Step Auction has merits over the Continuous trade Session in terms of transparency and efficiency in price discovery, we approve the use of Uniform Price Step Auction only as a matching methodology for price discovery in Daily, Weekly

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and Monthly Contracts. We further direct the Petitioner to use open auction for Uniform Price Step Auction so that the participants while bidding for these contracts can take informed decisions after seeing buy and sale bids offered by other anonymous participants.

37. The approval given herein for the price discovery and the matching methodology for Daily and Weekly Contracts shall supersede the earlier approvals of the Commission for these contracts. Accordingly, henceforth Daily and Weekly Contracts will follow only the Uniform Price Step Auction based on open auction for the price discovery.

38. For Any-Day(s) single sided Contracts, the Petitioner has proposed Reverse Auction wherein the buyer shall specify its requirement in terms of quantum in MW and duration. Sellers shall bid their offers specifying the quantum in MW and Price in Rs/MWh against the requirement of the buyer during the auction window. Then, the bidding shall take place in two stages, i.e., Initial Price Offering (IPO) and Reverse Auction. For Any-Day(s) single sided Contracts, the Petitioner has also proposed Forward Auction wherein the seller shall specify its offering in terms of quantum in MW and duration. Buyers shall bid specifying quantum in MW and Price in Rs/MWh against the offer of seller during the auction window. Then, the bidding shall take place in 2 stages, i.e., Initial Price Offering (IPO) and Forward Auction.

39. We note that the Petitioner's proposal of Reverse Auction on buyer's requisition is similar to the contracts currently executed at DEEP Portal wherein under the Reverse Auction mechanism, multiple sellers compete against each other for matching with the requisition of a buyer. We are of the view that such contracts at the Exchange will facilitate discovery of competitive prices, and also provide counterparty risk management by ensuring timely payment on the day close to delivery. On the other hand, the Petitioner's proposal of Forward Auction follows the price discovery on the basis of incremental price quotes by the buyers wherein the highest prevailing buy price shall be selected. We feel the proposal of Forward Auction does not strictly go with the spirit of efficient price discovery. Therefore, in the interest of the consumers, we only approve Reverse Auction as price discovery matching methodology for Any-Day(s) single sided Contracts.

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40. As discussed above, henceforth, the contracts and their price discovery methodologies in the term ahead market (including green term ahead market) at the Petitioner's Power Exchange shall be as follows for different contracts:

Name of the Contract	Approved Price Discovery Methodology
Daily Contract	Uniform Price Step Auction
Weekly Contract	Uniform Price Step Auction
Monthly Contract	Uniform Price Step Auction
Any-day Single Sided Contract	Reverse Auction

(iii) Timeline - commencement of bidding and duration of bidding session

41. The Petitioner, in terms of Regulation 25 of the PMR 2021, was required to provide timelines of the proposed contracts, including commencement of bidding and duration of bidding session till the delivery commences. During the second hearing, among other things, it was noticed that the Petitioner has not submitted the requisite details on timelines of the proposed contracts. Accordingly, vide ROP for the hearing dated 12.04.2022, the Commission directed the Petitioner to submit the same. However, we note that the Petitioner in its latest submission provided only the bidding hours for the respective contracts and not the complete details, including days of commencement of bidding. Therefore, we are inclined to stipulate timelines including commencement of bidding and duration of bidding session for the approved contracts as under:

Name of the Contract	Commencement of Bidding	Last day of bidding	Bidding Time
Daily Contracts	On Daily Basis	Two days before delivery day	00:00 – 24:00 hours
Weekly Contract	Monday of the week prior to delivery	Friday of the week prior to delivery	12:00 – 17:00 hours
Monthly Contract	First Day of the zero month	For the first month (M_1) contract – ten days prior to the close of zero month (M_0); For the second month (M_2) contract – five days prior to the close of zero month (M_0); For the third month (M_3) contract – last day of zero month (M_0).	12:00 – 17:00 hours
Any Day Single Sided Contract	On Daily Basis	Two days before delivery day	00:00 – 24:00 hours

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42. In Paragraph 34 of this Order, these contracts are approved for the maximum duration of three months. Considering the month prior to these three months as the zero month, trading for these contracts can be commenced in zero month. That means Daily, Weekly, and Any day Single Sided Contracts for the third month can be traded on rolling basis in zero month (M_0), first month (M_1), second month (M_2) and third month (M_3) subject to the timelines specified in above table. A monthly contract would be available for trading as per the timelines specified in the above table. The Petitioner is directed to make Daily, Weekly and Monthly Contracts available only for pre-specified time blocks notified to the market participants well in advance with the help of circulars.

43. The Petitioner is directed to commence the physical delivery of electricity on a day more than one day ahead (T + 2 or more) of the last day of bidding in accordance with the Regulation 2(ba) of the PMR 2021.

44. The approval given here in the contract timelines for Daily and Weekly Contracts shall supersede the earlier approvals of the Commission for these contracts. Accordingly, Daily and Weekly Contracts approved prior to this Order shall not run on the Exchange after the introduction of these contracts with modified timelines and contract specifications. However, the transactions made under the present form of Daily and Weekly Contracts, before the launch of these contracts with new timelines will not be affected and shall be delivered and settled as per the earlier terms and conditions.

(iv) Delivery Mechanism and Delivery Duration

45. For the contracts as approved above, the delivery duration proposed by the Petitioner is: i) T+2 to T+365 days for daily contracts, ii) TW+1 to TW+52 for weekly contracts, iii) TM+1 to TM+12 months for Monthly contracts, iv) T+2 to T+365 days for any day single sided contracts for user defined days and time blocks, wherein T denotes the trading day, TW denotes the Trading Week and TM denotes the trading month.

46. With respect to Paragraph 34 and Paragraph 42 of this Order, we approve these contracts for the maximum duration of three months, considering the month in which transaction is made as the zero month. Accordingly, the approved delivery duration for these contracts

(for the pre-specified time blocks notified to the market participants well in advance) is: i) T+2 to T+90 days for daily contracts, ii) TW+1 to TW+12 for weekly contracts, iii) TM+1 to TM+3 months for Monthly contracts; and iv) T+2 to T+90 days for any day single sided contracts for user defined days and time blocks, wherein T denotes the zero day of trading, TW denotes the zero week of Trading and TM denotes the zero month of the trading and physical delivery of electricity starts on a day more than one day ahead.

47. A table summarizing the timelines including commencement and duration of bidding, and delivery duration for the approved contracts is provided as under:

<table>
<tr><th>Name of the Contract</th><th>Commencement of Bidding</th><th>Last day of bidding</th><th>Bidding Time</th><th>Delivery Duration</th><th>Remarks</th></tr>
<tr><td>Daily Contracts</td><td>On Daily Basis</td><td>Two days before delivery day</td><td>00:00 – 24:00 hours</td><td>T+2 to T+90 Days</td><td rowspan="3">For pre-specified time blocks notified to the market participants well in advance through circulars</td></tr>
<tr><td>Weekly Contract</td><td>Monday of the week prior to delivery</td><td>Friday of the one week prior to delivery</td><td>12:00 – 17:00 hours</td><td>TW+1 to TW+12 Weeks</td></tr>
<tr><td>Monthly Contract</td><td>First Day of the zero month</td><td>For the first month (M_1) contract – ten days prior to the close of zero month (M_0);
For the second month (M_2) contract – five days prior to the close of zero month (M_0);
For the third month (M_3) contract – last day of zero month (M_0).</td><td>12:00 – 17:00 hours</td><td>TM+1 to TM+3 Months</td></tr>
<tr><td>Any Day Single Sided Contract</td><td>On Daily Basis</td><td>Two days before delivery day</td><td>00:00 – 24:00 hours</td><td>T+2 to T+90 Days</td><td>For user defined days and time blocks</td></tr>
</table>

48. We hereby direct that the delivery mechanism for these contracts shall be in accordance with the CERC (Open Access in inter-State Transmission Regulations), 2008 as amended from time to time including reenactment thereof; CERC (Indian Electricity Grid Code) Regulations, 2010 as amended from time to time including reenactment thereof; CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 as amended from time to time including re-enactment thereof; CERC (Power Market Regulations), 2021 as amended from time to time including reenactment thereof; Procedure for Scheduling of Bilateral Transaction and Procedure for Short Term Open Access in inter-

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State Transmission System through National Open Access Registry (NOAR) as amended from time to time including reenactment thereof.

(v) Risk Management Mechanism including Margin and Final Price Settlement Mechanism

49. In the revised submission dated 11.05.2022, the Petitioner proposed that for Daily, Weekly, and Monthly contracts the Initial Margin equivalent to 5% and 1% of the order value would be collected for contracts up to 15 days and beyond 15 days respectively; whereas Additional Margin equivalent to 50%, 25%, 20% of the trade value would be collected for the contracts up to 7 days, 15 days, and beyond 15 days respectively. For Any Day Single Sided Contracts, the sellers will be required to provide an Initial Margin calculated at the rate Rs. 30000/MW/Month or part thereof whereas the Additional Margin would be in line with the Daily, Weekly, and Monthly contracts.

50. We note that Regulation 26 of the PMR 2021 permits a Power Exchange to develop and implement a prudent risk management framework which shall be dynamic based on the changing risk profiles of the market. We find that the Petitioner has proposed Initial Margin and Additional Marginsas per the risk mitigation requirement of respective contracts. Accordingly, we approve the same.

51. Regarding the final price settlement, the Petitioner proposed that it will be equivalent to the 'Traded price x Quantity scheduled' at delivery point. The Petitioner mentioned that funds pay-in by the buyers equivalent to one day's obligation shall be collected on D-1 basis (D being delivery day) whereas funds pay-out to the seller equivalent to one day's obligation shall be disbursed on D+1 basis for each delivery day subject to confirmation of delivery by the seller. The Petitioner mentioned that netting off of the positions shall not be allowed.

52. We note that the mechanism of final price settlement as proposed by the Petitioner has been in practice since the commencement of the existing term ahead contract at the Power Exchange. We further note that no adverse feedback regarding the said mechanism has been received in this context. Accordingly, we approve the price settlement as proposed by

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the Petitioner subject to the condition that the netting off of the positions shall not be allowed.

53. We hereby direct the Petitioner to schedule these contracts, viz., Daily, Weekly, Monthly and Any day Single Sided contracts on the first available day following the transaction day and to strictly abide by the following conditions of NTSD contracts:

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.

54. We find that for monthly contracts, the Petitioner has proposed upto 15% of downward variation in the contracted quantity (MWh) excluding variations due to force majeure. As per the aforesaid condition (vi) of the NTSD contracts, the Commission directs that the contracts can be annulled or curtailed, without any transfer of positions, due to constraints in the transmission system or due to force majeure; however this will be subject to the validation by system operator and default mechanism of the Petitioner's Exchange. Accordingly, we direct that any downward revision in the contracted quantity (MWh) shall be subject to the aforesaid conditions.

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55. For Any Day Single Sided contracts, the Petitioner has proposed that after the Reverse Auction, the buyer may partially or fully reject the trade within the timelines as may specified by the Exchange from time to time. During such time, the bid will remain valid and the successful bidders will not be able to change their bids. If no communication is received from the buyer or the seller within the stipulated time regarding acceptance of the trade or on nonpayment of Additional Margin, the trade shall be deemed to be rejected by the buyer or seller.

56. We find that the above proposal of the Petitioner is a part of the trading activity (i.e. before transaction takes place) and therefore, we direct the Petitioner to complete the same, two days before the day of delivery. Once a transaction takes place and contract is entered into, no partial or full rejection of the contracted quantity shall be allowed, except in the case of force majeure or constraints in the transmission corridor, subject to the validation by the system operator and default mechanism of the Petitioner's Exchange.

57. The capacity offered, as a sell bid in Power Exchange under the Daily, Weekly, Monthly and Any-day single sided 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 PMR 2021 and other applicable Regulations of the Commission.

58. We hereby direct the Petitioner to make appropriate changes in its software before the commencement of these physical delivery based forward contracts and to align its Business Rules, Rules and Bye-Laws according to approvals granted in this Order and as per the detailed procedure for scheduling of bilateral transactions. We further direct the Petitioner to submit the compliance report of the same on affidavit within two weeks from the date of issuance of the Order. The Petitioner is also directed to upload the revised Business Rules, Rules and Bye-Laws on its website before the commencement of these contracts. Needless to mention, if any discrepancy is noticed or if it appears that the revised Business Rules, Rules and Bye-Laws do not conform to the Regulations and/or to this Order in any respect, necessary directions may be issued for such compliance. We also direct POSOCO to

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submit a report within three months from the date of introduction of the contracts as approved in this Order, after seeking feedback from the Power Exchanges on the experience and performance of the said contracts.

59. The Petition 219/MP/2021 is disposed of in terms of the above.

Sd/-	Sd/-	Sd/-	Sd/-
(P.K. Singh) Member	(Arun Goyal) Member	(I.S. Jha) Member	(P. K. Pujari) Chairperson

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Annexure - III

Contract Specification: Green Contingency Contracts (Hydro)

S. No.	Item	Details
1	**Contract Name***	Green National/Region wise Contingency Contracts (Solar/Non-Solar/Hydro)
2	**Contract Code***	"Type of Contract- "Time block No." (E.g.GECONSL-01) (E.g.GECONNS-01) (E.g. GECONHP-01) Where, GECON: Green Energy Contingency Contracts SL: Solar NS: Non-Solar HP: Hydro 01: Time block number 1, starting from 00:00 hours to 00:15 hours
3	**Contract Type**	National Contract or regional contract for physical delivery of electricity generated from Solar, Non-Solar and Hydro renewable energy sources.
4	**Contract available for Trading**	Contracts available for delivery of 15 mins or combination thereof in a day from 1st time block to 96th time block
5	**Trading day***	Same day or a day before delivery day or as per trading and settlement calendar declared in advance.
6	**Trading Session***	One continuous trading session will be made available to the members for bidding.

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7	**Bidding process**	Sellers and Buyers to submit bid specifying quantum (MW) and Price for each 15-minute time block or combination thereof.
8	**Matching of Bids**	Continuous trade session.
9	**Trading Hours**	Continuous trade session as per trading and settlement calendar to be notified by the Exchange from time to time
10	**Minimum Volume quotation***	0.1 MW
11	**Minimum Volume Step***	0.01MW (Solar, non-solar)/0.1 MW (Hydro)
12	**Lot size**	0.01 MW * 15 minutes (Solar, non-solar)/ 0.1*15 minutes (Hydro)
13	**Maximum bid size***	Bids should not be more than the allowed MW in any of Concurrence/Clearance issued by its SLDC to the Members/Clients at any time. It will be the responsibility of the Member to adhere to this rule.
14	**Price Quote Basis**	Rs. per MWh (excluding all fees, charges, taxes, if applicable)
15	**Price Tick***	Rs. 1 per MWh
16	**Volume Tick size**	0.1 MW
17	**Quantity Variation**	Zero quantity variation allowed.
18	**Settlement**	Traded price * Quantity scheduled by RLDC at delivery point.

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19	**Initial Margins (Operational Limit)***	105% margin from buyers of the total order value should be available in cash with the exchange at the time of bidding for continuous trading sessions.
20	**Transaction Fees**	Fees payable by buyer and seller to Exchange for the quantity approved by LDC at delivery point as specified by the Exchange from time to time with the approval of the commission.
21	**Scheduling**	As per Procedure for Scheduling of Bilateral Transactions
22	**LDC Clearance**	The buyer and seller will have to take concurrence from their respective LDC for scheduling of Power. This concurrence has to be submitted as per the timelines specified in the Trading and Settlement Calendar. NOC / Prior Standing Clearance issued by the LDC in format PX-I as per CERC (Interstate Open Access) Regulations, are also valid for these transactions.
23	**Application for Scheduling**	Application for Scheduling will be Submitted to Nodal LDC as per the "Procedure for Scheduling of bilateral transactions".
24	**Revision of Schedule**	Not Allowed.
25	**Delivery**	The quantity shall be deliverable as per the schedule issued by the respective LDC.
26	**Delivery point**	At the Sellers ISTS periphery.
27	**Application fees, Operating and Transmission Charges and**	Seller will bear all the Transmission, Scheduling& Operating charges and Transmission Losses (in kind) up to the delivery point and Buyer shall bear all the Transmission, Scheduling & Operating

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	Losses	charges including Application Fees and Transmission Losses from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at seller's ISTS Periphery.
28	**Force majeure**	In case of force majeure, the Exchange will settle the contract as per final schedule issued by LDCs.
29	**Fines & penalties***	As specified by the Exchange.
30	**Funds pay in by Members**	Exchange will debit/ adjust the funds pay-in on the next day of trading from buyer's Member/ clients as applicable. Excess margins, if any due to partial concurrence received will be refunded back to the Member on the settlement day.
31	**Funds pay out to Members**	Amount equivalent to net obligation will be credited on D+1 basis (where D stands for Delivery day.)

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Annexure – IV

Contract Specification: Green Daily Contract

S. No.	Item	Details
1	**Contract Name***	National/ Regional Daily Contracts (Solar/Non-solar/Hydro)
2	**Contract Code***	"Type of Contract- "Time block No." (E.g.GEDLYSL-01) (E.g.GEDLYNS-01) (E.g. GEDLYHP-01) Where, GECON: Green Energy Contingency Contracts SL: Solar NS: Non-Solar HP: Hydro 01: Time block number 1, starting from 00:00 hours to 00:15 hours
3	**Contract Type**	National or Electrical Region-specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
4	**Contract available for Trading**	Daily contracts for delivery in a calendar day will be available starting from T+2 day to maximum up to T+90 days on a rolling basis. (T-Trade Day).
5	**Trading day***	Trading will be available on the days as per Trading and Settlement calendar declared in advance.
6	**Trading Session***	Trading session will be made available to the

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		Members/Clients for bidding on each Trading Day on Daily Basis up to two days before delivery day.
7	**Bidding process**	Solar/Non-Solar Sellers and Buyers to submit order specifying duration, quantum in MWh and price in Rs./MWh. Sellers to provide its profile having 15 minute time block wise quantity (MW). It may be an 'All or None' type of order or partial selection type order. Each profile of seller shall be aggregated and converted in MWh for the purpose of matching. Hydro Sellers and Buyers to submit bid specifying duration, quantum (MW) and price in Rs/MWh for each 15-minute time block or combination thereof as the case may be
8	**Matching of Bids**	Uniform Price Step Open Auction
9	**Trading Hours**	Trading session as per trading and settlement calendar to be notified by the Exchange from time to time
10	**Minimum Volume quotation***	0.1 MW
11	**Minimum Volume Step***	0.1MW
12	**Lot size**	0.1 MW * 15 minutes or combination thereof as notified by exchange from time to time.
13	**Maximum bid size***	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility

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		of the Member or the Clients to adhere to this rule.
14	**Price Quote Basis**	Rs. Per MWH (excluding all fees, charges, taxes etc.)
15	**Price Tick***	Rs. 1 per MWH
16	**Volume Tick size**	0.1
17	**Quantity Variation**	Zero quantity variation allowed.
18	**Settlement**	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of change of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed.
19	**Risk Management**	**Initial Margins (Operational Limit):** Initial Margins equivalent to 5% of the order value or as may be specified by the Exchange from time to time will be collected from the Members/Clients (both from buyer & seller) at the time of bidding. The initial margins could be in the form of cash or non-cash or combination thereof. In the absence of initial margins, the Members/Clients will not be allowed to place the bids. **Additional Margin (Basis Margin):** After the trade and prior to submitting Application before the concerned Load Dispatch Center for scheduling of transactions, Additional Margin equivalent to the 50% of the Trade Value or as may be specified by the Exchange based on risk assessment, will be collected from the Member/Client (both from buyers & sellers).

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		Additional Margin can be in the form of cash or non-cash or combination thereof. Non-receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default. **Ad hoc Margin:** Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract.
20	**Transaction Fees**	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point, as specified by the Exchange from time to time, as approved by the Commission.
21	**Scheduling**	As per Procedure for Scheduling of Bilateral Transactions
22	**LDC Clearance**	Post trade, in case of buyer/seller connected to State transmission or distribution system, the buyer/ seller shall provide concurrence of SLDC of their respective State to the Exchange. The concurrence shall be submitted to the Exchange as per the timelines specified in the Trading & Settlement calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by SLDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
23	**Application for Scheduling**	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Settlement Calendar and as per the "Procedure

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		for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
24	**Alternate Route**	The buyer will be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
25	**Revision of Schedule**	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
26	**E-bidding of Transmission Corridor**	In case of perceived congestion in the link, if LDC conducts e-bidding process for allocation of transmission corridor, the Exchange will participate in the process of e biding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding.
27	**Delivery**	The quantity shall be deliverable as per the schedule issued by the LDC.
28	**Delivery point**	The delivery point shall be at Seller's injection point/Regional/State Periphery, as may be specified by the Exchange.

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29	**Application fees, Operating and Transmission Charges and Losses**	Seller will bear the Transmission, Scheduling & Operating charges and Transmission and wheeling Losses (in kind), as applicable, up to the delivery point and Buyer shall bear all the Transmission charges, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
30	**Force majeure**	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
31	**Fines & penalties***	As specified by the Exchange.
32	**Funds pay in by Members**	Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as Pay in default.
33	**Funds pay out to Members**	Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.

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Annexure – V

Contract Specification: Green Weekly Contract

S. No.	Item	Details
1	**Contract Name***	National/ Regional Weekly Contracts (Solar/Non-Solar/Hydro)
2	**Contract Code***	"Type of Contract- "Time block No." (E.g.GEWKLSL-01) (E.g.GEWKLNS-01) (E.g. GEWKLHP-01) Where, GECON: Green Energy Contingency Contracts SL: Solar NS: Non-Solar HP: Hydro 01: Time block number 1, starting from 00:00 hours to 00:15 hours
3	**Contract Type**	National or Electrical Region-specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
4	**Contract available for Trading**	The weekly contracts will be available for trading for calendar Weeks from Monday to Sunday from TW+1 week to maximum up to TW+12 weeks on a rolling basis. (TW-Trade Week).
5	**Trading day***	Trading will be available on the days as per Trading & Settlement calendar declared in advance.

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6	**Trading Session***	One trading session will be made available to the members for bidding separately for Solar, Non-solar and Hydro.
7	**Bidding process**	Solar/Non-Solar Sellers and Buyers to submit order specifying duration, quantum in MWh and price in Rs/MWh. Sellers to provide its profile having 15-minute time block wise quantity (MW). It may be an 'All or None' type of order or partial selection type order. Each profile of seller shall be aggregated and converted in MWh for the purpose of matching. Hydro Sellers and Buyers to submit bid specifying duration, quantum (MW) and price in Rs/MWh for each 15-minute time block or combination thereof as the case may be
8	**Matching of Bids**	Uniform Price Step Auction.
9	**Trading Hours**	Uniform Price Step Auction as per trading and settlement calendar to be notified by the Exchange from time to time
10	**Minimum Volume quotation***	0.1 MW
11	**Minimum Volume Step***	0.1MW
12	**Lot size**	0.1 MW * 15 minutes or combination thereof as notified by exchange from time to time.
13	**Maximum bid size***	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the

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		responsibility of the Member or the Clients to adhere to this rule.
14	**Price Quote Basis**	Rs. Per MWh (excluding all fees, charges, taxes etc.)
15	**Price Tick***	Rs. 1 per MWh
16	**Volume Tick size**	0.1 MW
17	**Quantity Variation**	Zero quantity variation allowed
18	**Settlement**	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of change of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed.
19	**Contracted Quantity**	Contracted quantity shall be the quantity approved and scheduled by LDC at delivery point against the Application for Scheduling made by Exchange. However, till the approval of application by LDC, traded quantity shall be considered as contracted quantity. In case, multiple applications are to be filed for single trade and partial quantity has been scheduled, the contracted quantity shall be equal to sum of quantity scheduled and balance trade quantity to be delivered.
20	**Risk Management**	Initial Margins (Operational Limit): Initial Margins equivalent to 5% of the order value or as may be specified by the Exchange from time to time will be collected from the Members/Clients (both from buyer & seller) at

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		the time of bidding. The initial margins could be in the form of cash or non-cash or combination thereof. In the absence of initial margins, the Members/Clients will not be allowed to place bid. Additional Margins (Basis Margin): After the trade and prior to submitting of Application before the concerned Load Dispatch Center for scheduling of transactions, Additional Margin equivalent to the 50% of the Trade Value or as may be specified by the Exchange based on risk assessment will be collected from the Member/Client (both from buyers & sellers). Additional Margin can be in the form of cash or non-cash or combination thereof. Non-receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default. Ad hoc Margin: Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract. d) Funds pay in Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as pay in default. e) Funds pay out Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.
21	**Transaction Fees**	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point, as specified by the Exchange from time to time, as approved by the Commission.
22	**Scheduling**	As per Procedure for Scheduling of Bilateral Transactions

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23	**LDC Clearance**	Post trade, in case of buyer/seller connected to State transmission or distribution system, the buyer/ seller shall provide concurrence of SLDC of their respective State to the Exchange. The concurrence shall be submitted to the Exchange as per the timelines specified in the Trading & Settlement calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by SLDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
24	**Application for Scheduling**	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Settlement Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
25	**Alternate Route**	The buyer will be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
26	**Revision of Schedule**	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission

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		corridor shall be treated as default by the party who is responsible for such event.
27	**E-bidding**	In case of perceived congestion in transmission link, if LDC conducts e-bidding process for allocation of transmission corridor then the Exchange will participate in the process of e biding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding
28	**Delivery**	The quantity shall be deliverable as per the schedule issued by the LDC.
29	**Delivery point**	The delivery point shall be at Seller's injection point/Regional/State Periphery, as may be specified by the Exchange.
30	**Application fees, Operating and Transmission Charges and Losses**	Application fees shall be collected from buyer on date of application to Nodal LDC. Transmission and Operating Charges as applicable on quantum scheduled at the delivery point and payable to the Nodal LDC, will be collected from the buyer and seller members/Clients on receipt of the acceptance from the nodal LDC.
31	**Force majeure**	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
32	**Fines & penalties***	As decided by the Exchange from time to time and informed through circular.

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33	**Funds pay in by Members**	Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as Pay in default.
34	**Funds pay out to Members**	Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.

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Annexure – VI

Contract Specification: Green Monthly Contract

S. No.	Item	Details
1	**Contract Name***	National/ Regional Monthly Contracts (Solar/Non-solar/Hydro)
2	**Contract Code***	GMLYSL-MMM-YYYY Where MMM: Month e.g. JAN YYYY-Year e.g. 2022 SL: Solar NS: Non solar HP: Hydro
3	**Contract Type**	National or Electrical Region-specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
4	**Contract available for Trading**	The Monthly contracts will be available for calendar Months from TM+1 Month to maximum up to TM+3 Months on a rolling basis. (TM-Trade Month)
5	**Trading day***	Trading will be available on the days as per Trading & Settlement calendar declared in advance.
6	**Trading Session***	Bidding session will be made available to the members/Clients for bidding on each Trading Day from

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		For the first month (M1) contract - ten days prior to the close of zero month (M0); For the second month (M2) contract - five days prior to the close of zero month (M0); For the third month (M3) contract - last day of zero month (M0).
7	**Bidding process**	Solar/Non-Solar Sellers and Buyers to submit order specifying duration, quantum in MWh and price in Rs/MWh. Sellers to provide its profile having 15-minute time block wise quantity (MW). It may be an 'All or None' type of order or partial selection type order. Each profile of seller shall be aggregated and converted in MWh for the purpose of matching. Hydro Sellers and Buyers to submit bid specifying duration, quantum (MW) and price in Rs/MWh for each 15-minute time block or combination thereof as the case may be.
8	**Matching of Bids**	Uniform Price Step Auction.
9	**Trading Hours**	As per trading and settlement calendar to be notified by the Exchange from time to time
10	**Minimum Volume quotation***	0.1 MW
11	**Minimum Volume Step***	0.1MW
12	**Lot size**	0.1 MW * 15 minutes or combination thereof as notified by Exchange
13	**Maximum bid size***	Bid quantity shall not be more than the maximum injection/drawl allowed by the concerned LDC. Member/Client shall ensure the compliance of this rule.

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14	**Price Quote Basis**	Rs. Per MWh (excluding all fees, charges, taxes etc.)
15	**Price Tick***	Rs. 1 per MWh
16	**Volume Tick size**	0.1
17	**Quantity Variation**	Zero quantity variation allowed
18	**Settlement**	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of revision of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed
19	**Contracted Quantity**	Contracted quantity shall be the quantity approved and scheduled by LDC at delivery point against the Application for Scheduling made by Exchange. However, till the approval of application by LDC, traded quantity shall be considered as contracted quantity. In case, multiple applications are to be filed for single trade, and partial quantity has been scheduled, the contracted quantity shall be equal to sum of quantity scheduled and balance trade quantity to be delivered.
20	**Initial Margins (Operational Limit)***	Initial Margins (Operational Limit): Initial Margins equivalent to 1% of the order value or as may be specified by the Exchange from time to time will be collected from the Members/Clients (both from buyer & seller) at the time of bidding. The initial margins could be in the form of cash or non-cash or combination of both. In the absence of initial margins, the Members/Clients will not be allowed to place the bids

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		Additional Margins (Basis Margin): After the trade and prior to submitting of Application before the concerned Load Dispatch Center for scheduling, Additional Margin equivalent to the 20% of the Trade Value or as may be specified by the Exchange time to time based on risk assessment will be collected from the Member/Client (both from buyers & sellers). Additional Margin can be in the form of cash or non-cash or combination thereof. Non receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default. c) Ad hoc Margin Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract.
21	**Transaction Fees**	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point as specified by the exchange from time to time, as approved by the Commission.
22	**Scheduling**	As per procedure of Bilateral transaction.
23	**SLDC Clearance**	Post trade, in case of buyer/seller is connected to State transmission or distribution system, the buyer/seller shall provide concurrence of LDC of their respective State to the Exchange for the traded quantity. The concurrence shall be submitted to the Exchange as per the timelines specified in the trading calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by LDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded

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		quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
24	**Application for Scheduling**	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Delivery Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
25	**Alternate Route**	The buyer shall be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
26	**Revision of Schedule**	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
27	**E-bidding**	In case of perceived congestion in the transmission link, if LDC conducts e-bidding process for allocation of transmission corridor then the Exchange will participate in the process of e-biding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding.

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28	**Delivery**	The quantity shall be deliverable as per the schedule issued by the LDC.
29	**Delivery point**	The delivery point shall be at Seller's Injection point/Regional/State Periphery as may be specified by requisitioner.
30	**Application fees, Operating and Transmission Charges and Losses**	Seller will bear the Transmission, Scheduling & Operating charges and Transmission Losses (in kind), as applicable, up to the delivery point and Buyer shall bear all the Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
31	**Force majeure**	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
32	**Fines & penalties***	As decided by the Exchange from time to time and informed through circular.
33	**Funds pay in by Members**	Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as pay in default.
34	**Funds pay out to Members**	Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.

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Annexure – VII

Contract Specification: Green Any-Day (s) Contract

S. No.	Item	Details
1	**Contract Name***	Green Any-Day(s) Single Sided Contracts (Solar/Non-solar/Hydro)
2	**Contract Type**	Contracts for physical delivery of electricity generated from Solar or Non-Solar or Hydro renewable energy sources
3	**Contract available for Trading**	Any-Day(s) Single Sided contracts will be available for user defined Day(s) and hour(s)/time block(s) from T+2 day to maximum upto T+90 days (T- Trade Day)
4	**Trading day***	Trading will be available on the days as per Trading & Settlement calendar declared in advance.
5	**Trading Session***	Trading sessions will be made available to the members/Clients for bidding on each Trading Day on Daily basis upto 2 days before delivery as per Trading & Settlement calendar.
6	**Bidding process**	Solar/ Non-Solar Reverse Auction: Buyer to specify its requirement in terms of quantum in MWh and duration. Sellers to bid their offers specifying quantum in MWh and Price in Rs/MWh against the requirement of buyer during the auction window. Buyer and Seller may also specify minimum quantum. The bidding shall take place in 2 stages i.e., Initial Price Offering (IPO) and Reverse Auction. Hydro

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		Reverse Auction: Buyer to specify its requirement in terms of quantum in MW and duration. Sellers to bid their offers specifying quantum in MW and Price in Rs/MWh against the requirement of buyer during the auction window. Buyer and Seller may also specify minimum quantum. The bidding shall take place in 2 stages i.e., Initial Price Offering (IPO) and Reverse Auction.
7	**Matching of Bids**	Reverse Auction for buyer's requisition
8	**Trading Hours**	As per trading and settlement calendar to be notified by the Exchange from time to time
9	**Minimum Volume quotation***	0.1 MW
10	**Minimum Volume Step***	0.1 MW
11	**Minimum Requisition /Offer Quantity**	Bidder while initiating the Reverse Auction will have to submit a minimum requisition or offer quantity of 500 MWhr or as may be specified by the Exchange from time to time
12	**Lot size**	1 MW * 15 minutes or combination thereof.
13	**Maximum bid size***	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility of the member/Clients to adhere to this rule.
14	**Price Quote Basis**	Rs. per MWh (excluding all fees, charges, taxes etc.)
15	**Price Tick***	Rs. 1 per MWh

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16	Volume Tick size	
17	Quantity Variation	No quantity variation allowed.
18	Settlement	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of revision of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed.
19	Contracted Quantity	Contracted quantity shall be the quantity approved and scheduled by LDC at delivery point against the Application for Scheduling made by Exchange. However, till the approval of application by LDC, traded quantity shall be considered as contracted quantity. In case, multiple applications are to be filed for single trade and partial quantity has been scheduled, the contracted quantity shall be equal to sum of quantity scheduled and balance trade quantity to be delivered.
20	Risk Management	Initial Margins (Operational Limit) The buyer has to pay a nominal non-refundable fee up to Rs. 1,00,000 or as may be specified by the Exchange for initiating the reverse auction. This fee will be adjusted in the additional margins to be collected from buyer after the successful execution of the contract. The seller will be required to provide an initial margin calculated at the rate of 30000/MW/Month or part thereof, or as may be specified by the Exchange, at the time of bidding in the Reverse Auction. The initial margin can be in the form of cash or non-cash collateral. If a seller gets eliminated during the Reverse Auction or the

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		trade gets rejected by Buyer, the initial margin as collected will be refunded to the seller. If the seller gets selected, then the initial margin will get adjusted with the Additional Margin to be collected from the Seller. In absence of adequate initial margin, seller will not be allowed to place bid. Additional Margins (Basis Margin): On acceptance of the trade and prior to submitting of Application before the concerned Load Dispatch Center for scheduling, Additional Margin equivalent to 50%, 25%, and 20% of the Trade Value for contracts up to 7 days, 15 days and beyond 15 days respectively or may be as specified by the Exchange from time to time will be collected from the Member/Client (both from buyers & sellers). Additional Margin can be in the form of cash or non-cash or combination thereof. Non receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default. Ad hoc Margin Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract.
21	**Right to Reject**	After the Reverse Auction, the Buyer may partially or fully reject the trade within the timelines as may specified by the Exchange from time to time. During such time, the bid will remain valid and the successful bidders will not be able to change their bid. In case no communication is received from the Buyer regarding acceptance of the trade or on non-payment of additional margin, within stipulated time, the trade shall be deemed to be rejected by the Buyer
22	**Transaction**	Fees payable by buyer and seller to Exchange for

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	Fees	the quantity approved by nodal LDC at delivery point as specified by the exchange from time to time, as approved by the Commission.
23	**Scheduling**	As per scheduling procedure of bilateral transactions.
24	**SLDC Clearance**	Post trade, in case of buyer/seller is connected to State transmission or distribution system, the buyer/seller shall provide concurrence of LDC of their respective State to the Exchange for the traded quantity. The concurrence shall be submitted to the Exchange as per the timelines specified in the trading calendar. In case of any mismatch between the buyer and seller NOC in terms of quantum and duration approved by LDC, the minimum of two shall be considered for application for scheduling. Except otherwise provided, in case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller
25	**Application for Scheduling**	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Delivery Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
26	**Revision of Schedule**	No revision of schedule allowed. Any revision by System Operator on account of reasons other than

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		force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
27	**Cancellation of Trade**	The Buyer who has initiated Reverse Auction shall have the right to partially or fully reject the trade within the timelines (maximum 2 days before delivery start) as may be specified by the Exchange
28	**E-bidding of Transmission Corridor**	In the event, LDC conducts e-bidding process for allocation of transmission corridor in case of congestion, the Exchange will participate in the process of e-biding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding.
29	**Delivery**	The quantity shall be deliverable as per the schedule issued by the LDC.
30	**Delivery point**	The delivery point shall be as may be specified by the Exchange
31	**Application fees, Operating and Transmission Charges and Losses**	Seller will bear the applicable Transmission, Scheduling & Operating charges and Transmission Losses (in kind), as applicable, up to the delivery point and Buyer shall bear applicable Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
32	**Force majeure**	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC.

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		The quantity reduced under force majeure shall not be treated as default.
33	**Fines & penalties***	As decided by the Exchange from time to time and informed through circular.
34	**Funds pay in by Members**	Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as pay-in default.
35	**Funds pay out to Members**	Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.

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Annexure – VIII

Contract Specification: Daily Contract

S. No.	Item	Details
1	**Contract Name***	Daily Contracts
2	**Contract Type**	National or Electrical Region specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity generated from Solar or Non-Solar or Hydro renewable energy sources, as may be notified by the Exchange.
3	**Contract available for Trading**	Daily contracts for delivery in a calendar day will be available starting from T+2 day to maximum up to T+90 days on a rolling basis. (T-Trade Day).
4	**Trading day***	Trading will be available on the days as per Trading and Settlement calendar declared in advance.
5	**Trading Session***	Trading session will be made available to the Members/Clients for bidding on each Trading Day on Daily Basis up to two days before delivery day.
6	**Bidding process**	Sellers and Buyers to submit order specifying duration, quantum in MW and price in Rs./MWh.
7	**Matching of Bids**	Uniform Price Step Open Auction
8	**Trading Hours**	Continuous trade session as per trading and settlement calendar to be notified by the Exchange from time to time
9	**Minimum Volume quotation***	1 MW

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10	**Minimum Volume Step***	1MW
11	**Lot size**	1 MW * 15 minutes or combination thereof as notified by exchange from time to time.
12	**Maximum bid size***	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility of the Member or the Clients to adhere to this rule.
13	**Price Quote Basis**	Rs. Per MWH (excluding all fees, charges, taxes etc.)
14	**Price Tick***	Rs. 1 per MWH
15		
16	**Quantity Variation**	Zero quantity variation allowed.
17	**Settlement**	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of change of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed.
18	**Risk Management**	Initial Margins (Operational Limit): Initial Margins equivalent to 5% of the order value or as may be specified by the Exchange from time to time will be collected from the Members/Clients (both from buyer & seller) at the time of bidding. The initial margins could be in the form of cash or non-cash or combination of both. In the absence of initial margins, the Members/Clients will not be allowed to place the bids. Additional Margins (Basis Margin): After the trade and prior to submitting Application

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		before the concerned Load Dispatch Center for scheduling, Additional Margin equivalent to the 50% of the Trade Value or as may be specified by the Exchange based on risk assessment, will be collected from the Member/Client (both from buyers & sellers). Additional Margin can be in the form of cash or noncash or combination thereof. Non receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default. Ad hoc Margin: Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract.
19	**Ad hoc Margin**	Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract.
20	**Transaction Fees**	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point, as specified by the Exchange from time to time, as approved by the Commission.
21	**Scheduling**	As per Procedure for Scheduling of Bilateral Transactions
22	**SLDC Clearance**	Post trade, in case of buyer/seller connected to State transmission or distribution system, the buyer/ seller shall provide concurrence of SLDC of their respective State to the Exchange. The concurrence shall be submitted to the Exchange as per the timelines specified in the Trading & Settlement calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by SLDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller

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		has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
23	**Application for Scheduling**	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Settlement Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
24	**Alternate Route**	The buyer will be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
25	**Revision of Schedule**	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
26	**E-bidding of Transmission Corridor**	In case of perceived congestion in the transmission link, if LDC conducts e-bidding process for allocation of transmission corridor then the Exchange will participate in the process of e biding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding.

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27	**Delivery**	The quantity shall be deliverable as per the schedule issued by the LDC.
28	**Delivery point**	The delivery point shall be at Seller's injection point/Regional/State Periphery, as may be specified by the Exchange.
29	**Application fees, Operating and Transmission Charges and Losses**	Seller will bear the Transmission, Scheduling & Operating charges and Transmission and wheeling Losses (in kind), as applicable, up to the delivery point and Buyer shall bear all the Transmission charges, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
30	**Force majeure**	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
31	**Fines & penalties***	As specified by the Exchange.
32	**Funds pay in by Members**	Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as Pay in default.
33	**Funds pay out to Members**	Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.

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Annexure – IX

Contract Specification: Weekly Contract

S. No.	Item	Details
1	**Contract Name***	Weekly Contracts
2	**Contract Code***	"Type of Contract- "Time block No." (E.g.TAMWKL-DYB-DDMMYY Where, TAMWKL: Term Ahead Market Weekly Contract DYB: Base i.e. RTC bid
3	**Contract Type**	National or Electrical Region-specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
4	**Contract available for Trading**	The weekly contracts will be available for trading for calendar Weeks from Monday to Sunday from TW+1 week to maximum up to TW+12 weeks on a rolling basis. (TW-Trade Week).
5	**Trading day***	Trading will be available on the days as per Trading & Settlement calendar declared in advance.
6	**Trading Session***	Bidding session will be made available to the Members/Clients for bidding on each Trading Day separately in Solar, Non-Solar and Hydro Contracts from Monday to Friday for next week onwards available weekly contracts.

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7	**Bidding process**	Sellers and Buyers to submit bid specifying duration, quantum (MW) and price in Rs/MWh for each 15-minute time block or combination thereof as the case may be.
8	**Matching of Bids**	Uniform Price Step Auction.
9	**Trading Hours**	Uniform Price Step Auction as per trading and settlement calendar to be notified by the Exchange from time to time
10	**Minimum Volume quotation***	1 MW
11	**Minimum Volume Step***	1MW
12	**Lot size**	1 MW * 15 minutes or combination thereof as notified by exchange from time to time.
13	**Maximum bid size***	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility of the Member or the Clients to adhere to this rule.
14	**Price Quote Basis**	Rs. Per MWh (excluding all fees, charges, taxes etc.)
15	**Price Tick***	Rs. 1 per MWh
16	**Quantity Variation**	Zero quantity variation allowed
17	**Settlement**	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of change of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off

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		(square scheduled off) of positions shall not be allowed.
18	**Contracted Quantity**	Contracted quantity shall be the quantity approved and scheduled by LDC at delivery point against the Application for Scheduling made by Exchange. However, till the approval of application by LDC, traded quantity shall be considered as contracted quantity. In case, multiple applications are to be filed for single trade and partial quantity has been scheduled, the contracted quantity shall be equal to sum of quantity scheduled and balance trade quantity to be delivered.
19	**Risk Management**	Initial Margins (Operational Limit): Initial Margins equivalent to 5% of the order value or as may be specified by the Exchange from time to time will be collected from the Members/Clients (both from buyer & seller) at the time of bidding. The initial margins could be in the form of cash or non-cash or combination thereof. In the absence of initial margins, the Members/Clients will not be allowed to place the bids. Additional Margins (Basis Margin): After the trade and prior to submitting Application before the concerned Load Dispatch Center for scheduling of transactions, Additional Margin equivalent to the 50% of the Trade Value or as may be specified by the Exchange based on risk assessment, will be collected from the Member/Client (both from buyers & sellers). Additional Margin can be in the form of cash or non-cash or combination thereof. Non-receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default. Ad hoc Margin:

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		Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract.
20	**Transaction Fees**	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point, as specified by the Exchange from time to time, as approved by the Commission.
21	**Scheduling**	As per Procedure for Scheduling of Bilateral Transactions
22	**SLDC Clearance**	Post trade, in case of buyer/seller connected to State transmission or distribution system, the buyer/ seller shall provide concurrence of SLDC of their respective State to the Exchange. The concurrence shall be submitted to the Exchange as per the timelines specified in the Trading & Settlement calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by SLDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
23	**Application for Scheduling**	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Settlement Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application

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		and any variation between traded quantity and scheduled quantity on account of LDC approval.
24	**Alternate Route**	The buyer will be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
25	**Revision of Schedule**	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
26	**E-bidding**	In case of perceived congestion in the transmission link, if LDC conducts an e-bidding process for allocation of transmission corridor then the Exchange will participate in the process of e biding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding
27	**Delivery**	The quantity shall be deliverable as per the schedule issued by the LDC.
28	**Delivery point**	The delivery point shall be at Seller's injection point/Regional/State Periphery, as may be specified by the Exchange.
29	**Application fees, Operating and Transmission Charges and Losses**	Application fees shall be collected from buyer on date of application to Nodal LDC. Transmission and Operating Charges as applicable on quantum scheduled at the delivery point and payable to the Nodal LDC, will be collected from the buyer and seller members/Clients on receipt of the acceptance from the nodal LDC.

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30	**Force majeure**	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
31	**Fines & penalties***	As decided by the Exchange from time to time and informed through circular.
32	**Funds pay in by Members**	Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as Pay in default.
33	**Funds pay out to Members**	Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.

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Annexure – X

Contract Specification: Monthly Contract

S. No.	Item	Details
1	**Contract Name***	Monthly Contracts
2	**Contract Code***	E.g. TAMMLY-DYB-MMM-YYYY Where, TAMMLY: Term ahead Market Monthly DYB: Base i.e. RTC MMM: Month e.g. JAN YYYY: Year e.g. 2022
3	**Contract Type**	National or Electrical Region-specific contracts for Northern Region (NR), Eastern Region (ER), Western Region (WR), Southern Region (SR) and North East Region (NER) or combination thereof for physical delivery of electricity, as may be notified by the Exchange.
4	**Contract available for Trading**	The Monthly contracts will be available for calendar Months from TM+1 Month to maximum up to TM+3 Months on a rolling basis. (TM-Trade Month)
5	**Trading day***	Trading will be available on the days as per Trading & Settlement calendar declared in advance.
6	**Trading Session***	Trading session will be made available to the members/Clients for bidding on each Trading Day from For the first month (M1) contract – ten days prior to the close of zero month (M0);

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		For the second month (M2) contract – five days prior to the close of zero month (M0); For the third month (M3) contract – last day of zero month (M0).
7	**Bidding process**	Sellers and Buyers to submit order specifying duration, quantum in MW and price in Rs/MWh.
8	**Matching of Bids**	Uniform Price Step Auction.
9	**Trading Hours**	As per trading and settlement calendar to be notified by the Exchange from time to time
10	**Minimum Volume quotation***	1 MW
11	**Minimum Volume Step***	1MW
12	**Lot size**	1 MW * 15 minutes or combination thereof as notified by Exchange
13	**Maximum bid size***	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility of the Member or the Clients to adhere to this rule
14	**Price Quote Basis**	Rs. Per MWh (excluding all fees, charges, taxes etc.)
15	**Price Tick***	Rs. 1 per MWh
17	**Quantity Variation**	Zero quantity variation allowed

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18	**Settlement**	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of revision of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed
19	**Contracted Quantity**	Contracted quantity shall be the quantity approved and scheduled by LDC at delivery point against the Application for Scheduling made by Exchange. However, till the approval of application by LDC, traded quantity shall be considered as contracted quantity. In case, multiple applications are to be filed for single trade, and partial quantity has been scheduled, the contracted quantity shall be equal to sum of quantity scheduled and balance trade quantity to be delivered.
20	**Risk Management**	Initial Margins (Operational Limit): Initial Margins equivalent to 1% of the order value or as may be specified by the Exchange from time to time will be collected from the Members/Clients (both from buyer & seller) at the time of bidding. The initial margins could be in the form of cash or non-cash or combination of both. In the absence of initial margins, the Members/Clients will not be allowed to place the bids. Additional Margins (Basis Margin): After the trade and prior to submitting Application before the concerned Load Dispatch Center for scheduling, Additional Margin equivalent to the 20% of the Trade Value or as may be specified by the Exchange based on risk assessment will be collected from the Member/Client (both from buyers & sellers). Additional Margin can be in the form of cash or non-cash or combination thereof.

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		Non receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default. Ad hoc Margin: Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract.
20	**Transaction Fees**	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point as specified by the exchange from time to time, as approved by the Commission.
21	**Scheduling**	As per procedure for scheduling of bilateral transaction
22	**SLDC Clearance**	Post trade, in case of buyer/seller is connected to State transmission or distribution system, the buyer/seller shall provide concurrence of LDC of their respective State to the Exchange for the traded quantity. The concurrence shall be submitted to the Exchange as per the timelines specified in the trading calendar. In case of any mismatch between the buyer and seller concurrence in terms of quantum and duration approved by LDC, the minimum of two shall be considered for application for scheduling. In case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller.
23	**Application for Scheduling**	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Delivery Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any

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		other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
24	**Alternate Route**	The buyer shall be deemed to have consented for all possible transmission corridors from seller's injection point till drawl point.
25	**Revision of Schedule**	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
26	**E-bidding**	In the event, LDC conducts e-bidding process for allocation of transmission corridor in case of congestion, the Exchange will participate in the process of e-biding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding.
27	**Delivery**	The quantity shall be deliverable as per the schedule issued by the LDC.
28	**Delivery point**	The delivery point shall be at Seller's Injection point/Regional/State Periphery as may be specified by requisitioner.
29	**Application fees**	Seller will bear the Transmission, Scheduling & Operating charges and Transmission Losses (in kind), as applicable, up to the delivery point and

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	Operating and Transmission Charges and Losses	Buyer shall bear all the Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
30	**Force majeure**	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
31	**Fines & penalties***	As decided by the Exchange from time to time and informed through circular.
32	**Funds pay in by Members**	Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as pay in default.
33	**Funds pay out to Members**	Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.

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Annexure - XI

Contract Specification: Any-Day (s) Contract

S. No.	Item	Details
1	Contract Name*	Any-Day(s) Single Sided Contracts
2	Contract Type	Contracts for physical delivery of electricity
3	Contract available for Trading	Any-Day(s) Single Sided contracts will be available for user defined Day(s) and hour(s)/time block(s) from T+2 day to maximum upto T+90 days (T-Trade Day)
4	Trading day*	Trading will be available on the days as per Trading & Settlement calendar declared in advance.
5	Trading Session*	Bidding sessions will be made available to the members/Clients for bidding on each Trading Day on Daily basis upto 2 days before delivery as per Trading & Settlement calendar.
6	Bidding process	Reverse Auction: Buyer to specify its requirement in terms of quantum in MW and duration. Sellers to bid their offers specifying quantum in MW and Price in Rs/MWh against the requirement of buyer during the auction window. Buyer and Seller may also specify minimum quantum. The bidding shall take place in 2 stages i.e., Initial Price Offering (IPO) and Reverse Auction.
7	Matching of Bids	Reverse Auction for buyer's requisition
8	Trading Hours	As per trading and settlement calendar to be notified by the Exchange from time to time
9	Minimum	1 MW

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	Volume quotation*	
10	Minimum Volume Step*	1 MW
11	Minimum Requisition /Offer Quantity	Bidder while initiating the Reverse Auction will have to submit a minimum requisition or offer quantity of 1 MW or as may be specified by the Exchange from time to time
12	Lot size	1 MW * 15 minutes or combination thereof.
13	Maximum bid size*	At no point of time the bid quantity of Sellers/Buyers should be more than the maximum injection/drawl quantity allowed by the concerned Load Dispatch Center. It will be the responsibility of the member/Clients to adhere to this rule.
14	Price Quote Basis	Rs. per MWh (excluding all fees, charges, taxes etc.)
15	Price Tick*	Rs. 1 per MWh
16	Volume Tick size	
17	Quantity Variation	No quantity variation allowed.
18	Settlement	Traded price * Quantity scheduled by Load Dispatch Center (LDC) at delivery point. In case of revision of schedule, the final price settlement shall be based on revised scheduled quantity. Netting off (square scheduled off) of positions shall not be allowed.
19	Contracted Quantity	Contracted quantity shall be the quantity approved and scheduled by LDC at delivery point against the Application for Scheduling made by Exchange. However, till the approval of application by LDC,

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		traded quantity shall be considered as contracted quantity. In case, multiple applications are to be filed for single trade and partial quantity has been scheduled, the contracted quantity shall be equal to sum of quantity scheduled and balance trade quantity to be delivered.
20	**Risk Management**	Initial Margins (Operational Limit): The buyer has to pay a nominal non-refundable fee up to Rs. 1,00,000 or as may be specified by the Exchange for initiating the reverse auction. This fee will be adjusted in the additional margins to be collected from buyer after the successful execution of the contract. The seller will be required to provide an initial margin calculated at the rate of 30000/MW/Month or part thereof, or as may be specified by the Exchange, at the time of bidding in the Reverse Auction. The initial margin can be in the form of cash or non-cash collateral. If a seller gets eliminated during the Reverse Auction or the trade gets rejected by Buyer, the initial margin as collected will be refunded to the seller. If the seller gets selected, then the initial margin will get adjusted with the Additional Margin to be collected from the seller. In absence of adequate initial margin, seller will not be allowed to place bid. Additional Margins (Basis Margin): On acceptance of the trade and prior to submitting Application before the concerned Load Dispatch Center for scheduling, Additional Margin equivalent to 50%, 25%, and 20% of the Trade Value for contracts up to 7 days, 15 days and beyond 15 days respectively or as may be specified by the Exchange from time to time will be collected from the Member/Client (both from buyers &

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		sellers). Additional Margin can be in the form of cash or non-cash or combination thereof. Non receipt of the adequate Additional Margin from the Member/Client shall be treated as Margin default. Ad hoc Margin: Exchange can impose Ad hoc Margin, which the Exchange can apply any time during the life of the contract
21	Right to Reject	After the Reverse Auction, the Buyer may partially or fully reject the trade within the timelines as may specified by the Exchange from time to time. During such time, the bid will remain valid and the successful bidders will not be able to change their bid. In case no communication is received from the Buyer regarding acceptance of the trade or on non-payment of additional margin, within stipulated time, the trade shall be deemed to be rejected by the Buyer
22	Transaction Fees	Fees payable by buyer and seller to Exchange for the quantity approved by nodal LDC at delivery point as specified by the exchange from time to time, as approved by the Commission.
23	Scheduling	As per the Procedure for scheduling of Bilateral transactions.
24	SLDC Clearance	Post trade, in case of buyer/seller is connected to State transmission or distribution system, the buyer/seller shall provide concurrence of LDC of their respective State to the Exchange for the traded quantity. The concurrence shall be submitted to the Exchange as per the timelines specified in the trading calendar. In case of any mismatch between the buyer and seller NOC in terms of quantum and duration approved by LDC, the minimum of two shall be considered for

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		application for scheduling. Except otherwise provided, in case, buyer/seller has not applied for such concurrence or applied for the quantity less than the traded quantity then the trade may be cancelled and such event shall be considered as default on account of such buyer/seller
25	Application for Scheduling	Application for Scheduling shall be submitted to nodal LDC by Exchange as specified in the Trading and Delivery Calendar and as per the "Procedure for Scheduling of bilateral transactions" or any other applicable procedure subject to receipt of adequate margins by Exchange. The Application shall be made on the first available date on best effort basis. The buyer and seller shall be deemed to have been consented for the type of Application and any variation between traded quantity and scheduled quantity on account of LDC approval.
26	Revision of Schedule	No revision of schedule allowed. Any revision by System Operator on account of reasons other than force majeure or constraints in the transmission corridor shall be treated as default by the party who is responsible for such event.
27	Cancellation of Trade	The Buyer who has initiated Reverse Auction shall have the right to partially or fully reject the trade within the timelines (maximum 2 days before delivery start) as may be specified by the Exchange
28	E-bidding of Transmission Corridor	In case of perceived congestion in the transmission link, if LDC conducts e-bidding process for allocation of transmission corridor then the Exchange will participate in the process of e-biding as per the procedure for scheduling of bilateral transaction subject to consent of buyer/seller. The buyer/seller, if consented, shall provide price quote to be bided (excluding transmission

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		charges) in the e-bidding. Exchange will collect the requisite amount from the concerned member/client before e bidding.
29	Delivery	The quantity shall be deliverable as per the schedule issued by the LDC.
30	Delivery point	The delivery point shall be as may be specified by the Exchange
31	Application fees, Operating and Transmission Charges and Losses	Seller will bear the applicable Transmission, Scheduling & Operating charges and Transmission Losses (in kind), as applicable, up to the delivery point and Buyer shall bear applicable Transmission, Scheduling & Operating charges including Application Fees and Transmission Losses (in kind), as applicable, from delivery point up to their point of drawl. The charges shall be applied on the quantum of power scheduled at delivery point.
32	Force majeure	In case of force majeure the Exchange will settle the contract as per final schedule issued by LDC. The quantity reduced under force majeure shall not be treated as default.
33	Fines & penalties*	As decided by the Exchange from time to time and informed through circular.
34	Funds pay in by Members	Amount equivalent to one day's obligation shall be collected from buyers on D-1 basis (D is Delivery Day). Any non-payment of funds shall be considered as pay-in default.
35	Funds pay out to Members	Amount equivalent to one day's obligation shall be disbursed to sellers on D+1 basis for each delivery day subject to confirmation of delivery by the seller.

Reg. No. 15376

TRUE COPY

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BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION

PETITION NO. ....../MP/2022

IN THE MATTER OF:

Petition under Section 66 of The Electricity Act, 2003 read with the Regulation 25 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 for approval of introduction of Hydropower Contracts in Green Contingency Contracts and Green Term Ahead Contracts and additional Term Ahead Contracts and Green Term Ahead Contracts beyond T + 11 days.

AND

IN THE MATTER OF:

Hindustan Power Exchange Limited (HPX)
(Formerly Pranurja Solutions Limited)
25th Floor, P J Towers
Dalal Street, Mumbai 400001

--------- Petitioner

I, Piyush S. Chourasia, Director of Hindustan Power Exchange Limited - the Petitioner in the above petition do hereby appoint and retain **Mr. Ravi Kishore, Mr. Keshav. Singh, Advocates** to appear, plead and act for us in the above petition and to conduct and prosecute all proceedings that may be taken in respect thereof and applications for return of documents, enter into compromise and to draw any moneys payable to us in the said proceeding and also to appear in all applications for review and for leave to the Supreme Court of India in all applications for review of judgment.

BEFORE ME

Place : New Delhi
Date : July, 2022

Signature of the Party

Adv. Shivaji

"Accepted"

19 JUL 2022

(Address for service on the Counsel for Respondent No.1)

Full Address : RAVI KISHORE, ADVOCATE
G-33 (LOWER GROUND FLOOR)
JANGPURA EXTENSION,
NEW DELHI – 110014

Mob. : 9811292550
Phone No. : 011-41541050
Email ID : ravi@rnslegal.in
Enrl. No. : D/1465/1999, D/1727/1999, D/862/2011, D/1276/2022

NOTARY GOVT OF INDIA

NOTED & REGISTERED
PageNo...72...Sr.No...77
Dated...19 JUL 2022

PRANURJA SOLUTIONS LIMITED
Reg. Office 25th Floor, P. J. Towers, Dalal Street, Mumbai – 400001.
CIN: U74999MH2018PLC308448
Tel. No.: +91 22 2272 1234 / 33 | Website: www.pranurja.com

CERTIFIED TRUE COPY OF THE RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF PRANURJA SOLUTIONS LIMITED AT THEIR MEETING HELD ON FRIDAY, OCTOBER 18, 2019

TO AUTHORIZE DIRECTORS OF THE COMPANY TO REPRESENT THE COMPANY BEFORE CENTRAL ELECTRICITY REGULATORY COMMISSION (CERC), APPELLATE TRIBUNAL FOR ELECTRICITY (APTEL) AND ANY OTHER JUDICIAL/STATUTORY AUTHORITIES INCLUDING LEGAL SERVICES W.R.T. THE COMPANY AND RELATED MATTERS

"RESOLVED THAT any Director of the Company be and is hereby authorised to sign all papers, applications, affidavits and all other documents on behalf of the Company and to represent the Company before Central Electricity Regulatory Commission (CERC), Appellate Tribunal for Electricity (APTEL) and any other judicial/statutory authorities including legal services w.r.t. the Company and matters incidental thereto as may be considered necessary and expedient.

RESLOVED FURTHER THAT any Director of the Company be and is hereby severally authorised to do all such acts, deeds and things as may be necessary to give effect to the said resolution."

For Pranurja Solutions Limited

Hardik Desai
Company Secretary

Date: August 10, 2021
Place: Mumbai

True Copy

FORM-I

S. No.	Particulars	
1.	Name of the Petitioner/Applicant	**HINDUSTAN POWER EXCHANGE LTD. (FORMERLY KNOWN AS PRANURJA SOLUTIONS LTD.)**
2.	Address of the Petitioner/Applicant	25th Floor, P J Towers, Dalal Street, Mumabi – 400 001
3.	Subject Matter	Petition under Section 66 of The Electricity Act, 2003 read with the Regulation 25 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 for approval of introduction of Hydropower Contracts in Green Contingency Contracts and Green Term Ahead Contracts and additional Term Ahead Contracts and Green Term Ahead Contracts beyond T + 11 days.
4.	Petition No., if any	NA
5.	Details of generation assets (a) generating station/units (b) Capacity in MW (c) Date of commercial operation (d) Period for which fee paid (e) Amount of fee paid (f) Surcharge, if any	NA
6.	Details of transmission assets (a) Transmission line and sub-stations (b) Date of commercial operation (c) Period for which fee paid (d) Amount of fee paid (g) Surcharge, if any	NA

7.	Fee paid for Adoption of tariff for (a) Generation asset (b) Transmission asset	NA
8.	Application fee for licence (a) Trading licence (b) Transmission licence (c) Period for which paid (d) Amount of fee paid	NA
9.	Fees paid for Miscellaneous Petition	Rs.3,00,00,000/- (Rupees Three Lakhs Only)
10.	Fees paid for Interlocutory Application	NA
11.	Fee paid for Regulatory Compliance petition	NA
12.	Fee paid for Review Application	NA
13.	Licence fee for inter-State Trading (a) Category (b) Period (c) Amount of fee paid (d) Surcharge, if any	NA
14.	Licence fee for inter-State Transmission (a) Expected/Actual transmission charge (b) Period (c) Amount of fee calculated as a percentage of transmission charge (d) Surcharge, if any	NA
15.	Annual Registration Charge for Power Exchange (a) Period (b) Amount of turnover (c) Fee paid (d) Surcharge, if any	NA

16.	Details of fee remitted (a) Payment id (b) Transaction id (c) Date of remittance (d) Amount remitted (e) PayU Id:	 e4565768987Ab9b01177 20.07.22 RS 300000/- 15537729329
Note: While Sl. Nos. 1 to 3 and 16 are compulsory, the rest may be filled up as applicable		
Signature of the authorized signatory with date		19/7/2022