

**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



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.

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.

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.

Hearing Dated 30.11.2021

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.

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 analyse 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

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

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;

- 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.

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.

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

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;

- (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

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

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.

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

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

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-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 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:

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	

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

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

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.

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.

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

Sd/-
(P.K. Singh)
Member

Sd/-
(Arun Goyal)
Member

Sd/-
(I.S. Jha)
Member

Sd/-
(P. K. Pujari)
Chairperson

