

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 170/MP/2023

Coram:

Shri Jishnu Barua, Chairperson

Shri I.S. Jha, Member

Shri Arun Goyal, Member

Shri P.K. Singh, Member

Date of Order: 21st September, 2023

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 High Price bilateral market segment with contracts operating under provisions of Regulation 5(2) and 5(3) of PMR 2021.

And in the matter of

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

...Petitioner

Versus

Grid Controller of India Limited,
B-9 (1st Floor), Qutub Institutional Area,
Katwaria Sarai, New Delhi – 110016

...Respondent

Parties Present:

Shri Avijeet Lala, Advocate, PXIL

Shri Aryaman Singh, Advocate, PXIL

Shri Alok Mishra, NLDC



ORDER

The Petitioner, Power Exchange India Limited (hereinafter referred to as the "PXIL"), has sought approval of the Commission for the introduction of High Price bilateral market segment with contracts operating under the provisions of Regulations 5(2) and 5(3) of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 ("PMR 2021") on PXIL's PRATYAY Platform, in accordance with Regulation 25 of PMR 2021.

2. The Petitioner has made the following prayers:

- a. Grant approval for introduction of High Price Bilateral Market segment with Contracts operating under provisions of Regulation 5(2) and 5(3) of PMR 2021;
- b. Grant approval to sell side eligible entities as provided in Order in Petition no 14/MP/2023 dated 11.04.2023;
- c. Direct any other seller to be considered as eligible for the sell side participant in high price market from time to time;
- d. Grant approval for amendment of Business Rules of the exchange by inclusion of contract specification for High Price Bilateral Market segment;
- e. Prescribe floor price and forbearance as provided in Suo motu Order 4/SM/2023 dated 31.03.2023 for participation in different High Price Bilateral Market Contracts and revisions, if any, based on directives provided by Hon'ble Commission from time to time;
- f. Issue directions to GRID-INDIA to provide information regarding such Battery Energy Storage System (BESS) that qualify as entities such that purchase of energy will enable buyers to fulfil 'Energy Storage obligation' and also clarify the basis for determining the status of such participating BESS. The information may be provided in 'No Objection Certificate' issued to such BESS entities that qualify as Energy Storage plants criteria as provided at Para 15 of MOP notification F No. 09/12/2021-RCM dated 22.07.2022;



- g. Grant approval for issuance of 'Certificate of Purchase from Energy Storage System' to cleared Buyers that purchase storage energy from such plants that are approved by GRID-INDIA;
- h. Approve increase in tenure of High Price bilateral Contracts up to 11 (eleven) months on implementation of Temporary – General Network Access as provided in GNA Regulation;
- i. Pass such other order(s) that this Hon'ble Commission may deem fit to remove difficulties and allow implementation of the above; and
- j. Pass such other relief (s) / Order(s) that this Hon'ble Commission may deem fit.

Background

3. The Petitioner, Power Exchange of India (PXIL), was granted registration to establish and operate a Power Exchange vide Commission's Order dated 27.5.2008. Presently, it is offering contracts in the Integrated Day Ahead Market (IDAM), Real Time Market (RTM), Term Ahead Market (TAM), Green Term Ahead Market (GTAM), Renewable Energy Certificates (RECs), and Energy Saving Certificates (ESCs).

4. The Commission, vide Order dated 11.4.2023 in Petition No. 14/MP/2023, had granted approval to the Petitioner for introduction of the High Price Day Ahead Market on PXIL's PRATYAY Platform.

5. The Petitioner has filed the present petition seeking approval of the Commission for the introduction of a High Price bilateral market segment with contracts operating under provisions of Regulation 5(2) and 5(3) PMR 2021 on PXIL's PRATYAY Platform.

Submission by Petitioner

6. The Petitioner has submitted that the Commission, vide Order dated 11.4.2023 in Petition No. 14/MP/2023, accorded approval for introduction of the High Price Day Ahead



Market (“HP-DAM”) on PXIL’s PRATYAY Platform. Since the HP-DAM contract is transacted a day-prior to delivery, buyers get exposed to price volatility in this segment. To overcome such a situation, it would be beneficial if the eligible Sellers and Buyers enter into the transaction much in advance, i.e., up to the duration permitted under the Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008 (“STOA Regulations”). Accordingly, the Petitioner has proposed to introduce seven new High Price Bilateral Market Contracts which operate under Regulations 5(2) and 5(3) of PMR 2021 as under:

PMR 2021 provision	Proposed High Price Bilateral Contracts
Regulation 5(2)	<p><u>Contingency Contracts</u></p> <ul style="list-style-type: none"> a. High Price Intra Day Contract b. High Price Day Ahead Contingency Contract
Regulation 5(3)	<p>Term Ahead Contracts</p> <ul style="list-style-type: none"> a. High Price Daily Contract b. High Price Weekly Contract c. High Price Monthly Contract d. High Price Any Day Single Sided Contract with Reverse Auction initiated by Buyer e. High Price Any Day Single Sided Contract with Forward Auction initiated by Seller

7. The Petitioner has submitted the contract specifications for the proposed high price bilateral market segment contracts. These are discussed briefly as under:



- a) **Price Discovery:** The Petitioner has proposed the price discovery in case of High Price bilateral Contracts as under:

Contract name	Price Discovery
a. Day Ahead Contingency b. Intra Day Contingency	Continuous Matching
a. Daily, Weekly and Monthly Contracts	Uniform Price Step Method
b. Any Day Single Sided initiated by Buyer	Reverse Auction
c. Proposed Any Day Single Side initiated by Seller	Forward Auction

- b) **Timelines for Contingency contracts:** The timelines, including commencement of bidding for Contingency Contracts operating under the provision of Regulation 5(2) are proposed as under:

Contract name	Commencement and duration of bidding session
a. Day Ahead Contingency	After 15:00 Hrs after declaration of result of Day Ahead Market
b. Intra Day Contingency	00:00 to 24:00 Hrs

- c) **Timelines for TAM contracts:** The timelines, including commencement of bidding for Term Ahead market Contracts operating under the provision of Regulation 5(3), are proposed as under:

Name of the Contract	Commencement of Bidding	Last day of bidding	Bidding Time
Daily Contracts	Daily basis	'D-2' i.e. two days before delivery day	00:00 to 24:00 Hrs



Name of the Contract	Commencement of Bidding	Last day of bidding	Bidding Time
Weekly Contract	Monday of the Week prior to delivery, i.e. Monday of 'Week-0'	Friday of the week prior to delivery, i.e. Friday of 'Week-0'	12:00 to 17:00 Hrs
Monthly Contract	First Day of zero Month ('M0')	For the first Month ('M-1') Contract – ten days prior to the close of 'M0'	12:00 to 17:00 Hrs
		For the second Month ('M-2') Contract – five days prior to the close of 'M0'	
		For the third Month ('M-3') Contract – last day of zero Month ('M0')	
Any-Day Single Sided Contract with Reverse Auction initiated by Buyer	On Daily basis	Two days before delivery day	00:00 to 24:00 Hrs
Any-Day Single Sided Contract with Forward Auction initiated by Seller	On Daily basis	Two days before delivery day	00:00 to 24:00 Hrs



d) **Delivery Mechanism and Duration:** The Petitioner has submitted that the delivery shall be under the provision of the CERC (Open access in inter-state transmission) Regulations, 2008, in compliance with provisions of Regulation 5(2) and Regulation 5(3) of PMR 2021. The duration under each Contract shall be as per the provisions applicable under existing Contracts. In case of Daily, Weekly and Monthly Contracts, the delivery duration shall be for pre-specified time blocks notified to market participants, whereas, in the case of 'Any Day Single Sided Contract with Reverse Auction' initiated by Buyer and 'Any Day Single Sided Contract with Forward Auction' initiated by Seller, the delivery duration shall be for user defined days and time blocks.

Contract name	Delivery duration
i. Day Ahead Contingency	Next days 24 Hours i.e. 'T+1'
ii. Intra Day Contingency	00:00 to 24:00 Hrs of same day 'T'
iii. Daily	From 'T+2' to 'T+90' day
iv. Weekly	'Week-1' to 'Week-12' considering the Week in which bidding is done as 'Week-0'
v. Monthly	'Month-1' to 'Month-12' considering the month in which bidding is done as 'Month-0'
vi. Any Day Single Sided with Reverse Auction initiated by Buyer	From 'T+2' to 'T+90' day
vii. Any Day Single Side with Forward auction initiated by Seller	From 'T+2' to 'T+90' day

e) **Risk management mechanism:** The risk management system applicable for participation in High Price bilateral market Contracts shall be similar to the existing



provisions applicable for Contracts offered on the 'PRATAY' platform that are operating under the provisions of Regulation 5(2) and Regulation 5 (3) of PMR 2021.

8. **Renewable Purchase Obligation and Energy Storage Obligation:** The Petitioner has proposed to issue a 'Certificate of Purchase from Energy Storage System' to the cleared buyers, that the purchased energy in such different High Price Bilateral Market Contracts where the selling Battery Energy Storage System (BESS) entities qualify under the criteria of Energy Storage plant as provided in the MOP notification on RPO trajectory dated 22.07.2022. The Petitioner has further requested the Commission to provide directions to GRID-INDIA to provide information regarding Battery Energy Storage System (BESS), the purchase of energy from which in different Contracts of High Price bilateral market will enable the buyers to fulfil their 'Energy Storage obligation' for the year. A sample format of 'Certificate of Purchase of Energy from Energy Storage System' has also been provided.

9. **Temporary-General Network Access:** The Petitioner has submitted that on implementation of T-GNA provisions the tenure of High Price Bilateral segment Contracts operating in term ahead market segment be automatically increased up to 11-months.

Hearing dated 8.6.2023

10. The matter was heard for admission on 8.6.2023. The learned counsel for the Petitioner submitted that they have already uploaded the present Petition on the website along with the Public Notice dated 29.5.2023 inviting comments/ suggestions from the stakeholders. The Commission, after hearing the learned counsel, admitted the matter and directed the Petitioner to serve a copy to the Respondent, Grid Controller of India (hereinafter "GRID-INDIA"). The Petitioner was further directed to file an affidavit within three weeks with a detailed study incorporating the comments received from the stakeholders and the response thereon.



Reply by the Petitioner

11. In compliance with the directions of the Commission, the Petitioner served a copy of the Petition to the Respondent. The Petitioner received comments from the following stakeholders:

- i. GRID-INDIA (Respondent)
- ii. Prayas Energy Group

12. The comments received from the stakeholders and the Petitioner's response thereto are as under:

(a) GRID-INDIA's Comments & Petitioner's Response

- (i) **Floor Price** – The price formation in organized electricity markets establishes market clearing prices for energy and ancillary services. Floor price could blunt the signal for flexible resources like energy storage. As more of such flexible resources get added initially to get the benefit of price arbitrage and subsequently from a Resource Adequacy consideration, the diurnal variation in prices would automatically get moderated. However, the introduction of a floor price would create further non-flexibility in the system and is not in the interest of reliable operation of the grid. Floor price can have a negative impact on the country's renewable energy integration program. In the case of low demand and high RE penetration scenarios, the floor price could have an adverse effect on maintaining an adequate spinning reserve.

Response of Petitioner – The Petitioner submitted that since the eligible entities for participation in the High Price Term Ahead (HP-TAM) segment would be such entities that are eligible to participate in the HP-DAM segment, to maintain parity in transactions, no floor price is proposed for introducing High Price Bilateral Market Contracts in Contingency and Term Ahead Markets. Further, the Petitioner shall abide by the directions issued by the Hon'ble Commission in the matter.



(ii) **Eligibility of Seller** - The Commission, in Petition No. 359/MP/2022 and Petition No. 14/MP/2023, directed that the category of generating stations eligible to participate in HP- DAM shall be subject to periodic review by the Commission and directed NLDC to submit a quarterly report with recommendations. In view of that, GRID-INDIA has submitted a report on 02.05.2023. In the said report, based on market data and representations received from different generating stations, GRID-INDIA has submitted that there is a need to allow participation of more entities in the HP-DAM segment in a non-discriminatory and transparent manner through a well-defined framework.

Response of Petitioner – The Petitioner has submitted that the sell side entities eligible to submit their offers in the HP-TAM segment shall be based on information provided by MOP/CERC/CEA/GRID-INDIA to enable the Petitioner to configure such entities exclusively in the HP-TAM segment. The Commission may consider, if it would allow, generators other than those identified for HP-DAM and HP-TAM, to approach the Commission for allowing their inclusion in these segments based on specific considerations. Further, the Petitioner shall abide by directions on addition/deletion of eligible entities issued by the Commission and/or Respondent.

(iii) **Revision of Schedule for HP-TAM Contract** - As per IEGC, in case of unit tripping of unit size 100 MW or more, revision of the Short-Term Open Access schedule is possible. Accordingly, suitable provisions may be put in place in the Contract.

Response of Petitioner – The Petitioner has submitted that the power exchange shall settle the transaction based on the revised schedule provided by RLDC on submission of the application for revision by the generator, electricity trader or any other agency selling power from the unit of the generating station, in case of a forced outage of a unit of the generating station (having generating capacity of 100 MW or more) that are eligible to participate in the HP-TAM segment.

(b) Comments by Prayas Energy Group & Petitioner's Response

(i) **High price segment better suited in high bilateral segment rather than integrated day ahead market:** The need for High Price Market should be evaluated. Further High Price Segment is better suited in Term Ahead contracts rather than IDAM.

Response of Petitioner: The Petitioner has submitted that in Petition No. 14/MP/2023 dated 11.04.2023, the Commission has prescribed the following categories of generators eligible to participate in HP-DAM:

- i. Gas based Power Plants using imported RLNG and Naphtha
- ii. Imported Coal based Power Plant using imported coal
- iii. Battery Energy Storage Systems (BESS)

Introduction of Term Ahead Market Contracts in the 'High-Price' segment will provide visibility to eligible entities to enter into appropriate fuel supply agreements to plan their operations over a longer horizon of up to three months ahead, as provided in STOA Regulation 2008. Further, approval to introduce 'High-Price' contracts in the contingency segment would enable the buyers and sellers to transact power to meet their contingent requirements under 'Intra Day' and 'Day Ahead Contingency' Contracts that operate as continuous transactions.

(ii) **Battery Energy Storage System:** A regulatory framework for the participation of storage on all the power exchange contracts and process for claiming ESOs is necessary. Energy purchased from storage projects should be accounted for separately, based on SLDC/RLDC/GRID-INDIA reports. The certification should be provided by GRID-INDIA based on reports from the power exchange on quantum procured via the PX and on actual energy delivered from the storage project. The concerned LDCs should also capture and record the source of energy used to charge the storage project. Energy accounting information submitted by the project and verified by the LDC will aid annual



accounting to verify that 85% of the energy obtained by the obligated entity from a storage system is from renewable energy sources. Thus, it is crucial that the certification provided for claiming ESO compliance is provided:

- By GRID-INDIA based on reports from appropriate LDCs
- Is based on block-wise accounting of energy supplied from the storage system and accounting of sources of energy used to charge the storage system
- With every transaction which will aid energy accounting for verifying compliance status at the annual level for the obligated entity.”

Response of Petitioner: The BESS is no longer an afterthought or an add-on but rather an important pillar of any energy strategy. The advantages of BESS are many, they make renewable energy more reliable and thus more viable. Since the supply of solar and wind power fluctuates, a BESS plays a crucial role in “smoothing out” this intermittency and enabling a continuous power supply of energy when it's needed. Energy storage is a crucial tool for achieving the apparently impossible task of matching the grid's electricity supply and demand second by second. Storage is essential for frequency regulation and maintaining the grid's stability and safety. It permits the storage of excess energy for consumption at a more opportune time. It serves as a reserve source in case of emergencies. These four functions collectively guarantee the integrity of the essential grid system.

The Petitioner has requested the Commission to issue appropriate direction to GRID-INDIA for providing information in the ‘No Objection Certificate’ issued to such BESS entities in order to fulfil the criteria prescribed in the MOP Order. The Petitioner has, at Prayer (g) of the Petition, requested approval to issue a ‘Certificate of Purchase from Energy Storage System’ to the cleared buyers that purchase storage energy from such sources that are qualified by GRID-INDIA in different Contracts of High Price bilateral market to enable buyers to fulfil their ‘Energy Storage Obligation’ for the year. Petitioner has also provided



a sample format of a 'Certificate of Purchase of Energy from Energy Storage System'.

Hearing dated 23.8.2023

13. The matter was heard by the Commission on 23.8.2023. The learned counsel for the Petitioner submitted that the Commission has already approved similar contracts for Hindustan Power Exchange (HPX) in its recent order dated 24.7.2023 in Petition No. 122/MP/2023. The learned counsel further submitted that it has additionally prayed for directions to GRID-INDIA to qualify Battery Energy Storage System plants that fulfil the criteria prescribed by the Ministry of Power vide its Order dated 22.7.2022 and to approve the issuance of 'Certificate of Purchase of Energy from Energy Storage System' to the cleared buyers that will enable them to fulfil their 'Energy Storage Obligation' for the said year. The learned counsel added that the Petitioner has received a comment from Prayas Energy that supports the Petitioner's present proposal. The learned counsel further submitted that the Respondent has furnished its comments, and the Petitioner has filed its rejoinder. Considering the submissions made by the learned counsel for the Petitioner and the representative of GRID-INDIA, the Commission reserved the matter for order.

Analysis and Decision

14. The Petitioner has proposed to introduce the high-price bilateral market segment with contracts operating under Regulations 5(2) and 5(3) of PMR 2021 on PXIL's PRATYAY Platform, in accordance with Regulation 25 of PMR 2021, which provides for "Approval or Suspension of Contracts by the Commission".

15. The Petitioner has carried out stakeholder consultation and submitted its point-wise reply to the comments/suggestions given by the stakeholders and the Respondent, GRID-INDIA. The comments/suggestions received from the Respondent mainly relate to the eligibility of sellers, floor price and revision of schedule as per IEGC. Prayas Energy Group, inter-alia, suggested that appropriate direction may be given to GRID-INDIA to provide information in the "No Objection Certificate" issued to BESS (Battery Energy



Storage System) entities that meet the MOP's criteria regarding fulfilment of energy storage obligation (ESO).

16. The Commission has earlier accorded approval for the introduction of the High Price Day Ahead Market (HP-DAM) on PXIL's PRATAY platform vide order dated 11.04.2023 in Petition No. 14/MP/2023. The Petitioner, in the instant petition, has sought approval for the introduction of the high-price bilateral market segment, including high-price TAM and Contingency contracts.

17. The Commission, in its Order dated 24.7.2023 in Petition No. 122/MP/2023, has accorded approval to another power exchange, namely the Hindustan Power Exchange (HPX), for the introduction of HP-TAM and HP-Contingency contracts.

18. We have considered the submissions of the Petitioner and the comments/suggestions of the stakeholders and GRID-INDIA, along with the reply thereupon by the Petitioner. We find that the stakeholders have largely welcomed the proposal for the introduction of HP-TAM as an additional platform and for improving competition. We further note that GRID-INDIA has not raised any concern about the implications and operational difficulties in the implementation of the proposed HP-TAM and HP-Contingency contracts.

19. In light of the above, we think that approval needs to be accorded to the Petitioner's proposal for the introduction of the High Price Market segment. Accordingly, we examine in the subsequent paragraphs the Petitioner's proposal for the high-price bilateral market segment, in terms of the earlier orders by the Commission in this regard and the relevant provisions of the applicable Regulations, Grid Code, etc. Since the instant proposal involves the introduction of longer-duration contracts in the high-price segment, we also take cognizance of the decision of the Hon'ble Supreme Court of India on the issue of longer-duration contracts (beyond T+11 days) and financial derivatives, which was sub-judice till October 2021. The issue was favourably disposed of by the Hon'ble Supreme Court in its Order dated 06.10.2021 as Civil Appeals 5290-5291 of 2011, 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.....”

High Price Term Ahead Market and Contingency Contracts

20. **Type of Contracts:** The Petitioner has proposed high-price TAM contracts under the category of (i) Daily, Weekly and Monthly Contracts; (ii) Any-Day single-sided contracts by Buyers; and (iii) Any-Day single-sided contracts by Sellers. In the case of Contingency contracts, the Petitioner has proposed to introduce high-price Day Ahead Contingency Contracts and high-price Intra-day Contingency Contracts.

21. We have examined the proposed contracts as submitted by the Petitioner. We note that the contracts proposed by the Petitioner, i.e., Daily Contracts, Weekly Contracts, Monthly Contracts, and Any-Day Single-Sided Contracts, are physical delivery-based forward contracts and/or NTSD Contracts. Therefore, in line with the judgment of the Hon'ble Supreme Court in the matter of longer duration contracts (beyond T+11 days) and financial derivatives, vide its order dated 06.10.2021, and in terms of the agreement reached between CERC and SEBI, CERC has the jurisdiction to regulate these contracts.



22. We also note that the Commission, vide its Order dated 7.6.2022, in Petition No. 229/MP/2021 along with IA No. 25/2022, approved trading of these types/durations of contracts in Term Ahead Market and Green Term Ahead Market on the Petitioner's power exchange, except for the proposed Any-Day single-sided contracts by Sellers based on forward auction.

23. As regards the proposed Any-Day single-sided contracts by Sellers based on forward auction, we find that the Commission has earlier examined this matter in Petition No. 229/MP/2021 and decided as under:

“ 41. 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 Contracts”

24. We, therefore, accord approval for the introduction of high-price Daily, Weekly, Monthly Contracts, for pre-specified time blocks to be notified to the market participants well in advance, and Anyday Single-sided contracts initiated by the buyers based on Reverse Auction only, subject to the directions in subsequent paragraphs.

25. We also approve the introduction of high-price Day Ahead Contingency Contracts and high-price Intra-day Contingency Contracts, subject to the directions in subsequent paragraphs.

26. **Eligible Entities:** The Petitioner has submitted that only those sellers, as approved by the Commission and identified by the Nodal Agency as being High Price sellers, will be eligible to participate in high-price TAM and Contingency contracts. In the case of HP-



DAM, vide order dated 11.04.2023 in Petition No. 14/MP/2023, we have approved the following categories of generators with high costs to be eligible for participation:

- i. Gas based Power Plants using imported RLNG and Naphtha
- ii. Imported Coal based Power Plant using imported coal
- iii. Battery Energy Storage Systems (BESS)

27. At this stage, we approve the same category of high-cost generators for participation in the high-price bilateral market segment, including TAM and Contingency contracts, so as to maintain consistency across different market segments. The above category, however, shall be subject to periodic review by the Commission based on the feedback of the stakeholders and in consultation with GRID-INDIA. Moreover, all the entities that are eligible to procure power through Open Access shall be eligible to participate as buyers in the high-price bilateral segment.

28. **Price Discovery and Matching Mechanism:** The Petitioner has proposed to follow Uniform Price Step Auction as the matching methodology for high-price Daily, Weekly, and Monthly Contracts. For Any Day Single Sided Contracts initiated by Buyers, the Petitioner has proposed to use Reverse Auction as the price discovery methodology, and for Any Day Single Sided Contracts initiated by Sellers Forward Auction has been proposed. Further, the Petitioner has proposed continuous matching as the price discovery methodology for high-price Contingency contracts, in line with the existing practice followed in the case of Contingency Contracts.

29. We approve the use of Uniform Price Step Auction as a matching methodology for price discovery in the case of high-price Daily, Weekly, and Monthly Contracts, in line with the existing methodology in conventional TAM 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 make informed decisions after seeing buy and sale bids offered by other anonymous participants.



30. We also approve the proposed Reverse Auction methodology as the price discovery matching methodology for Anyday single-sided Contracts initiated by buyers. The Petitioner is directed to clearly define the stages and timeline of Reverse Auction in the relevant sections of the Business Rules and the Contract Specifications. As discussed in para 22-23 above, the proposed Anyday single-sided Contracts initiated by sellers based on Forward Auction do not strictly go with the spirit of efficient price discovery. Therefore, we do not approve of the same.

31. As the 'Continuous matching' methodology proposed for high-price Day Ahead Contingency Contracts and Intra Day Contingency Contracts is the same as that of the methodology followed in the existing Contingency/ Intraday Contracts and Green Contingency/ Intraday Contracts, we agree with the Petitioner's proposal and approve the same.

32. **Floor and Forbearance Price:** In line with the floor and forbearance price for HP-DAM, we direct that the floor price shall be Rs.'0'/kWh and the upper price limit shall be Rs. 20/kWh for the high- price bilateral market segment including TAM and Contingency contracts, until further orders.

33. **Timelines for Bidding and Delivery duration:** The Petitioner has proposed high-price TAM contracts for a maximum duration of three months, with trading in the prior month. High-price Daily, Weekly, Monthly and Any Day Single Sided contracts for the third month can be traded on a rolling basis in zero month (M-0), first month (M-1), second month (M-2), and third month (M-3). For Contingency Contracts, the bidding timelines and delivery duration are proposed to be similar to the existing Contingency Contracts. The Petitioner has further submitted that on implementation of T-GNA provisions, the tenure of High Price Bilateral segment Contracts operating in the term ahead market segment be automatically increased up to 11-months.

34. The timelines and delivery proposed by the Petitioner for high-price TAM contracts, i.e., for the maximum period of three months, are broadly in line with the approval granted by the Commission in the Order dated 7.6.2022 in Petition No. 229/MP/2021 for longer-



duration contracts in the Term Ahead Market and Green Term Ahead Market. We, therefore, approve the proposed high-price TAM contracts for a maximum duration of three months, considering the month in which the 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.

35. Regarding Petitioner's submission that with the implementation of T-GNA provisions, the tenure of High Price Bilateral Segment Contracts operating in the term ahead market segment be automatically increased up to 11-months, we note that the longer duration contracts of up to three months, have yet to garner sufficient liquidity at the Petitioner's platform. Therefore, following the gradual approach, we allow only the contracts for the maximum duration of up to three months at this stage. The Commission shall decide on the need for an extension of the duration of the longer duration contracts beyond three months at an appropriate time based on the performance of the existing contracts, market requirements and feedback from GRID-INDIA.

36. The Petitioner is directed to make Daily, Weekly, and Monthly Contracts available only for the pre-specified time blocks notified to the market participants well in advance with the help of circulars. In the case of Any Day Single-Sided contracts, the buyer is allowed to define the days and time blocks of the delivery period only within T+2 days to T+90 days, and the same shall be notified through circulars.

37. We also direct that timelines and delivery mechanism for high-price Day Ahead Contingency and Intraday Contracts shall be on similar lines to the conventional/green power in the Contingency segment.



38. The delivery mechanism for the high-price TAM and Contingency contracts shall be in accordance with the CERC (Open Access in inter-State Transmission Regulations), 2008, as amended from time to time, including re-enactment thereof; CERC (Indian Electricity Grid Code) Regulations, 2010 as amended from time to time including re-enactment thereof; Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022, 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 re-enactment 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 re-enactment thereof.

39. **Risk Management Mechanism:** The Petitioner has submitted that the risk management system applicable for participation in high-price bilateral market Contracts shall be similar to the existing provisions applicable for Contracts offered on the 'PRATAY' platform that are operating under the provisions of Regulation 5(2) and Regulation 5 (3) of PMR 2021.

40. We note that Regulation 26 of the PMR 2021 permits a power exchange to develop and implement a prudent risk management framework that shall be dynamic based on the changing risk profiles of the market. As a prudent risk management practice, the Petitioner should keep the initial and additional margins as per the risk mitigation requirements of its respective contracts and should clearly specify the same in its Business Rules.

41. As in the case of the conventional contracts, the final price settlement shall be equivalent to the 'Traded price x Quantity scheduled' at the delivery point, subject to the condition that the netting off of the positions shall not be allowed.

42. **Revision:** GRID-INDIA, in its reply on the revision of the schedule, has submitted that, as per IEGC, in the case of unit tripping of unit size of 100 MW or more, revision of



the Short-Term Open Access schedule is possible. Accordingly, suitable provisions may be put in place in the Contract. In this regard, the Petitioner has submitted that the power exchange shall settle the transaction based on the revised schedule provided by RLDC on submission of the application for revision by the generator, electricity trader, or any other agency selling power from the unit of the generating station, in case of a forced outage of a unit of the generating station (having a generating capacity of 100 MW or more) that is eligible to participate in the High Price Term Ahead Market segment.

43. In line with the laid down conditions of NTSD contracts, we direct that the high-price Monthly 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 the system operator and the default mechanism of the Petitioner's Exchange. Any downward revision in the contracted quantity (MWh) shall be subject to the aforesaid conditions.

44. In case of unit tripping, the provisions relating to revision of the schedule as specified in the IEGC, as amended from time to time, shall apply to the contracts under the high-price TAM segment.

45. **Renewable Purchase Obligation and Energy Storage Obligation:** As regards the Petitioner's suggestion for directing GRID-INDIA to provide information regarding Battery Energy Storage System (BESS) that qualify as entities such that purchase of energy from such sources in different Contracts of High Price bilateral market will enable the buyers to fulfil 'Energy Storage obligation' we are of the view that the issue involves wider consultation and cannot be dealt with in the present Petition.

46. We direct that all other features of the high-price bilateral market segment, including TAM and Contingency Contracts, shall be on similar lines to the conventional/green power segment.

47. We also direct the Petitioner to schedule these high-price contracts, viz., Daily, Weekly, Monthly, and Any day Single-Sided contracts initiated by the buyer 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.

48. The capacity offered as a sell bid in a power exchange under the high-price Daily, Weekly, Monthly, and Any day single-sided contracts initiated by the buyer 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, as the case may be, along with the other actions for market abuse under the PMR 2021 and other applicable Regulations of the Commission.

49. In light of the above analysis and decision on the various issues arising out of the proposal for the introduction of the high-price bilateral market segment at the Petitioner's power exchange, we hereby approve the Petitioner's proposal to introduce high-price TAM and Contingency contracts, subject to compliance with the directions stated above.



50. The Petitioner is directed to incorporate appropriate provisions in its Bye-laws, Rules, and Business Rules with respect to the introduction of these contracts in line with the above directions and submit them to the Commission for records within 15 days from the date of this order. 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.

51. We also direct GRID-INDIA to submit a report on the experience and performance of HP-TAM and HP-Contingency contracts within three months from the date of introduction of these contracts, after seeking feedback from the Petitioner.

52. Petition No. 170/MP/2023 is disposed of in terms of the above.

Sd/-
(P.K. Singh)
Member

Sd/-
(Arun Goyal)
Member

Sd/-
(I.S. Jha)
Member

Sd/-
(Jishnu Barua)
Chairperson

