

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 122/MP/2023

Coram:

Shri Jishnu Barua, Chairperson

Shri I.S. Jha, Member

Shri Arun Goyal, Member

Shri P.K. Singh, Member

Date of Order: 24 July, 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 seeking approval for introduction of High Price contracts in High Price Day Ahead Market (HP-DAM), High Price Term Ahead Market (HP-TAM), and High Price Contingency Contracts.

And in the matter of

Hindustan Power Exchange Limited,

(Formerly Pranurja Solution Ltd)

25th Floor, P J Towers

Dalal Street, Mumbai – 400001

....Petitioner

Versus

Grid Controller of India Limited

B-9 (1st Floor), Qutub Institutional Area,

Katwaria Sarai, New Delhi – 110016

...Respondent

Parties Present:

Shri Vishal Binod, Advocate, HPX

Shri Pravesh Sharma, HPX

Shri Alok Mishra, NLDC



ORDER

The Petitioner, Hindustan Power Exchange Limited (hereinafter referred to as the "HPX") has sought approval of the Commission for the introduction of High Price contracts in the High Price Day Ahead Market (HP-DAM), High Price Term Ahead Market (HP-TAM) and High Price Contingency Contracts (HP-Contingency) under Regulation 25 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 ("PMR 2021").

2. The Petitioner has made the following prayers:

- (a) Admit the present Petition;
- (b) Approve the introduction of High Price Day Ahead Market contracts as per the specifications set out in the present Petition;
- (c) Approve the introduction of High Price Term Ahead Market contracts as per the specifications set out in the present Petition;
- (d) Approve the introduction of High Price Contingency contracts as per the specifications set out in the present Petition;
- (e) Pass such other or further order(s) or direction(s) as this Hon'ble Commission may deem fit and proper in the facts and circumstances of the case.

Background

3. In 2021, the Petitioner, Hindustan Power Exchange Limited (HPX) was granted registration by the Commission to establish and operate a Power Exchange, vide Commission's order dated 12.5.2021. Subsequently, vide order dated 27.6.2022, the Petitioner was permitted to commence operations of its Power Exchange and the Petitioner finally commenced operations of its Power Exchange from 6.7.2022 in



Contingency (Day Ahead and Intra-day), Green Contingency (Day Ahead and Intra-day) Contracts, in Renewable Energy Certificates (RECs) from 27.7.2022, and from 28.7.2022 in Integrated Day Ahead Market (IDAM) and Real Time Market (RTM), as per the provisions of the PMR 2021.

4. The Petitioner has filed the present petition seeking approval of the Commission for the introduction of High Price contracts in High Price Day Ahead Market (HP-DAM), High Price Term Ahead Market (HP-TAM) and High Price Contingency Contracts (HP-Contingency).

Submission by Petitioner

5. The Petitioner has submitted that the Ministry of Power (MoP) had proposed to introduce a High Price Market segment (HP-DAM) within the existing Integrated-DAM (I-DAM) vide its letter dated 1.8.2022 and issued a detailed note vide letter dated 11.10.2022 after incorporating public comments on the same.

6. The Petitioner further added that its proposal is broadly in line with the framework set out in MoP's Letter dated 11.10.2022, but there are certain modifications that the Petitioner has incorporated keeping in mind market realities and operational limitations. These modifications are summarized as under.

I. Proposal for introduction of HP-TAM and HP-Contingency Contracts:

- a. While the MoP Letter only envisages the creation of a HP-DAM segment within Integrated DAM, the Petitioner is also proposing to introduce HP-TAM and HP-Contingency segments, keeping in mind the market realities and ensuring a level playing field across segments and across buyers and sellers intending to transact in various segments based on their requirements and availability.
- b. The Petitioner has mentioned , that the introduction of the High Price Market Segment is consequential and directly related to the introduction of price caps by the Commission, it would only be fair that any such introduction of the High



Price Market Segment must also be done in a uniform manner across all segments.

- c. Moreover, natural market development should not be restricted solely to promote a particular market segment, which may in turn promote trading on a particular power exchange. Instead, a level playing field should be provided for the development of all market segments to promote competition and efficiency in the power markets, which is one of the key salutary objectives of the Act, as well as the Power Market Regulations.
- d. In addition, it is submitted that permitting the introduction of HP-TAM and HP-Contingency contracts will afford members the choice and flexibility to plan their transactions in a better manner and transact purely based on their requirements, as opposed to being constrained to transact only in the HP-DAM segment irrespective of their actual requirements.

II. Proposal for having floor and forbearance price in the High Price Market Segment:

(a) Floor Price: The Petitioner has submitted that the objective for the creation of a High Price Market Segment is to facilitate trading of electricity by high variable cost generators, who are otherwise unable to participate in the market on account of the price cap of Rs. 12/unit imposed by the Commission, so it is imperative that a floor price of Rs. 12/unit be mandated for this segment. Mandating such a floor price will ensure that only the intended market participants, who are otherwise unable to trade in the market owing to their high variable costs, are able to participate in the High Price Market Segment, and that any unintended possibilities of gaming are mitigated.

(b) Forbearance Price: The Petitioner has requested that it may be permitted to indicate a forbearance price for trading in the High Price Market Segment. The said forbearance price may be prescribed by this Hon'ble Commission, as it deems fit. It is stated that the Petitioner seeks to include a forbearance price in

its contracts as the trading software and matching mechanism of the Petitioner's software require the input of a forbearance price for effective matching.

7. With the above background and as required by Regulation 25(2) of the Power Market Regulations, the Petitioner has submitted the contract specifications of the various types of contracts that it proposes to introduce in the High Price Market Segment as under.

8. High Price Day Ahead Market (HP-DAM) Contract

- (i) **Type of Contract:** Collective transactions on a day ahead basis, on the same lines as Integrated DAM contracts approved in order dated 27.06.2022 passed in Petition No. 159/MP/2022.
- (ii) **Eligible Entities:** It is proposed 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 HP-DAM contracts.
- (iii) **Price Discovery and Matching Methodology:** In line with the procedure followed for Integrated DAM contracts, the price discovery and matching methodology to be followed shall be the Double Sided Closed Bidding process, and the price discovery shall be as per the uniform clearing price mechanism.
- (iv) **Timelines, including commencement of bidding and duration of the bidding session:** In accordance with the MoP's Letter and in line with the procedure followed for Integrated DAM contracts, the timeline for the bidding session shall be 10 AM to 12 PM.
- (v) **Delivery mechanism and delivery duration:** Same as Integrated DAM transactions.



- (vi) **Risk management mechanisms including margining and final price settlement mechanisms:** Same as Integrated DAM transactions.
- (vii) Other items like revision of schedule, application for scheduling, pay-in and pay-out etc. shall be as per the existing procedure followed for I-DAM contracts on the exchanges and as approved by the Commission.

9. **High Price Term Ahead Market (HP-TAM) Contract**

- (i) **Type of Contract:** Following contracts are proposed to be introduced by the Petitioner in the HP-TAM segment:
 - a. **High Price (HP) Daily Contracts:** These contracts are proposed to be traded on T days for pre-specified and pre-notified time blocks for delivery from T + 2 days to T + 90 days onwards.
 - b. **High Price (HP) 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.
 - c. **High Price (HP) 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 detail.
 - d. **High Price (HP) 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.



- (ii) **Eligible Entities:** It is proposed that only those sellers approved by the Hon'ble Commission and identified by the Nodal Agency as being High Price sellers will be eligible to participate in HP-TAM contracts.

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

- (iv) **Timelines for Bidding and Delivery:** These contracts are proposed for a maximum duration of three months, with trading in the prior month. HP Daily, HP Weekly, and HP 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). HP Daily, HP Weekly, and HP Monthly Contracts will be made available for pre-specified time blocks only, which will be notified to 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. The following table summarizes the trading and delivery timelines for the proposed contracts, which are in line with the approval of the Hon'ble Commission for similar contracts with respect to other exchanges:

Contract	Start day of trading	Last day of trading	Trading time	Delivery	Trading time blocks
HP Daily	On daily basis (T)	Two days before day of delivery	1200 to 1700 hours	T + 2 to T + 90 days	For pre-specified time blocks notified to market participants in advance
HP Weekly	Monday of prior week (TW0)	Friday of prior week (TW0)	1200 to 1700 hours	TW + 1 to TW + 12 weeks	
HP 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	
HP 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

- (v) **Risk management mechanisms including margining and final price settlement mechanisms:** It is proposed that the Exchange will collect an 'Initial margin' at the time of bidding equivalent to 5% of the order value for HP Daily and HP Weekly Contracts and 1% of the order value for HP Monthly Contracts. For HP 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 Centre. 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, the margins collected shall be utilized

to pay the compensation to the counterparty. The margins will be collected in both cash and non-cash.

- (vi) **Pay-In & Pay-Out:** Pay-in and Pay-out for all the proposed contracts under HPTAM will be as per existing practice i.e. pay-in on D-1 day and pay-out to the generator on a D+1 day basis. Netting-off of the positions will not be allowed.
- (vii) **National or Regional:** In line with TAM contracts, HP-TAM 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 combinations thereof for physical delivery of electricity, as may be notified by the Exchange.
- (viii) **Minimum Volume Quotation:** Minimum Volume quotation is proposed as 0.1 MW in HP-TAM and TAM contracts based on the feedback received from the market.
- (ix) **Revision:** For HP 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 the proposed contracts and prevailing practices in the bilateral OTC market. However, as directed by the Hon'ble Commission in an order dated 07.06.2022, this revision will be subject to validation by system operator and the default mechanism of the Petitioner's Exchange.
- (x) **Cancellation/Rejection of trade:** In HP Any Day Single Sided contracts, it is proposed that the buyer have the option to specify the number of days (maximum up to two days before the day of delivery) within which it has to either confirm, or partially or fully reject the trade. During this time, the bid will remain valid, and the successful bidders will not be able to change their



bids. In case no communication is received from the buyer or 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.

- (xi) **Default penalty/compensation:** In case of default, the future delivery under the concerned contract shall be reduced/cancelled/suspended and a penalty may be imposed on the defaulting entity as may be specified by the Exchange in advance. Such a 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.
- (xii) Other items, including Application for Scheduling, SLDC clearance etc. shall be as per the procedure approved by the Commission for TAM contracts.

10. **High Price (HP) Contingency Contracts**

- (i) **Type of Contracts:** Following contracts are proposed to be introduced by the Petitioner:
 - a. **High Price (HP) 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 a price discovery methodology.
 - b. **High Price (HP) 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 a price discovery methodology.



- (ii) **Eligible Entities:** It is proposed that only those sellers approved by the Hon'ble Commission and identified by the Nodal Agency as being High Price sellers will be eligible to participate in HP Contingency contracts.
- (iii) **Price Discovery and Matching Methodology:** In line with the directions of the Hon'ble Commission and existing practice followed in Contingency contracts, price discovery methodology for HP Contingency contracts (Day Ahead and Intra-day) shall be Continuous matching.
- (iv) **Minimum Volume Quotation:** The Minimum Volume Quotation is proposed as 0.1 MW
- (v) **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 the Contingency segment.

Hearing dated 02.05.2023

11. The matter was heard for admission on 02.05.2023. 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"), and also to give wide publicity to its proposed new contracts by uploading the same on its website for inviting comments from the stakeholders and general public and filing an affidavit within three weeks with a detailed study incorporating the comments received from the stakeholders and the response thereon.



Reply by the Petitioner

12. In compliance with the directions of the Commission, the Petitioner served a copy of the Petition to the Respondent, and also hosted the Petition on its website for inviting Stakeholders comments. The Petitioner received comments from the following stakeholders:

- (i) Arunachal Pradesh Power Corporation Pvt. Ltd. (APPCPL)
- (ii) JPL-Simhapuri Energy Ltd.
- (iii) Adani Power Ltd.

Grid-India's Comments & Petitioner's Response

13. The Respondent has submitted the following comments:

- (i) 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 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 – In view of orders passed by the Commission, no further comments required.

- (ii) Floor Price – 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 country's renewable energy integration program. In case of low demand and high RE penetration scenarios, floor price could have adverse effect for maintaining adequate spinning reserve. A tolerance level may not adversely affect the return to the investors and at the same time, it needs to



control the volatility /spikes in the price of electricity in the day-ahead/ real time markets being caused due to market imperfections. It may be appropriate to link the price cap/floors/tolerance levels to an index of fuel price.

Response of Petitioner – Since only costliest generation can participate therefore it was proposed to have a floor price which shall be linked to the forbearance price of DAM/TAM etc. and will ensure that any error while placing the bid can be avoided. However, since any seller in High Price segment can be allowed only when it has a valid standing clearance from Grid Controller of India, therefore Grid-India's suggestion of omitting the floor price may be accepted.

(iii) Duration of HP-TAM Contract – Grid- India has highlighted a typo error wherein petitioner has mentioned duration as “T+2 day to T+90 days onwards” and suggested to correct it to “T+2 day to T+90 days”, as approved by the Commission for longer duration contracts.

Response of Petitioner – The Petitioner shall correct the typographical error.

(iv) Revision of Schedule for HP-TAM Contract - Grid-India has submitted in its Reply that as per IEGC, in case of unit tripping of unit size 100 MW or more, revision of Short-Term Open Access schedule is possible. Accordingly, suitable provisions may be put in place in the Contract.

Response of Petitioner – The Petitioner agrees with the submission. Accordingly, appropriate provision shall be incorporated to ensure that schedule for plants having installed capacity more than 100 MW can be revised during real time operation in case of outages. The Petitioner requests the Commission to allow the same facility in all other TAM segments as well for uniformity.

Stakeholders' Comments & Petitioner's Response

14. The Petitioner has submitted that overall a positive response has been received from the stakeholders. The comments and response of the Petitioner thereon are as under:

- (i) APPCPL submitted that the volume traded in HP-DAM has been very limited and the certainty of the power being cleared in HP-DAM is very minimal owing to limited participation. Moreover, the start-up cost for running the power plant for a single day far outweighs the revenue earned through DAM as well, so it may not be economically viable for the power plants to run for one day or more unless there is guarantee of their power being sold. Thus, HP-TAM and HP-Contingency, as an additional avenue to trade such power will be of huge benefit.

Response of Petitioner – No response required

- (ii) JPL-Simhapuri welcomed the proposal for HP-DAM as additional platform and better competition. With regard to HP-TAM, it submitted this option to trade in HP-TAM and HP-Contingency contracts is not available. Permitting HP-TAM will allow members the choice and flexibility to transact based on their availability and requirements, and also foster competition in the power market. It further requested that the Additional Margin may be reduced for sellers trading extensively in Power Exchange. This would ease-off the financial burden on the already stressed power generators, while the exchange can recover penalty amount, if any, from pay-out against sale of power.

Response of Petitioner – The additional margins proposed in the contract specifications are in-line with the additional margins currently applicable for similar non-HP market segments as part of prudent risk management policy.

- (iii) Adani Power Ltd. submitted that introduction of HP-DAM is consequential and directly related to the introduction of a price cap by CERC, it would only be fair that such introduction of High Price Market must also be done in a uniform manner



across all segments. This will ensure a level playing field for the development of all market segments to promote competition and efficiency in the power markets, being one of the key salutary objectives of the act, as well as the power market regulations.

Response of Petitioner – No response required

Hearing dated 08.06.2023

15. The matter was heard by the Commission on 08.06.2023. During the course of discussion, the learned counsel for the Petitioner informed that pursuant to the direction of the Commission vide RoP for the hearing dated 02.05.2023, the Petitioner had uploaded the present Petition on its website for stakeholders' comments and in response, the Petitioner has received comments from three stakeholders, namely, Arunachal Pradesh Power Corporation Private Limited, JPL Simhapuri Energy Limited and Adani Power Limited, all of which are favourable. Learned counsel also submitted that the Respondent, Grid-India 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

16. The Petitioner has proposed to introduce High Price contracts in the High Price Day Ahead Market (HP-DAM), High Price Term Ahead Market (HP-TAM) and High Price Contingency Contracts (HP-Contingency), in accordance with Regulation 25 of the Power Market Regulations, 2021 which provides for "Approval or Suspension of Contracts by the Commission".

17. In pursuance of the directions of the Commission, 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. It is observed that the stakeholders have largely welcomed the proposal. The comments/suggestions received



from the Respondent are mainly relating to the eligibility of sellers, floor price, and revision of schedule as per IEGC.

18. The Commission has already accorded approval for the introduction of the High Price Day Ahead Market (HP-DAM) on the IEX platform vide order dated 16.02.2023 in Petition No. 359/MP/2022, and on PXIL's PRATAY platform vide order dated 11.04.2023 in Petition No. 14/MP/2023. The Petitioner herein, HPX, has also sought approval for introduction of HP-DAM; however, in addition it has sought approval for the introduction of HP-TAM and HP-Contingency contracts.

19. 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. Prima facie, we are of the view that the Petitioner's proposal for the introduction of HP-DAM, being largely similar to the ones already approved by the Commission for the other two power exchanges, may be approved in line with the approval granted to the other two power exchanges.

20. As regards the Petitioner's proposal for the introduction of HP-TAM and HP-Contingency contracts, we feel that the introduction of these contracts may help in increasing competition, provide more avenues to eligible sellers who have not been able to participate in TAM and Contingency contracts due to the existing price ceiling of Rs.10/kWh, and create a level playing field across different market segments.

21. Since the instant proposal involves 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 since 2011. The issue was favorably disposed of by the Hon'ble Supreme Court in its order dated 06.10.2021 for 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.....”

22. Accordingly, we first examine the Petitioner’s proposal for HP-DAM contracts and subsequently evaluate the proposal for HP-TAM and HP-Contingency contracts in terms of the directions given by the Hon’ble Supreme Court in its order dated 06.10.2021, earlier orders by the Commission in this regard, and relevant provisions of the applicable Regulations, Grid Code, etc.

I. HP-DAM contracts

Bidding, Price Discovery, Market clearing and Scheduling

23. The proposed contract specifications by the Petitioner for HP-DAM are broadly in line with the specifications approved for the existing Integrated-DAM (I-DAM) on the Petitioner’s power exchange. We, therefore, approve the Double-Sided Closed Bidding and Uniform market clearing price mechanism for HP-DAM. There shall be a single bidding window as per the existing timeline of 10 am to 12 noon for I-DAM. The price discovery and market clearing shall take place in a sequential manner, i.e., first GDAM will be cleared followed by DAM and HP-DAM. The participants (buyers and eligible sellers) will also have the option to transfer unselected bids in DAM to HP-DAM with the flexibility to specify different prices. We also note that I-DAM already follows a similar sequential clearing. To this, a new segment of HP-DAM will be added. We approve the



sequential clearing of GDAM first, followed by DAM and finally HP-DAM. Also, the buyers and the eligible sellers will have the option to transfer unselected bids in DAM to HP-DAM with the flexibility to specify different prices for different segments at the time of bidding. Both buyers and sellers will be allowed to submit a price premium in case they opt for carry forward of their unselected bids from DAM to HP-DAM. However, in case of buyers, we direct the Petitioner to provide an option to the buyers to quote their maximum quantum of unselected bids from conventional DAM that they would like to carry forward to the HP-DAM segment.

Procedure for scheduling of collective transactions

24. We observe that the timelines for collective transactions have been specified in the procedure for scheduling of collective transactions. The timeline proposed by the Petitioner for auction window for HP-DAM is the same as the existing GDAM and DAM, and also combined requisition is required to be made from the Power Exchanges to NLDC. Subject to the above, NLDC and the Petitioner may mutually formalize the communication protocol between themselves.

25. In the event of congestion, curtailment shall follow the sequence of curtailment of HP-DAM transactions first, followed by the transactions in DAM, then in GDAM and finally in RTM.

Eligibility for Participation

26. The Petitioner has proposed that only those sellers who are approved by the Commission and identified by the Nodal agency will be eligible to participate in HP-DAM contracts, Accordingly, we approve the following categories of generators with high cost to be eligible for participation 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)



27. The above category of eligible generating stations shall be subject to periodic review by the Commission. Moreover, all the entities which are eligible to procure power through Open Access shall be eligible to participate in HP-DAM as buyers to participate in HP-DAM.

28. As regards the process of NoC/standing clearance, we hold that the eligible seller willing to participate in HP-DAM shall submit the request for standing clearance along with a declaration form through NOAR, and the concerned SLDC/RLDC/NLDC shall grant standing clearance through NOAR as per the extant provisions of the regulations after verifying the information furnished in the declaration form with the available records. The NoC/Standing clearance should clearly specify the source of power of such sellers. Similarly, eligibility of HP-DAM sellers shall be ascertained at the time of registration with the power exchange based on NoC/Standing clearance issued by SLDC/RLDC/NLDC, as applicable.

Floor and Forbearance Price

29. We have considered the Petitioner's submission and the suggestions of the Respondent. We agree with the Respondent's view that prescribing a floor price can have a negative impact on the country's renewable energy integration program and in cases of low demand and high RE penetration scenarios, floor price could have an adverse effect on maintaining adequate spinning reserve. Thus, we allow the floor price of '0' for HP-DAM to the Petitioner, in line with the approval granted to the other two power exchanges.

30. The forbearance price shall be Rs. 20/kWh for HP-DAM, as per the Commission's order dated 31.03.2023 in Petition 4/SM/2023 (Suo-Motu), until further orders.

II. HP-TAM and HP-Contingency Contracts

31. We note that the Petitioner has proposed HP-TAM and HP-Contingency contracts in view of the market realities and for ensuring a level playing field across segments and

across buyers and sellers intending to transact in various segments. The Petitioner has mainly submitted that the high-price market segment is consequential and directly related to the introduction of the price cap by the Commission and therefore sought approval for the introduction of the high-price market segment in a uniform manner across all segments.

32. In this context, we would like to reiterate that price caps have been introduced in the power exchanges to balance the interest of buyers while ensuring that the suppliers get adequately compensated. Further, in order to ensure that such price caps do not drive away the high-cost generators from the market, the Commission has already granted approval for the introduction of the HP-DAM market segment.

33. We find that the stakeholders have largely welcomed the proposal for the introduction of HP-TAM as an additional platform and for improving competition. Some of the stakeholders have highlighted that HP-TAM will allow members the choice and flexibility to transact based on their availability and requirements, and also foster competition in the power market. It has also been argued that the start-up cost for running the power plant for a single day far outweighs the revenue earned through DAM as well, so it may not be economically viable for the power plants to run for one day or more unless there is the guarantee of their power being sold. 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.

34. We have also observed that the volume transacted in the HP-DAM segment has not been significant since its introduction in March 2023. Though, it is too early to comment on the performance of a new market segment, some of the reasons attributed to low initial liquidity are uncertainty of getting cleared in HP-DAM, and less than anticipated demand during March-May 2023 mainly on account of untimely rains. We also note the argument put forth by the stakeholders that low liquidity in HP-DAM may be addressed with the introduction of high-price contracts in TAM.

35. We observe that the Commission vide its suo-motu order dated 31st March, 2023 in Petition No. 04/SM/2023 (Suo-Motu) had stipulated as follows: *“In exercise of the aforesaid powers under Regulation 51(1) of the PMR 2021 and in view of the prevalent power scenario and likely high increase in demand going forward, the Commission in public interest, directs all the Power Exchanges to re-design their bidding software for the period from 04.04.2023 until further orders, in such a way that the members can quote the price in the range of (a) Rs.0/kWh to Rs.10/kWh for all contracts, viz., DAM(including GDAM), RTM, Intra-day, Day Ahead Contingency and Term-Ahead (including GTAM); and (b) Rs.0/kWh to Rs.20/kWh in the HP-DAM segment. This in our view would reduce the cost of power for the buyers, while providing an opportunity to the high cost generators and the willing buyers to participate in the HP-DAM market.”* This implies that the price ceiling of Rs. 10/kWh applies to all transactions in term ahead market. In other words, the high cost generators that are otherwise eligible to quote up to Rs. 20/kWh in HP-DAM cannot do so in term ahead market. This is viewed by several stakeholders as being a restrictive stipulation.

36. In light of the above, we think that the Petitioner’s proposal for introduction of HP-TAM and HP-Contingency contracts in addition to HP-DAM merits consideration. The key aspects of the proposed contract specifications of HP-TAM and HP-Contingency are dealt with in the following sections:

High Price Term Ahead Market (HP-TAM)

37. **Type of Contracts:** The Petitioner has proposed HP-TAM contracts under the category of Daily Contracts, Weekly Contracts, Monthly Contracts, and Any-Day(s) Single-Sided Contracts. 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(s) 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.

38. We also note that the Commission vide its order dated 30.12.2022 in Petition No. 206/MP/2022, approved trading of these types/durations of contracts in Term Ahead Market and Green Term Ahead Market on the Petitioner's power exchange.

39. We, therefore, accord approval for the introduction of HP-Daily, HP-Weekly, HP-Monthly Contracts, and HP-Any day Single-sided contracts for pre-specified time blocks to be notified to the market participants well in advance, subject to the directions in subsequent paragraphs.

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

41. At this stage, we approve the same category of high-cost generators for participation in HP-TAM as well, so as to maintain consistency among the 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 which are eligible to procure power through Open Access shall be eligible to participate as buyers in HP-TAM.

42. **Price Discovery and Matching Mechanism:** The Petitioner has proposed to follow Uniform Price Step Auction as the matching methodology for Daily, Weekly, and Monthly Contracts in HP-TAM. For Any Day Single Sided Contracts, the Petitioner has



proposed to use Initial Price Offering (IPO) and Reverse Auction (RA) based bidding as price discovery methodology.

43. We approve the use of Uniform Price Step Auction as a matching methodology for price discovery in the case of Daily, Weekly, and Monthly Contracts in HP-TAM, 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 take informed decisions after seeing buy and sale bids offered by other anonymous participants.

44. We also approve the proposed Reverse Auction methodology as price discovery matching methodology for HP-Any-Day(s) single-sided Contracts. It is noticed that the Petitioner has proposed that the auction be in two stages namely Initial Price Offer (IPO) and Reverse Auction (RA). The Petitioner is directed to clearly define the stages and timeline in the relevant sections of the Business Rules and the Contract Specifications.

45. **Floor and Forbearance Price:** In line with the floor and forbearance price for HP-DAM, we direct that the floor price shall be '0' and forbearance price shall be Rs. 20/kWh for HP-TAM, until further orders.

46. **Timelines for Bidding and Delivery Mechanism:** The Petitioner has proposed HP-TAM contracts for a maximum duration of three months with trading in the prior month. HP Daily, HP Weekly, and HP Any Day Single Sided contract 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). HP Daily, HP Weekly, and HP 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.

47. The timelines and delivery proposed are broadly in line with the approval granted by the Commission in the order dated 30.12.2022 in Petition No. 206/MP/2022 for longer-



duration contracts in Term Ahead Market and Green Term Ahead Market. We approve the proposed HP-TAM contracts for the 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.

48. 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. 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.

49. We further direct the Petitioner 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 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.

50. ***Risk Management Mechanism:*** The Petitioner has proposed that the Exchange will collect an “Initial margin’ at the time of bidding equivalent to 5% of the order value for



HP-Daily and HP-Weekly Contracts and 1% of the order value for HP-Monthly Contracts. For HP-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 Centre. 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.

51. 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 Margins as per the risk mitigation requirement of respective contracts. Accordingly, we approve the same.

52. Regarding the final price settlement, the Petitioner, in contract specifications, has 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.

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

54. **Minimum Volume Quotation:** We approve the Minimum Volume quotation equivalent to 1 MW in HP-TAM contracts as proposed in the contract specifications and in line with the earlier approved contracts.

55. **Revision:** The Petitioner has proposed that in the case of HP-Monthly Contracts, the contracts may be allowed to be annulled or curtailed, without any transfer of positions, due to transmission constraints or force majeure, subject to validation by the system operator and default mechanism of Petitioner's Exchange. This is proposed considering the length of proposed contracts and prevailing practices in the bilateral OTC market.

56. Grid-India in its reply on the revision of the schedule has submitted that as per IEGC, in case of unit tripping of unit size 100 MW or more, revision of Short-Term Open Access schedule is possible. Accordingly, suitable provisions may be put in place in the Contract. The Petitioner has, therefore, requested that appropriate provision shall be incorporated to ensure that the schedule for plants having installed capacity more than 100 MW can be revised during real time operation in case of outages. The Petitioner requests the Commission to allow the same facility in all other TAM segments as well for uniformity.

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

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

59. **Cancellation/Rejection of trade:** The Petitioner has proposed that in the case of HP-Any Day Single-Sided contracts, the buyer shall have the option to specify the number of days (maximum up to two days before the day of delivery) within which it has to either

confirm or partially or fully reject the trade. During this time, the bid will remain valid, and the successful bidders will not be able to change their bids. In case 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.

60. We find the above proposal of the Petitioner is a part of the trading activity (i.e. before the transaction takes place) and therefore, direct the Petitioner to complete the same, two days before 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 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 power exchange.

61. **Default penalty/compensation:** The Petitioner has proposed that in case of default, the future delivery under the concerned contract shall be reduced/canceled/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 counterparty as compensation against cancellation/revision of the contract after adjustment of charges and deduction of power exchange administrative charges.

62. 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 imposition of default penalty/compensation is a risk mitigation requirement of respective contracts. Hence, we approve the same. We further direct the Petitioner to clearly specify the penalty fines & penalties in the contract specifications and Business Rules to ensure transparency in the risk management and informed decision making for the market participants.

63. We also direct the Petitioner to schedule these contracts, viz., HP-Daily, HP-Weekly, HP-Monthly, and HP-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.

64. The capacity offered, as a sell bid in Power Exchange under the HP-Daily, HP-Weekly, HP-Monthly and HP-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 as the case may be, along with the other actions for market abuse under the PMR 2021 and other applicable Regulations of the Commission.

High Price (HP) Contingency Contracts

65. The Petitioner has proposed to introduce (i) High Price (HP) Day Ahead Contingency Contracts which will be hourly/block-wise contracts to be traded on D-1 day for delivery on D day, and (ii) High Price (HP) Intra-day Contingency Contracts which 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. The Petitioner has proposed similar contracts for hydro segments as well.

66. The Petitioner has proposed continuous matching as the price discovery methodology for both contracts, in line with existing practice followed in Contingency contracts. Other features, including minimum volume quotation and bidding process, are proposed to be similar to that of the conventional power in the Contingency segment. The eligible entities for HP-Contingency contracts are proposed to be as per the decision of the Commission and the nodal agency.

67. **Matching Methodology:** As the 'Continuous matching' methodology proposed for HP-Day Ahead Contingency Contracts and HP- Intraday 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.

68. **Eligible Entities:** At this stage, we approve the same category of high-cost generators for participation in HP- Day Ahead Contingency and Intraday Contracts as already approved for HP-DAM and HP-TAM in the instant Petition, so as to maintain consistency among the different market segments. Accordingly, the following categories of generators approved for participation in HP- Day Ahead Contingency and HP- Intraday Contracts:

- 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)

69. 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.

70. **Floor and Forbearance Price:** In line with the floor and forbearance price for HP-DAM, we direct that the floor price shall be '0' and forbearance price shall be Rs. 20/kWh for HP-Day Ahead Contingency and HP- Intraday Contracts, until further orders.

71. **Minimum Volume Quotation:** We approve the Minimum Volume quotation equivalent to 1 MW in HP-Contingency contracts as proposed in the contract specification and in line with the earlier approved contracts.

72. We also direct that all other features of HP-Day Ahead Contingency and HP-Intraday Contracts shall be on similar lines to the conventional/green power in the Contingency segment.

73. The Petitioner's proposal for introducing HP-Day Ahead Contingency (Hydro) and HP-Intraday Contracts (Hydro) doesn't seem to fulfill the requirement of having a separate high-price market segment for high-cost generators. We, therefore do not approve the proposal for introducing HP-Day Ahead Contingency (Hydro) and HP-Intraday Contracts (Hydro).

74. We have also examined other details of the contracts proposed to be introduced by the Petitioner and provided our observations/ directions on the same in Annexure-I attached to this order.

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

76. 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 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.

77. 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.

78. Annexure-I attached herewith shall form part of this order.

79. Petition No. 122/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
---------------------------------------	---------------------------------------	-------------------------------------	--



Observations/Directions of the Commission on Contract Specifications submitted by HPX

S. No.	Contract	Item	Observations/Directions of the Commission
1	HP-Daily	13. Lot Size	As approved above and in the order for Petition No. 206/MP/2022, the Daily contracts are to be made available only for pre-specified time blocks and not for user-defined blocks. Further the hours/blocks are to be notified by the power exchange to the market participants well in advance. The Petitioner is directed to rectify the same in contract specifications.
2	HP-Daily	17. Minimum Order Price Limit	Petitioner to align this with the approval above.
3	HP-Daily	18. Maximum Order Price Limit	Petitioner to align this as per the Commission's order dated 31.03.2023 in Petition No. 4/SM/2023 (Suo-Motu), until further orders. Or, the Petitioner may mention "Price as notified by the Commission".
4	HP-Weekly	13. Lot Size	As approved above and in the order for Petition No. 206/MP/2022, the Daily contracts are to be made available only for pre-specified time blocks and not for user defined blocks. Further the hours/blocks are to be notified by the power exchange to the market participants well in advance. The Petitioner is directed to rectify the same in contract specifications.
5	HP-Weekly	17. Minimum Order Price Limit	Petitioner to align this with the approval above.
6	HP-Weekly	18. Maximum Order Price Limit	Petitioner to align this as per the Commission's order dated 31.03.2023 in Petition No. 4/SM/2023 (Suo-Motu), until further orders. Or, the Petitioner may mention "Price as notified by the Commission",
7	HP-Weekly	13. Lot Size	As approved above and in the order for Petition No. 206/MP/2022, the Daily contracts are to be made available only for pre-specified time blocks and not for user defined blocks. Further the hours/blocks are to

			be notified by the power exchange to the market participants well in advance. The Petitioner is directed to rectify the same in contract specifications.
8	HP-Weekly	17. Minimum Order Price Limit	Petitioner to align this with the approval above.
9	HP-Weekly	18. Maximum Order Price Limit	Petitioner to align this as per the Commission's order dated 31.03.2023 in Petition No. 4/SM/2023 (Suo-Motu), until further orders. Or, the Petitioner may mention "Price as notified by the Commission".
10	HP-Any Day Single sided	17. Minimum Order Price Limit	Petitioner to align this with the approval above.
11	HP-Any Day Single sided	18. Maximum Order Price Limit	Petitioner to align this as per the Commission's order dated 31.03.2023 in Petition No. 4/SM/2023 (Suo-Motu), until further orders. Or, the Petitioner may mention "Price as notified by the Commission",
12	HP-Contingency	16. Minimum Order Price Limit	Petitioner to align this with the approval above.
13	HP-Contingency	17. Maximum Order Price Limit	Petitioner to align this as per the Commission's order dated 31.03.2023 in Petition No. 4/SM/2023 (Suo-Motu), until further orders. Or, the Petitioner may mention "Price as notified by the Commission",