

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 175/RC/2015

Coram:

Shri Gireesh B. Pradhan, Chairperson

Shri A.K. Singhal, Member

Shri A.S. Bakshi, Member

Dr. M.K. Iyer, Member

Date of Hearing: 14.1.2016

Date of Order: 6.5.2016

In the matter of

Application in compliance of Regulation 24 and other provisions of the Central Electricity Regulatory Commission (Power Market) Regulations, 2010

And

In the matter of

Power Exchange India Limited
5th Floor, Tower 3, Equinox Business Park
LBS Marg, Kurla (W), Mumbai

.....Petitioner

Parties Present:

Shri Chandrasekhar Bhatt, PXIL

Shri Mukti Marhchino, PXIL

ORDER

The petitioner, Power Exchange of India Ltd., has filed the present petition for approval of amendment/modifications to the Bye-laws and Business Rules of Power Exchange of India Limited.

2. The petitioner has submitted that PXIL is upgrading its trading platform and is going to offer an IT based trading platform, namely "PXIL-NSPOT Efficient Smart and Secure Trading System" (P-NEST), to market participants which offers several advantages over the existing "EnTRiM" in terms of access, ease of usage and

information dissemination leading to overall functional improvements and better risk management system for all the participants.

3. The petitioner has mentioned that P-NEST offers technological upgrade as it is a complete web based solution in comparison to the thick client based solution used currently. P-NEST trading platform offers a flexible risk management and margining system at various stages of the product cycle that could be customized to meet participants' requirements without renegeing on the risk management practices. The petitioner has submitted that certain changes are required in the existing provisions of its Bye-Laws and Business Rules of the petitioner to make use of the new, additional and updated features of the new P-NEST trading platform.

4. The petitioner vide its affidavit dated 3.7.2015 has placed on record the clean copy of the Business Rules and Bye laws. The petitioner vide letter dated 26.8.2015 was directed to limit the changes in Business Rules and Bye Laws only to those required for launching of P-NEST and solicit views from the stakeholders on these changes by hosting the proposed modifications on its website. The petitioner vide its affidavit dated 30.9.2015 has submitted the revised petition for approval of revised Business Rules and Bye Laws.

5. The petitioner hosted the proposed amendments to the Business Rules on its website for inviting comments from the stakeholders. The petitioner has submitted that no comments have been received on the proposed amendments.

6. The matter was heard on 14.1.2016. During the course of hearing, the representative of the petitioner reiterated its submissions made in the petition.

7. The petitioner has made following broad changes to its bye laws, physical market business rules and REC Business Rules:

- (a) Introduction of web based multi device interface along with a specific workstation based bidding.
- (b) Removal of Trading and Self Clearing Member-Plus (TSCM-P) Category of membership and allowing of Clearing and Settlement directly with the Client of a member.
- (c) Change in the risk management system and margining.

8. The staff of the Commission discussed the proposed changes with the petitioner in detail. The petitioner wants to provide its members and clients with a web based application interface to increase the ease of use and make it more user friendly. Since, P-NEST provides the facility of doing the clearing and settlement activities directly with the client, the petitioner is planning to remove the Trading and Self Clearing-Plus (TSCM-P) membership category which was being used by the clients of the advisory members. Currently, the petitioner requires 100 percent margin from the buyers for its DAS product and in the proposed new risk management framework, it plans to move towards a multi-level margining system for DAS and TAM contracts similar to IEX.

9. The petitioner has submitted that since new P-NEST trading platform offers a flexible risk management and margining system at various stages of the product cycle that could be customized to meet participants' requirements without renegeing on the risk management practices, it is proposing a new multi-level margining system for DAS, 2D-SPOT and EVE-DAS Contracts broadly as under:

- a. **Pre-Bid Margin:** Pre-Bid Margin would be applied at the time of order entry.
- b. **Pre-Trade margin:** Pre-Trade Margin would be verified before matching process is initiated. All the orders, for which pre-trade margin validation fails, would be cancelled and no matching would be done for such orders. Pre-Trade Margin shall be applicable only for batch matching engine instances (like DAS, Discriminatory Price Auction etc). Pre-Trade Margin validation would be done just before the orders are considered for matching. For DAS, 100% of the provisional matched trade obligation based on Available Transfer Capability (ATC) as informed by NLDC including applicable charges or as prescribed has to be there for the bids to go for final matching.
- c. **Post-Trade Margin:** Post-Trade Margin would be applied on the trade (matching).
- d. **Delivery Margin:** Delivery Margin would be blocked by the Day End Margin process. Delivery margin is applied on pending delivery records and delivery date slab-wise different margin percentage (%) could be defined. If Post-Trade Margin and Delivery Margin both are applicable, then higher of the two would be taken.
- e. **Charge Margin:** The new software system has a provision to configure the transmission and operating charges separately for different products. This charge margin can be made applicable at any stage of

trade processing i.e. pre-bid, pre-trade, post trade, application creation, and application response.

- f. The above margins can be applied to buyers and sellers differently for any product.

10. The petitioner was directed by staff of the Commission to submit detailed process flow on how the new margining system would work under different scenarios. The petitioner has submitted the detailed flowcharts on functioning of the clearing and settlement systems along with the details of the functioning of the risk management system. The petitioner has submitted that in the proposed P-NEST system bid placement would not be allowed if Available Margin is less than twenty percent of the Bid Amount. Immediately after the bid submission, a margin call will be issued to the members to increase the margin to seven days trade average multiplied by a multiplying factor. Thereafter, PXIL will carry out the bank run process between 1315 and 1345 hours to ensure that 7 day average is maintained as available margin before final matching.

11. The petitioner has submitted that in Intra Day and Day Ahead Contingency products, its plans to take 105% of the bid value as the Margin. In Any Day and Weekly Contracts, the petitioner has proposed to take 10 paisa per kWh as the Initial Margin and Maximum of 45% of the traded volume shall be three days matched trade value shall be maintained by the buyer as the margin on rolling basis.

12. We have examined the submissions and the detailed analysis provided by the petitioner. In our view, moving towards a web-based interface would be user friendly and enhance the functionality of the products offered to the clients. Therefore, it is a

step in the right direction. We approve the changes in the Business Rules and Bye-Laws to enable the web-based interface. The petitioner shall be required to ensure that web-based interface uses the best in the industry practices and products and does not compromise the security and privacy of its customers. The petitioner is directed to place on record of the Commission detailed analysis of the security measures adopted for the web-interface along with its IT Audit report.

13. The petitioner has stated that in the EnTRIM system, the clients of advisory members had to take a Trading and Self Clearing Member-Plus (TSCM-P) Category membership for completing the clearing and settlement activities as this system did not have the functionality of clearing and settlement directly with the clients. The changes related to deletion of Trading and Self Clearing Member-Plus (TSCM-P) Category membership and allowing of clearing and settlement directly with the Client of a member are change in functionality for such clients as in the new P-NEST system the clients of the Advisory Members can directly do clearing and settlement with PXIL. Since Power Exchanges are also responsible for post trade surveillance of Advisory Members, the petitioner shall ensure that books of accounts maintained by the Advisory Members are in sync with the proposed changes and such members do not provide credit facility to their Clients and do not levy member service charges beyond the limits specified in the Central Electricity Regulatory Commission (Power Market) Regulations, 2010.

14. The petitioner has submitted detailed information on how its new risk management system is going to function. Perusal of the information reveals that taking 100 percent margin according to the bid submitted by the buyers in DAM can be onerous for them. Therefore, the petitioner has proposed to adopt a multi-level

margining system which takes into care the needs of the participants. We have considered the submissions by PXIL. Broadly, the petitioner has proposed multilevel margining system for the purpose of providing flexibility to its members and clients. In IEX also, there is multi-level flexibility in its margining system. Therefore, the commission approves the margining system proposed by PXIL with some safeguards as under:-

Additional Safeguards to be adopted by PXIL

- (a) It needs to ensure that buy order is not allowed to be placed by a member if the available margin is less than 20 percent of the bid amount or seven days trade average, whichever is higher.
- (b) Before running the final matching, PXIL must also ensure that the available margin of the member is greater than the provisional obligation generated for a member after a response is received from settlement bank at 1430 hours.
- (c) PXIL to ensure that in its DAS product, the clearing and settlement system ensures that 100 percent margin is provided by the buyers before transaction is allowed.

The above safeguards have been prescribed keeping in view the present networth of PXIL.

15. The amendments proposed by the petitioner in its Bye-Laws and Business Rules are approved subject to the modifications to strengthen the risk management procedure as detailed in para 14 alongwith additional safeguards at (a), (b) and (c)

above. The petitioner is directed to submit the revised Business Rules and Bye-Laws updating for the modifications prescribed above both in track change and clean copy for records of the Commission and display the same on its website for information and reference by the stakeholders.

16. The petition is disposed of with the above.

sd/-
(Dr. M.K. Iyer)
Member

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

sd/-
(Gireesh B. Pradhan)
Chairperson