CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Suo motu Petition No. 127/2011 alonwith IA No. 16/2011

Coram: Dr. Pramod Deo, Chairperson

Shri S. Jayaraman, Member Shri V.S. Verma, Member Shri M. Deena Dayalan, Member

Date of Hearing: 18.8.2011 Date of Order: 27.9.2011

In the matter of:

Implementation of the order dated 24.5.2011 in Petition No. 127/2011 by Indian Energy Exchange and Power Exchange of India Limited on modification in market design of Day Ahead markets in Power Exchanges

And

In the matter of:

- 1. Indian Energy Exchange Ltd., New Delhi
- 2. Power Exchange of India Ltd., Mumbai
- 3. National Power Exchange of India Limited, New Delhi
- 4. Power System Operation Company Limited, New Delhi Respondents

ORDER

The commission in its order dated 24.5.2011 in Petition No. 127/2011 (*suo motu*) directed the power exchanges as under:

- "8. We direct the Power Exchanges to change the bidding time blocks from one hour to 15 minutes in day ahead market and submit an implementation plan to the Commission which should include any operationalisation issues like extension time period for auction or unconstrained price discovery process or price discovery process with transmission corridor availability etc. The implementation plan shall be submitted by 30.6.2011 and the process of changeover shall be completed within a period of six months from the issue of this order."
- 2. Respondent No.1 has filed Interlocutory Application (IA) No. 16/2011 with the following prayers:
 - "(a) Grant further time till 1.4.2012 for implementing the order dated 24.5.2011 in Suo Motu Petition No. 127 of 2011:
 - (b) Approve the Implementation Plan annexed hereto as Annexure A to this Application;



- (c) Issue appropriate directions to reimburse the power exchanges for the costs incurred in implementing the directions contained in the order dated 24.5.2011 in Suo Motu Petition No. 127 of 2011 upon furnishing of proof of expenses; and
- (d) Pass such further or other orders as the Hon'ble Commission may deem fit and proper in the facts and circumstances of the case and thus render justice."
- 3. Respondent No.1 has submitted that following activities are required to be undertaken for smooth changeover from the hourly bidding time-block to 15 minute bidding time block in Day Ahead Market in compliance with the directions of the Commission in order dated 24.5.2011:

A. Trading Engine:

- a. Defining requisite modification in the trading software application, including the users interface.
- b. Agreeing on commercial terms with the software vendor.
- c. Entering into a contract with the software vendor.
- d. Redesigning post trade operations including reporting formats and web based reports.

B. Post Trade Systems:

- a. Agreeing with the software vendor for incorporating modifications.
- b. Placing orders for such modifications.
- c. Undertaking testing of trading software as well as post trade software.
- C. Training / educating the market about changes made in the bidding and reporting procedures.
- D. Carrying out mock tests with the participants as well as other stakeholders like banks and transmission system operators (NLDC, RLDC & SLDC).
- E. Testing and approval by Hon'ble Commission.
- F. Switchover to 15 minutes time blocks bidding pattern.



- 4. Respondent No.1 has submitted that the exchange has made substantial efforts in education of the market participants for the past more than three years about the existing bidding methodology. At present, the number of market participants in the exchange is 1100 and it would require substantial time and money and effort to educate and inform these market participants. Respondent No.1 has also submitted that it anticipates corresponding increase in the number of bids on account of the contract size being reduced from one hour to 15 minutes. The respondent is in consultation with its software vendor to work out the modalities in such a manner that on account of the reduction of the contract size from one hour to 15 minutes, the validation period for the bids does not increase correspondently and the software is enabled to handle large number of bids in the same time frame. The respondent would also require adequate time to explore its option from safety, accuracy and commercial point of view before switching over to 15 minutes bidding format.
- 5. Respondent No.1 has further submitted that the original software was acquired from a foreign vendor at great expense for operating Day Ahead markets with hourly contracts, only three years back. The direction of the Commission to switch over to 15 minutes bidding has required the respondent to create a new software in the event the existing software cannot be modified to accommodate the new format of trading, even though the software has not been fully depreciated. Respondent No.1 has accordingly prayed for extension of time till 1.4.2012 for implementing the directions of the Commission in the order dated 24.5.2011 ibid.

6. Respondent No.1 has also submitted the Implementation Plan as Annexure A to the Interlocutory Application. The time schedule is extracted hereunder:

Selection Finalization and issue of Letter of Intent (LOI)	15 th July, 2011
Delivery of software for UAT	1 st December, 2011
Conclusion of UAT (with necessary changes, if any)	31 st January, 2012
Testing and Approval by Hon'ble CERC	15 th February 2012
Training and MOCK test on the new Exchange software with Market Participants and other intermediaries like Clearing Banks and Transmission Operators	15 th March, 2012
Launch of the product (software) on Exchange	1 st April, 2012

- 7. During the hearing of the matter on 21.7.2011, we had directed Respondent No.1 to file the details of action taken to implement our order dated 24.5.2011. Respondent No.1 in its affidavit dated 12.8.2011 has explained the steps taken by it for compliance of our order. It has been submitted that as per the proposed delivery schedule given by the software solution provider, the software is expected to be delivered by December 2011 and thereafter, two to three months time would be required for installation and implementation of software, training and mock training involving the respondent's members as well as testing and approval by the Commission. Accordingly, the Respondent No. 1 has sought extension of time till 1.4.2012 for implementation of the order dated 24.5.2011.
- 8. Respondent No.1 has also claimed privilege in respect of the content of the affidavit dated 12.8.2011 in terms of Regulation 109(3) of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for the purpose of inspection or supply of copies of the said affidavit in view of the confidential commercial information contained therein.

- 9. We have considered the request of Respondent No.1. In its affidavit dated 12.8.2011, Respondent No.1 has enumerated the steps taken by it for change from the one hour bidding to 15 minutes bidding format. The steps essentially pertain to the internal procedure and decision of the respondent company. We consider the information as privileged from the point of view of the respondent company and accordingly direct that the said information will not be available to third parties for inspection or issue of certified copies.
- 10. After consideration of the contents of IA No. 16/2011 and the affidavit dated 12.8.2011, we are of the view that Respondent No.1 has been making concerted efforts to undertake modifications in the trading software to comply with our order dated 24.5.2011. Apart from the fact that certain externalities requiring time and efforts are involved in the process, it is of critical importance that the modified trading software should be rigorously tested before commencement of its operation since accuracy, authenticity and security of the software has direct implication on the process of price discovery in the power market. Considering these factors, we allow the IA filed by Respondent No.1 and grant extension of time till 1.4.2012 for implementation of our order dated 24.5.2011 <u>ibid</u>. However, it is made clear that further extension of time would not be allowed under any circumstances.
- 11. Respondent No.1 has prayed for reimbursement of the cost for modification/acquiring the new trading software for compliance of the order dated 24.5.2011. We are not inclined to grant this relief since the respondent is required to undertake the modification in the market design to improve the efficiency, economy and competition in the power market. We expect the power exchanges to be aware

of the requirement for such regulatory changes and to factor such risks in their business plans. Accordingly, the expenditure incurred on the modification of the market design from one hour to 15 minutes bidding should be funded from the internal resources of the respondents.

12. Power Exchange of India Ltd., Respondent No.2 herein, in its letter dated 28.6.2011 has submitted that migration from the current hourly time blocks to 15 minutes time blocks shall be implemented by it with the following tentative time schedule:

Ser No.	Items	Expected Completion date
1	Modify the contract specification in Day Ahead	29.7.2011
	market to reflect 15-minutes Time Block contracts	
2	Modify the relevant provisions in the Bye-laws,	29.7.2011
	Rules and Business Rules of the exchange and	
	submit to the Commission for approval	
3	Undertake testing of the new trading system and validation of test results before actual implementation of 15 minutes bidding. The test results shall be submitted to the Commission for perusal	First week of October 2011
4	Carry out mock tests with participants for a smooth transition from 1 hour to 15 minutes bidding	Week starting 17.10.2011
5	Launch of Day Ahead system with 15 minutes Time Block	By first week of November 2011

13. Respondent No.2 has further submitted that it does not foresee any extension of time for auction or unconstrained price discovery. Respondent No.2 has however pleaded that for the overall operational efficiency and maximum utilization of the corridor, the exchanges should get the transmission corridor availability in the morning itself from POSOCO before the start of the session. As regards the Area Clearing Price and Volume Discovery in the event of congestion, it has been submitted that the advance information of the transmission corridor availability in the

morning itself shall nullify the extra time needed for price and volume discovery process as it involves routing of power in different region.

- 14. In view of the readiness of Respondent No.2 to introduce 15 minute bidding at its exchange within the timeframe stipulated in our order dated 14.5.2011 *ibid*, we accord approval to Respondent No. 2 to introduce 15 minutes bidding on or after 24.11.2011 and before 1.4.2012 after completion of testing of the trading software and submission of the test results to the Commission.
- 15. National Power Exchange of India Limited, Respondent No.3 herein, has not filed any response. As per the information available, Respondent No.3 will take one more year to go into operation. We direct Respondent No.3 to take necessary steps to introduce 15 minutes bidding on its operation and make necessary provisions in its Bye laws and Business Rules.
- 16. Power System Operation Company Limited, Respondent No.4 was directed in our order dated 24.5.2011 to modify the Detailed Procedure for Scheduling of Collective Transactions after discussing the procedural changes with the Power Exchanges and submit the same for our approval. The modified Detailed Procedure is yet to be submitted by Respondent No.4. We direct Respondent No.4 to submit the modification to the Detailed Procedure latest by 15.10.2011.

sd/- sd/- sd/-

(M.DEENA DAYALAN) (V.S.VERMA) (S.JAYARAMAN) (Dr. PRAMOD DEO)
MEMBER MEMBER MEMBER CHAIRPERSON