

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**PETITION No. 210/2010**

**Coram** : Dr. Pramod Deo, Chairperson  
Shri S.Jayaraman, Member  
Shri V.S.Verma, Member  
Shri M.Deena Dayalan Member

Date of Hearing: 17.8.2010

Date of Order: 17.9.2010

**In the matter of:**

Petition under Section 66 of the Electricity Act, 2003 read with Regulations 4 and 7 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2010 for approval for the draft contract for trading in Renewable Energy Certificates.

**And in the matter of**

Indian Energy Exchange Ltd., New Delhi ... Petitioner

Shri Jayant Deo, IEX  
Shri Rajesh Mediratta, IEX  
Shri Akhilesh Awasthy, IEX  
Shri S.C.Sexena, NLDC

**ORDER**

Indian Energy Exchange Ltd., the Petitioner herein, has filed this petition under Section 66 of the Electricity Act, 2003 (the Act) read with Regulations 4 and 7 of the Central Electricity Regulatory Commission (Power Market)

Regulations, 2010 (“Power Market Regulations”) seeking approval to the draft contract for trading in Renewable Energy Certificates.

2. The Petitioner has submitted that under Regulation 4(v) read with Regulation 7 of the Power Market Regulations, Exchanges are required to submit to the Commission the complete and detailed contract specifications relating to contracts linked with electricity generated from renewable sources, e.g. Renewable Energy Certificates (REC) etc. to be transacted on Exchanges. It has been averred in the Petition that pursuant to the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 (“REC Regulations”), the Petitioner is desirous of introducing the Renewable Energy Certificate (RECs) in the market and has developed draft contract specifications for trading RECs annexed at Annexure A to the Petition.

3. The Petitioner has also stated that the revised Byelaws, Rules, and Business Rules submitted earlier for approval of the Commission contained the changes in the REC market in Schedule C, and also that a new category of membership namely REC Member has been added in the Exchange Rules at clause 4.3.4.

4. In light of the above, the following prayers have been made:-

- (a) Approve the draft contract for trading in RECs as contained in Annexure A;*
- (b) Approve the Rules, byelaws and Business Rules relating to RECs;*
- (c) Pass any such further Orders(s) as the Commission deems fit in the facts and circumstances of the case.*

5. Since the National Load Despatch Centre (NLDC) has been designated as the Central Agency for the purpose of REC Regulations and Nodal Agency for Power Exchanges, its views/suggestions were sought on the proposed Schedule 'C' of Business Rules pertaining to REC Contracts.

6. The petition was heard on 17.8.2010. The Petitioner was directed to file its responses to the comments and observations received from the Central Agency. The Commission further directed the Petitioner to undertake test run of the software for various scenarios with at least 10 test cases covering different types of demand supply curves (including all boundary conditions like high demand, high supply, less supply, less demand and the scenarios which depict the matching rules with Reference to any kind of priority or pro-rata method being used, time priority used in selection of participants, solution with demand supply curves overlapping at multiple points) and submit the test results latest by 27.8.2010.

7. The Petitioner in its affidavit dated 27.8.2010 submitted its reply to the comments filed by the Central Agency, the test run of software for various scenarios covering different types of demand supply curves and solution with

demand supply results of the mock test run, and the revised Schedule 'C' of Business Rules incorporating some of the suggestions made by the Central Agency.

8. Bye-laws, Rules and Business Rules revised in compliance to Power Market Regulations and submitted by the Petitioner on 6.5.2010 were approved by the Commission vide order dated 26.8.2010 except Schedule 'C' of the Business Rules, subject to compliance of the directions therein. In this order, "Schedule C" of Business Rules" pertaining to REC is being examined.

9. After detailed examination of the Schedule 'C' of the Business Rules, our observations are given in the succeeding paragraphs.

10. **Market Segment and Type of Contracts:** The REC market segment shall cover two categories of certificates – Solar and Non Solar. The REC market segment shall be operated in accordance with Power Market Regulations and REC Regulations read with the Detailed Procedure for accreditation, registration, issuance and redemption of RECs approved by the Commission.

11. **Price Discovery Mechanism to be used:** The Commission hereby approves a double sided closed bid auction with uniform price solution as price discovery mechanism for REC contracts. Since REC trading is a new market development the price discovery mechanism will be reviewed after one year. The

Commission may direct changes in the price discovery methodology based on market feedback and market liquidity/transaction volume to keep pace with the market conditions.

12. **Membership of Power Exchange:** Any membership including REC membership shall be in compliance with Power Market Regulations in all respects including the processes related to handling money transactions, contribution to the settlement guarantees fund and risk management practices. Power Market Regulations specify a distinct membership structure for the category of members who are neither electricity traders nor distribution licensees (including deemed distribution licensee) nor grid connected entities. We direct the Petitioner to formulate new processes and procedures for client transactions of this category of Members and suitably incorporate the same.

13. **Risk Management System and Margin Requirements:** The Power Exchange shall allow a member/client, as applicable, to place a purchase order against cash amount made available by member/client, as applicable, equivalent to 100% of the order value. Similarly, bids of seller will be valid only if sufficient number of RECs is available in the account of the particular seller. This availability of REC in sellers' account will be confirmed by Central Agency before auction matching is executed by the Power Exchange.

14. **Termination/Cancellation of Contract:** The Commission does not envisage a situation where a contract requires to be terminated or cancelled due to shortage of funds of buyers or non-availability of RECs for sellers as there are built-in pre-auction matching checks when the participants place orders. The Petitioner is directed to delete any such clause.

15. **Issue of Certificates:** As per detailed procedure issued by NLDC (Central Agency) for REC Mechanism, Power Exchange(s) are required to issue certificate of purchase of REC to the buyers. However, in the Business Rules submitted by the Petitioner, it has been mentioned in Clause 8.5 (delivery phase) that the Exchange shall send a written invoice to all the successful buyers and sellers by 17.30 Hrs stating the total number of RECs purchased/sold by them along with the unique identification code for each transaction. The Petitioner is directed to issue to the buyer an electronically printable certificate along with REC account statement pertaining to such certificate. To have consistency in the market, a standard certificate which a power exchange is required to issue to a buyer of Renewable Energy Certificates is **annexed** with the order. The trade information shall be sent to the Central Agency as per the agreed data interchange formats which shall also include the Certificate number of the certificate which is being issued by the Power Exchange to a Buyer. The State Agency may verify the details regarding purchase of RECs by a buyer from REC registry Website. Accordingly, the applicant shall modify and incorporate the

provisions for interchange of data information and issuance of such certificates in its Business Rules.

16. In order to bring consistency in the market, it is directed that certificates be issued to buyers within five days from the date of trading of such certificates. Accordingly, the existing provision shall be modified.

17. **Mock Test Run of Power Exchange system in coordination with NLDC:** The Petitioner is directed to approach the Central Agency for testing and mock run of REC on the power exchange. The Central Agency after being satisfied about facilities available at the PX, particularly the data transfer and communication interface along with the timelines shall give clearance to the Petitioner to start operation of REC market segment of the PX.

18. **Transaction Fee:** The Member Service Charge which has been provided for Day Ahead and Term Ahead market segment under Regulation 27 of Power Market Regulations shall also be applicable for REC market segment. The Petitioner shall bring this fact to the notice of its existing members as also of the persons seeking enrolment as members or clients of the exchange in future.

19. The following discrepancies are observed in the revised Schedule C of Business Rules which need to be rectified:

- i) In clause 10.1 of Matching Rules, the cross reference of clause 17(f) of Rules needs to be checked and corrected if required.
- ii) There is a discrepancy in Rule 3a of Matching Rules in Clause 10.2. The matching Rule 3a shall be replaced with the matching Rule 3a approved for Term Ahead Market since the price discovery methodology is similar in both cases.

20. The Petitioner is directed to amend the “Schedule C of Business Rules” in accordance with our observations and directions given as above. Subject to compliance of our directions given as above, “Schedule C of Business Rules” of the Indian Energy Exchange is hereby approved. The amended “Schedule C of Business Rules” shall be submitted to the Commission for information and record within 15 days from the date of this order.

21. Permission is hereby accorded to the Petitioner to launch REC contracts on its Exchange.

22. Petition No.210/2010 is accordingly disposed of.

sd/-  
(M. DEENA DAYALAN)  
MEMBER

sd/-  
(V.S.VERMA)  
MEMBER

sd/-  
(S.JAYARAMAN)  
MEMBER

sd/-  
(DR.PRAMOD DEO)  
CHAIRPERSON



Name of the Exchange  
may be with logo

### Certificate of Purchase of REC(s)

Number C-[Certificate No.]

Issued On-[DD-MMM-YYYY]

Serial No.-[....\*.....]

[NAME OF CORPORATION]

A [ ] Corporation

[#Issued] Certificates

RECType [Solar / Non Solar]

Session ID

This certifies that [REC Buyer] is the holder of [Number Issued] [Solar / Non Solar] non transferable Renewable energy certificate(s) bought on \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, through *Name of the exchange.*

This certificate represented hereby is issued and shall be held subject to all the provisions of the regulations of Honorable CERC as amended from time to time and the Bye-laws, Rules and Business Rules of *name of the exchange.*

**This is a computer generated statement hence doesn't require signature.**

\* - Prefix as first three digits to differentiate the Power Exchange