

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

- 1. Shri Ashok Basu, Chairman**
- 2. Shri K.N. Sinha, Member**
- 3. Shri A.H. Jung, Member**

**Petition No. 38/2005**

In the matter of

Miscellaneous petition under Regulations 24 and 111 of the CERC (Conduct of Business) Regulations, 1999 for approval of CERC for procurement of 2 Nos. Converter Transformer for Rihand-Dadri HVDC link in Northern Region

And in the matter of

Power Grid Corporation of India Ltd.

... **.Petitioner**

**Vs**

1. Ajmer Vidyut Vitran Nigam Ltd., Ajmer
  2. Jaipur Vidyut Vitran Nigam Ltd., Jaipur
  3. Jodhpur Vidyut Vitran Nigam Ltd., Jodhpur
  4. Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur
  5. Himachal Pradesh State Electricity Board, Shimla
  6. Punjab State Electricity Board, Patiala
  7. Haryana Vidyut Prasaran Nigam Ltd., Panchkula
  8. Power Development Department, Govt. of J&K, Jammu
  9. Uttar Pradesh Power Corporation Ltd., Lucknow
  10. Delhi Transco Ltd., New Delhi
  11. Chandigarh Administration, Chandigarh
  12. Uttaranchal Power Corporation Ltd., Dehradun
- .... **Respondents**

**The following were present:**

1. Shri B.N. De Bhowmick, DGM (OS), PGCIL
2. Shri N.D. Sodha, AGM(OS), PGCIL
3. Shri A.V.S. Ramesh, Dy. Manager (OS), PGCIL
4. Shri M.M. Mondal, PGCIL
5. Shri P.C. Pankaj, PGCIL
6. Shri C.Kannan, PGCIL
7. Shri U.K. Tyagi, PGCIL

8. Shri Umesh Chandra, ED(OS), PGCIL
9. Shri S.N. Joshi, Executive Engineer, Jodhpur VVNL
10. Shri T.P.S. Bawa, PSEB

**ORDER**  
**(DATE OF HEARING: 9.6.2005)**

The petitioner, Power Grid Corporation of India Ltd, has prayed for approval for procurement of two ABB make Converter Transformers under Rihand Transmission System and additional capitalization of cost thereof for the purpose of recovery of tariff.

2. The revised cost estimates for setting up of Rihand Transmission System have been approved by Ministry of Power vide its letter dated 19.4.1995 at a cost of Rs.1460.58 crore, including IDC of Rs.130.97 crore. The approved scope of work includes Rihand-Dadri 500 kV D/C Bi-pole, referred to as Pole-I and Pole-II, declared under commercial operation on 10.1.1992 and 20.5.1991 respectively. The tariff for the block 2001-04 for Rihand Transmission System has already been approved by the Commission by considering the capital cost of Rs.1294.13 crore.

3. Rihand-Dadri HVDC Bi-pole link is stated to have been executed by BHEL in collaboration with ABB, Sweden. It has been submitted that each pole of Rihand-Dadri HVDC Bi-pole link has 6 single-phase dedicated Converter Transformers. In addition, one spare Converter Transformer was provided at each terminal, Rihand and Dadri. Thus, in all, 14 Converter Transformers were

initially installed for Rihand-Dadri HVDC Bi-pole link, including two spare Converter Transformers. Out of 14 Converter Transformers, 8 are reportedly manufactured by ABB, Sweden and the remaining 6 by BHEL. ABB make Converter Transformers are said to have been installed at Pole-I and BHEL make Converter Transformers at Pole-II. It has been stated that BHEL make Converter Transformers have not been giving satisfactory service as they have been failing at regular intervals, though these used to be repaired by BHEL from time to time. In view of regular failures of BHEL make Converter Transformers and to ensure uninterrupted system availability to the beneficiaries, one additional BHEL make Converter Transformer was procured for Rihand terminal. Thus, in all, 3 additional Converter Transformers are procured by the petitioner, in addition to 6 dedicated Converter Transformers for each pole. The petitioner has proposed to replace existing two defective BHEL make Converter Transformers by ABB make Converter Transformers and seeks direction that the price of two ABB make Converter Transformers proposed to be purchased, be capitalized for the purpose of tariff.

4. The replies to the petition have been filed by RRVPL, Jaipur Vidyut Vitran Nigam Ltd., Jodhpur Vidyut Vitran Nigam Ltd. and Ajmer Vidyut Vitran Nigam Ltd (Respondents 1 to 4). These respondents have opposed the prayer made in the petition. They have submitted that with the procurement of two additional Converter Transformers, the availability of HVDC Bi-pole link shall improve as a result of which the petitioner will earn extra incentive. It has been, therefore, submitted that the petitioner should bear the cost of additional

Converter Transformers. These respondents have further submitted that in case procurement of two additional Converter Transformers is approved, these should be treated as replacement of old assets and cost of the depreciated value of two BHEL make Converter Transformers proposed to be replaced should be adjusted against the cost of new assets.

5. We have heard the representatives of the petitioner and Shri T.P.S. Bawa for PSEB.

6. We have carefully considered the matter. The tariff regulations notified by the Commission, inter alia, lay down that the capital expenditure on any additional works/services which have become necessary for efficient and successful operation of the project, but not included in the original project cost may be admitted by the Commission after prudence check. It is not disputed that the additional Converter Transformers now proposed to be procured had not been catered for in the revised cost estimates approved by the Central Government. Therefore, before according approval to the proposals made in the petition, we have to be satisfied about the justification of the additional expenditure sought to be incurred and its burden on the consumers.

7. We have already noted that three spare Converter Transformers are presently available to meet the emergency situations and the unforeseen requirements. These Converter Transformers have been capitalized and tariff on that account is recovered from the respondents. It is also noted from the petition

that BHEL shall be supplying another Converter Transformer to the petitioner, probably free of cost. However, the petitioner, being unsure of the satisfactory performance of the BHEL make Converter Transformers, has proposed to procure two additional ABB make Converter Transformers. We do not favour that the entire burden on account of procurement of two additional Converter Transformers be passed on to the consumers since *prima facie* the petitioner has to ensure availability of the transmission assets. However, considering special circumstances, as narrated in the petition, we allow procurement of two additional Converter Transformers in replacement of the two existing defective ones. The two Converter Transformers now proposed to be replaced shall be decapitalised and the decapitalised value shall be adjusted against the cost of one additional Converter Transformer which the petitioner proposes to procure. The second additional Converter Transformer shall be procured by the petitioner at its own cost and shall not be allowed to be capitalised for the purpose of tariff. The approval accorded by us is a complete package and shall not be diluted or split up by the petitioner.

8. On a query from the bench, the petitioner stated that they had procured the converter transformers for Pole II from BHEL to promote indigenous efforts. While the Commission appreciates the effort of the petitioner, it notes with concern that sufficient safeguards were not built in the contract to protect the public interest against repeated failures, as has been the instant case. The Commission advises the petitioner to be more careful, in such situations, in future. The Commission would also like to point out that the present permission

to procure additional transformer – one in number for the purposes of tariff computation – shall not be quoted as a precedent in future either by the petitioner or any other company/licensee/organisation.

9. The Commission also notes that since procurement of one number of additional converter transformer is being supported by the consumers by way of increased tariff (after decapitalisation), the incentive payment shall have to be based on original gross block and not the new gross block.

10. The petitioner has proposed to procure two additional Converter Transformers of ABB make because of their reported highly satisfactory performance at Pole-I of Rihand-Dadri HVDC Bi-pole link. In response to a query from the Bench, it was explained by the representative of the petitioner that ABB make Converter Transformers installed at other HVDC links were also facing breakdowns, though those installed for Rihand-Dadri HVDC Bi-pole link were functioning to the complete satisfaction of the petitioner as no failures have been reported. In view of the fact that complete break down of ABB make Converter Transformers cannot be ruled out, our approval is not exclusively for procurement of ABB make Converter Transformers. The petitioner shall be guided by the prudent procurement practices and policies, while procuring the two additional number of Converter Transformers.

11. With the above directions the petition stands disposed of.

Sd/-  
**(A.H. JUNG)**  
**MEMBER**

Sd/-  
**(K.N. SINHA)**  
**MEMBER**

Sd/-  
**(ASHOK BASU)**  
**CHAIRMAN**

New Delhi dated the 21<sup>st</sup> June 2005