

**Central Electricity Regulatory Commission
New Delhi**

Petition No. 19/2010

Subject : Petition for in-principle approval of procurement of Generator at Rihand Super Thermal Power Station Stage-I (1000 MW).

Date of Hearing : 21.12.2010

Petitioner : NTPC Ltd

Respondent : Uttar Pradesh Power Corporation Limited
and others

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

Parties present : Shri A.K Mukhrjee, NTPC
Shri D.K Chaturvedi, NTPC
Shri S.K Samui, NTPC
Shri Ajay Dua, NTPC

RECORD OF PROCEEDINGS

This petition has been filed by the petitioner for in-principle approval for procurement of a spare generator at Rihand Super Thermal Power Station Stage-I (1000 MW).

2. The representative of the petitioner submitted that in compliance with the directions of the Commission during the hearing on 11.11.2010, the petitioner has filed the copy of the Residual Life Assessment (RLA) study report of the OEM (M/s Alstom, U.K) on the status and condition of the generator rotor and stator along with recommendations of OEM and a letter from M/s BHEL expressing its regret to make an offer for spare generator suitable for 500 MW Rihand Stage I units.

3. The representative of the petitioner submitted the following with regard to the RLA study:

(a) RLA study has been carried out by the OEM M/s Alstom on Unit-2 Generator of Rihand STPS stage-I. The report recommends replacement of some of the components like Rotor winding, End Winding Retaining Rings, Instrument Slip Rings of Exciter, Generator Coolers and Hydrogen Gas System. Some of the components have been recommended for repair such as Rotor Forging and Stator Water System.

(b) Defect was observed in one core of Stator because of increasing current and fretting dust and also observed wedge looseness in Stator Winding. The remaining life of Stator Winding is based on future condition monitoring supported by spares holding.

(c) The Rotor Winding required replacement because damage occurred due to Earth fault. The Rotor Forging has outlived its design life and accordingly revalidation exercise is required. Retaining rings of rotor are fitted with 18 Mn/ 4Cr and this should be replaced with 18/18.

(d) The OEM has recommended planned replacement programme for generator coolers as tube wall has got thinner , tube supports has degraded and because of possibility of tube blocking due to normal aging.

(e) According to RLA study, the condition of Stator Water System is likely to lead to operational problem.

4. The representative of the petitioner further submitted that M/s BHEL has been approached to confirm whether the rotor and stator of the generators supplied by M/s Alstom could be repaired by it. Response from M/s BHEL is awaited.

5. The Commission directed to admit the petition. The petitioner shall serve copies of the petition on the respondents, if not already done. The respondent shall file their replies to the petition by 25.1.2010 and the petitioner may file its rejoinder by 5.2.2010.

6. The Commission further directed the petitioner to submit the following information on affidavit with copy the respondents by 10.1.2011:

(i) To furnish the Cost-benefit analysis considering the generation loss due to the generator break down and the downtime required to get the generator repaired vis-à-vis the purchase of a new generator.

(ii) To follow-up with BHEL whether they would be able to repair the rotor and stator of M/s Alstom design.

(iii) To obtain and place on record the comments of CEA on the need for spare generator.

7. The Petition will be listed for hearing on 10.2.2011.

Sd/-
(T Rout)
Jt. Chief (Law)