# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 309/MP/2014

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri M. Deena Dayalan, Member Shri A.K.Singhal, Member Shri A.S.Bakshi, Member

Date of Hearing : 18.9.2014 Date of Order : 29.9.2014

### In the matter of

Petition seeking the Commission's permission to allow extension of the period for injection of infirm power for testing including full load testing of Unit-IV (660 MW) of Barh STPP (Stage-II, 2X660 MW), beyond six months from initial synchronization.

# And In the matter of

NTPC Limited, NTPC Bhawan, Core-7, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi-110 003.

...Petitioner

#### Vs

- Power System Operation Corporation Ltd.
  B-9, Qutab Institutional Area,
  Katwaria Sarai, New Delhi-110 016
- Eastern Regional Load Despatch Centre
  Golf Club Road, Tollygunj,
  Kolkata-700 033
- 3. South Bihar Power Distribution Company Limited 1st Floor, Vidyut Bhawan, Bailey Road, Patna-800 001
- North Bihar Power Distribution Company Limited
  1st Floor, Vidyut Bhawan,
  Bailey Road, Patna-800 001



- 5. Jharkhand Urja Vikas Nigam Ltd., Engineering Building, HEC Township, Dhurwa, Ranchi-4
- 6. GRIDCO Ltd. Vidyut Bhawan, Janpath, Bhubaneshwar-751 007
- 7. West Bengal State Electricity Distribution Company Ltd., Vidyut Bhawan, Block-DJ, Sector-II, Salt Lake City, Kolkata-700 091
- 8. Power Department Govt. of Sikkim, Kazi Road, Gangtok, Sikkim-737 101

.....Respondents

## Parties present:

Shri Ajay Dua, NTPC Shri S.K.P. Singh, NTPC Shri S. Barpanda, POSOCO

### **ORDER**

This petition has been filed by the petitioner, NTPC Ltd. seeking permission of the Commission for injection of infirm power into the grid during testing including full load testing beyond the period of 6 months from the first synchronization up to the date of declaration of commercial operation of the Unit-IV of Barh Super Thermal Power Station, Stage-II (660 MW) (hereinafter referred to as " the Project") in terms of Clause (7) of Regulation 8 of the Central Electricity Regulatory Commission (Grant of connectivity, Long-term Access and Medium-term Open access in inter-state transmission and related

matters) Regulations, 2009 ('Connectivity Regulations') as amended from time to time.

- 2. The petitioner has submitted that the first unit-IV (unit) of Barh Super Thermal Power Station, Stage-II (660 MW) (Project) has already been test synchronized on 22.11.2013 after clearance from ERLDC. The petitioner has submitted that the unit attained full load on 30.11.2013 with designated fuel firing after making all necessary systems for sustained operation.
- 3. The Commission by its order dated 19.6.2014 in Petition No. 87/MP/2014 had allowed injection of infirm power from the unit for testing including full load testing till 30.9.2014 or upto the declaration of commercial operation of the unit, whichever is earlier. The petitioner has submitted that it is not possible to achieve the COD by 30.9.2014 as the technical issues relating to water wall leakage, distortion of Rolled Beam (RB) and modification of boiler suspension system are to be resolved. The petitioner has submitted that based on the current progress of work, the technical issues are expected to be sorted out by October 2014. Therefore, the COD is expected to be achieved by 30.11.2014.

- 4. The petitioner in this petition, while praying for extension of time for testing and full load testing and consequent injection of infirm power, has mainly submitted as under:
  - (a) All the failed weld joints of T23 Tubes as well as weld joints having hardness value above permissible limits by June 2014 as per revised pre and post weld procedures were repaired. After repairing of the defective tube joints, stable operation of the unit at rated parameters was carried out in the month of June 2014 and July 214. However, 72 hours of uninterrupted full load trial operation could not be achieved successfully due to tripping of the unit for various reasons. All out efforts were made several times to demonstrate successful trial operation for which notices were issued to various stakeholders.
  - (b) The unit was synchronized on 5.8.2014 and achieved full load at around 10.25 hrs on 5.8.2014. The unit was running successfully at almost full load till 22.07 hrs of 7.8.2014 and thereafter, the unit tripped due to malfunctioning of hotwell level controller. However, after identifying and analyzing the cause of tripping, the unit was immediately restored on bar at 2.28 hrs on 8.8.2014. The unit achieved full load immediately and operated at full load till unit was taken out of bar on 8.8.2014 at 10.25 hrs due to boiler water wall leakage. Therefore, the unit was on bar for a period of about 74 hrs demonstrating 100% MCR even after discounting the outage period.

- (c) During the trial operations in June 2014 and July 2014, the boiler was operated at rated parameters for considerable period of time on sustainable basis and even boiler was lighted up from cold conditions. After comprehensive repair work of T23 weld joints, no failures were detected in these boiler tubes.
- (d) The unit was taken under shut down for attending water wall tube leakage developed during trial operation. During such shutdown period, boiler suspension system was inspected and distortion of the Rolled Beam on which water wall system was hanging was observed at 5 locations in in left hand side and front side of boiler. The matter was immediately taken up with BHEL and Alstom. After inspection of the suspension system, BHEL informed that due to uneven distribution of loading, distortion of RB has happened and detailed modification of suspension system is required before next boiler light up.
- (e) On continuous follow up with BHEL at various levels, BHEL has started manufacturing of modified washer plants and mobilization of work for repair/replacement of 05 nos. of RB. BHEL also clarified that only 10 suspensions can be removed at a time since the water wall load is to be shared by remaining suspensions.
- 5. No reply has been filed by the respondents despite notice.

- 6. During the hearing on 18.9.2014, the representative of the petitioner reiterated the details of the technical problems, namely distortion in RB. The representative of the petitioner further submitted that replacement of RB would be done by 31.10.2014.
- 7. We have considered the prayer of the petitioner. The fourth proviso to Regulation 8 (7) of the Connectivity Regulations, as amended from time to time, provides as under:

"Provided that the Commission may in exceptional circumstances, allow extension of the period for inter-change of power beyond the period as prescribed in this clause, on an application made by the generating station at least two months in advance of completion of the prescribed period:

Provided further that the concerned Regional Load Despatch Centre while granting such permission shall keep the grid security in view."

8. The petitioner has submitted that due to water wall leakage, distortion of Rolled Beam and in RB, COD of the unit could not be achieved. The petitioner has further submitted that 1 No twisted RB and all washer plates shall be replaced and 4 No. RB are required to be hot corrected. Taking into consideration the technical problems faced by the petitioner, we allow extension of time for injection of infirm power into the grid for commissioning tests including full load test of the unit up to 30.11.2014 or actual date of commercial operation, whichever is earlier. We expect the petitioner to make all efforts to ensure the commercial operation of unit of the project by this date. It is, however, clarified that the extension of time granted as above shall not automatically entitle the petitioner for IEDC/IDC for the

delay in declaration of COD from the scheduled COD which will be decided in accordance with the relevant provisions of the tariff regulations.

9. The petition is disposed of in terms of the above.

Sd/- sd/- sd/-

(A.S.Bakshi) (A.K.Singhal) (M Deena Dayalan) (Gireesh B.Pradhan) Member Member Chairperson