

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 220/MP/2011**

Subject: Petition for relaxation of NAPAF for the period 1.4.2010 to 31.3.2011 of Tehri HPP (1000 MW)

Date of Hearing: 22.11.2012

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

Petitioner: THDC

Respondent: PSPCL and 11 others

Parties present: Shri M. G Ramachandran, Advocate, THDC  
Ms. Swapna Seshadri, THDC  
Shri M. K. Tyagi, THDC  
Shri J. K Hatwal, THDC  
Shri H. L Arora, THDC  
Shri Sarosh H Siddiqi, THDC  
Shri Ajay Mathur, THDC  
Shri Padamjit Singh, PSPCL  
Shri K. S Saini, UHBVN  
Shri Sunil Kumar, UHBVN  
Shri Anand Prakash, UPPCL  
Shri R. B Sharma, Advocate, BRPL

**RECORD OF PROCEEDINGS**

The petitioner, THDC India Ltd has filed this petition for relaxation of Normative Plant Availability Factor (NAPAF) for 2010-11 to 74.08% for the recovery of full capacity charges by the petitioner in respect of Tehri hydro power project (Tehri HPP).

2. The learned counsel for the petitioner referring to the relevant paras in the petition submitted that:

(a) For enabling the construction and completion of Koteshwar hydroelectric project, it became necessary that water releases from Tehri dam were diverted through Koteshwar diversion tunnel to avoid water flow affecting the said construction plant and machinery and it was not possible to undertake construction without such

diversion. During December, 2010, geological subsidence, a natural calamity occurred above the underground diversion tunnel, before its outlet and the muck got spread inside the tunnel and blocked the flow. This was a natural event and calamity and it was not possible for the petitioner to prevent the same and thus beyond human control. There was no other alternative passage of water at Koteshwar HEP leading to imminent threat to construction of the Koteshwar project and in order to obviate the situation, releases from Tehri had to be stopped leading to complete stoppage of generation at Tehri HPP. The above was on account of natural factors affecting the project.

(b) The generation at Tehri HPP remained halted from 17.12.2010 till 28.1.2011 when Koteshwar HEPs spill gates became operational. During the said period Tehri HPP could be operated intermittently for short periods to augment seepage from diversion tunnel of Koteshwar HEP and on account of this force majeure event, the actual Plant Availability Factor (PAF) for the months of December 2010 to January 2011 could only be achieved at 46.689% and 24.651% respectively.

(c) From January, 2011, all efforts to ensure maximum PAF to compensate the deficit of PAF, during December, 2010 and January, 2011, by operating Tehri HPP most optimally, thereby achieving monthly PAF of 106.998% and 100.039% for the months of February, 2011 and March, 2011 respectively. Also, schedule maintenance of machine (Unit-II) was pre-poned and carried out during forced shut down. Thus, the petitioner did its best to compensate the grid for energy loss due to natural calamity which was beyond the control of the petitioner.

(d) On account of force shut down during the months of December, 2010 and January, 2011, Tehri HPP could achieve the annual PAF of 74.408% during 2010-11 against the NAPAFA of 77%.

3. The learned counsel for respondent no. 5, BRPL submitted that an interim reply has been filed in the matter and prayed for liberty to file a detailed reply based on the documents/submissions of the petitioner. He submitted as under:

(a) Though the basic problem related to the construction of Koteshwar HEP and the diversion of water to avoid water flow affecting the said construction, the relief has been sought from Tehri HPP.

(b) The petition is incomplete as the petitioner has not filed the copy of the PPA entered into by the petitioner and the respondents to ascertain the justification of the relief sought for on account of Force Majeure.

(c) From the geological report furnished by the petitioner, certain facts like natural calamity and whether the occurrence of the calamity was an "Act of God" or was on account of poor construction has not been clarified.

(d) Detailed reply in the matter may be permitted to be filed.

4. The representative for respondent no. 1, PSPCL submitted that:

(a) As per sanction order of the Govt. of India dated 10.4.2000 Koteshwar HEP should be completed within 5 years from the date of sanction order and the delay in the completion of Koteshwar HEP is directly connected to Tehri HPP. Had Koteshwar HEP been commissioned within the said period, the calamity during December, 2010 would not have occurred.

(b) The diversion tunnel of Koteshwar HEP was only 1/2 km long and the petitioner did not make any sincere efforts to avoid such natural calamity. The hillside should have been strengthened with concrete and the tunnel itself should have been given more reinforcement. Hence, this is clearly a design and construction error.

(c) Since there is no enquiry report from any independent agency, the geological report furnished by the petitioner cannot be considered.

(d) Referring to an article by the Director (Technical) THDC, in the business standard dated on 23.12.2010, the representative submitted that the water due to non generation was not lost but was saved and subsequently used for generation resulting in an increase of NAPAF in the subsequent months. The full level for filling the dam was 830 meters, and on 18<sup>th</sup> December, 2010 the level was 816.7 meters and on 28<sup>th</sup> January, the level was 820.45 meters.

(e) The critical activity for completion of the spillways and tailgates were neglected and at the time of the natural calamity when the tunnel collapsed there was no other choice except to close the Tehri HPP.

(f) Further, the dam is not clear for filling beyond 820 meters. Moreover, the dam with a design level of 830 meters has been restricted to 820 meters on account of environmental issues.

(g) Time may be granted to file reply to the said petition.

5. The representative of respondent no. 3, UPPCL submitted as under:

(a) During the shutdown of Unit-II during December, 2010 the petitioner did not suffer any loss in NAPAF, since Unit-II was under maintenance.

(b) The actual NAPAF of 77% was fixed by the Commission based on the datas for five years from 2003-04 to 2007-08 approved by CEA. Therefore, the claim of the petitioner for 74.048% for 2010-11 cannot be considered.

6. The representative of respondent no. 2, UHBVN prayed that it may be granted 10 (ten) days time to file its reply.

7. On a specific query by the Commission as regards the geological report, the learned counsel for the petitioner submitted that the internal report *vide* affidavit dated 12.1.2012 regarding the 'sinkhole generated blockage in diversion tunnel of Koteshwar HEP' was submitted by consultants who were not the employees of the petitioner corporation.

8. In response to the submissions of the respondent, BRPL, the learned counsel for petitioner clarified that copy of the PPA has been submitted along with its rejoinder dated 14.11.2012, and a copy of the same has been served on the said respondent.

9. In response to the submissions of respondent no. 1, PSPCL, the learned counsel for the petitioner clarified as under:

(a) The construction period of Koteshwar HEP was 5-6 years and the diversion tunnel was designed taking care of reasonable discharge. Therefore, nothing in the construction could have prevented such calamity, as indicated in page 4 of the said report.

(b) The dam was filled upto 830 meters after obtaining the permission of the Hon'ble Supreme Court and the petitioner has generated a maximum of upto 1080 MW for 24 hrs continuously.

(c) The said respondent may be directed to file detailed written reply and the petitioner may be permitted to file its rejoinder to the same.

10. In response to the submissions of the respondent no. 3 UPPCL, the learned counsel for petitioner clarified that rejoinder to the reply of the said respondent has been filed. The learned counsel clarified that the prayer of the petitioner is only to allow the NAPAF of 74.408% due to force majeure instead of 77% for 2010-11.

11. The Commission after hearing the parties directed the respondents, BRPL, PSPCL and UHBVN to file their replies to the petition, on or before 31.12.2012, with advance copy to the petitioner, who may file its rejoinder, if any, by 7.1.2013.

12. The Commission also directed the petitioner to furnish the following information on affidavit, on or before 31.12.2012:

*"Whether adequate stability measures envisaged by the petitioner as mentioned in Point No. 2 of the additional submissions vide affidavit dated 12.1.2012 were actually incorporated by it while constructing the diversion tunnel."*

13. Matter to be listed for final hearing on 15.1.2013.

By order of the Commission

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