CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 3/GT/2013 (Docket No. 23/GT/2011)

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

Date of Order: 1.4.2013

IN THE MATTER OF

Approval of generation tariff of Chutak Hydroelectric Project (4 x 11 MW) for the period from 1.9.2011 to 31.3.2014.

AND

IN THE MATTER OF

Grant of provisional tariff of Chutak Hydroelectric Project (4 x 11 MW) for the period from 1.9.2011 to 31.3.2014.

AND

IN THE MATTER OF

NHPC Ltd, Faridabad …**Petitioner**

Vs

Power Development Department, Government of J&K, Srinagar …**Respondent**

ORDER

The petitioner, NHPC Ltd has filed this petition for approval of generation tariff of Chutak Hydroelectric Project (4 x 11 MW) ('the generating station") for the period from 1.9.2011 (expected date of commercial operation) to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as "the 2009 Tariff Regulations").

2. The generating station situated in the State of J&K, has been designed as a purely run of the river scheme and comprises of four units with a capacity of 11 MW each. The project has been sanctioned by the Government of India during August, 2006 at a cost of ₹621.26 crore (including IDC and FC of ₹3.69 crore at December, 2005 price level). The petitioner has entered into a Power Purchase Agreement (PPA) with the Government of J&K on 26.10.2005 and power is allocated from the generating station as per Ministry of Power, Government of India letter dated 2.9.2011. The power generated from the generating station was initially planned to be evacuated at 33 kV level through 220/33 kV network comprising of 220 kV Alistang(Srinagar)-Leh transmission line having 4 nos. 220/33 kV sub-stations, namely Drass, Kargil, Khalsti and Leh respectively. Subsequently, CEA decided that 66 kV network would be more suitable for evacuation of power from the generating station and for distribution in Kargil area and accordingly evacuation system was planned at 66 kV for the generating station. The evacuation system (66/11 kV) beyond the switchyard of the generating station was to be constructed by the respondent which was further to be connected to Gramthang, Kargil, Mulbek, Sankoo and Khangral sub-stations via the 66 kV transmission line.

3. Units I to III of the generating station were declared under commercial operation on 29.11.2012. During the pendency of the petition, the petitioner had filed interlocutory application (I.A.No.15/2012) for recovery of annual fixed charges based on actual energy generated from the generating station as per available load and for relaxation of operational/technical norms in terms of Clause-4 of Part-7 (Miscellaneous) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 under Regulation 44 of 2009 Tariff Regulations. The

Commission after considering the submissions of the parties disposed of the said application by its order dated 31.12.2012.

4. Subsequently, on 7.2.2013 the instant petition was heard and the Commission reserved its order on the petition.

5. While so, the petitioner by its affidavit dated 14.2.2013 has submitted that Unit-IV of the generating station was declared under commercial operation on 1.2.2013 upon successful trial run and demonstration of peaking capability. It has submitted that the generating station has been successfully commissioned and scheduling of power was being done by SLDC, J&K. It has further submitted that the Revised Cost Estimate (RCE) for ₹913.25 crore (including IDC & FC of ₹22.69 crore of July, 2010 Price level) has been submitted to the Ministry of Power, Government of India for approval. Though CEA has since vetted the RCE for ₹89376 lakh, the approval of MOP is still awaited. The petitioner has further submitted that M/s Tata Consulting Engineers Ltd, Bengaluru have been appointed as the designated agency on 11.1.2013 for vetting of capital cost of the generating station in terms of the guidelines dated 2.8.2010 issued by the Commission as regards vetting of the capital cost of hydro electric projects by Designated Independent Agencies or Institutions or Experts and the same would be submitted as and when finalized. In the above circumstances, the petitioner has prayed that the Commission may consider the grant of provisional tariff of the generating station based on the capital cost as on the actual/expected date of commercial operation of the generating station as submitted by the petitioner.

6. The submissions of the petitioner have been examined. As the documents pertaining to the approved RCE by the Central Government and the appraisal report

on the capital cost as vetted by the designated agency are yet to be submitted by the petitioner and would take some more time, the final tariff of the generating station if determined in the absence of these said documents would not be based on any prudent capital cost. Hence, we propose the grant of provisional tariff of the generating station in terms of Regulation 5(4) of the 2009 Tariff Regulations, subject to adjustment after tariff is finally approved by the Commission. We order accordingly.

7. Regulation 5 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (First Amendment) Regulations, 2011 provides as under:

> *"(4) Where application for determination of tariff of an existing or a new project has been filed before the Commission in accordance with clauses (1) and (2) of this regulation, the Commission may consider in its discretion to grant provisional tariff upto 95% of the annual fixed cost of the project claimed in the application subject to adjustment as per proviso to clause (3) of this regulation after the final tariff order has been issued:*
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> *Provided that recovery of capacity charge and energy charge or transmission charge, as the case may be, in respect of the existing or new project for which provisional tariff has been granted shall be made in accordance with the relevant provisions of these regulations."*

8. The petitioner has filed this petition in compliance with Clauses (1) and (2) of Regulation 5 of the 2009 Tariff Regulations and has published the notice in the newspapers as regards its filing of the tariff petition and served copies of the petition on the beneficiaries. The respondent has also filed its reply to the petition. Since the petitioner has complied with the provisions of Clauses (1) and (2) of Regulation 5 of 2009 Tariff Regulations, provisional tariff for the generating station for the period from actual date of commercial operation of the units of the generating station till 31.3.2014 is allowed as discussed in the subsequent paragraphs.

Time and Cost overrun

9. The project has been sanctioned by the Government of India during August, 2006 at a cost of ₹621.26 crore (at December, 2005 price level) including IDC and FC of ₹3.69 crore. As per CCEA approval, the generating station was scheduled to be commissioned by 23.2.2011. In response to the query by the Commission as regards the justification for implementation of the project with high cost, the petitioner has submitted as under:

"*Techno Economic viability of te project has been assessed in detail during the PIB/CCEA stage through comparing the existing source of power supplies in the area from DC generation which was in the level of Rs 10-15/unit. During the PIB meeting held on 8.6.2005, Secretary (Power) stated that Ladakh region does not have any significant generation capacity and relies mainly on DG sets. As a result, the development of the region is lagging. He informed that both these projects (Chutak H.E and Nimo Bazgo) have been envisaged taking into consideration the sensitivity of the region, the sentiments of the people as well as the technical requirements. He agreed that the projects are commercially unviable under the normal financial model. However, it would be improper to let the region suffer due to high cost of power. Subsidy in the form of grants/subordinate loan is therefore justified to promote economic development of the region. He further stated that there is a strong case for providing interest free subordinate debt for these hydro projects to make power affordable to the people of the region. Secretary (Power) also stated that alternative energy options are also likely to be even costlier.*

In pursuance to the observation of PIB, MOP provide ₹364 crore as subordinate debt to finance this project at an interest rate of 2.5% per annum with repayment of principal to start from 6th year after commissioning. Also, no interest is to be charged on this subordinate loan during construction. Accordingly, as per the sanction of the project by MOP, GOI, nhpc went ahead for implementation of the project."

10. Considering the expected date of commercial operation of the generating station as 1.9.2011, the project cost claimed by the petitioner is as under:

(₹ in lakh)

Capital cost as on 1.9.2011 excluding un-discharged liabilities	88364.03
Projected additional capital expenditure	
2011-12	758.74
2012-13	5195.80
2013-14	168.11
Total	**94486.68**

11. However, the petitioner by its affidavit dated 14.2.2013 has submitted that the audited capital cost as per books of accounts is ₹79707 lakh as on 31.12.2012, which includes CWIP amounting to ₹7688 lakh.

12. The petitioner has submitted its justification/reasons for the time and cost overrun of the project and the same will be considered at the time of determination of final tariff of the generating station, along with the approved RCE by the Central Government and the appraisal report on the capital cost of the generating station as vetted by the designated independent agency along with its recommendations to be submitted by the petitioner.

13. It is noticed that in case of Chamera hydroelectric project Stage-III of the petitioner, wherein RCE was yet to be approved by the Central Government and where Time and Cost overrun were involved, the Commission by its order dated 13.8.2012 in Petition No. 22/GT/2011 had granted provisional tariff for the said generating station for the period from 4.7.2012 to 31.3.2014 based on 85% of the capital cost as claimed by the petitioner. We consider the same methodology in the present case for the grant of provisional tariff for this generating station. Accordingly, 85% of the capital cost of ₹79707 lakh as on 31.12.2012 as submitted by the petitioner vide affidavit dated 14.2.2013, which works out to ₹67750.95 lakh is allowed for the purpose of provisional tariff. Based on this, the *pro rata* unit-wise capital cost allowed for the purpose of tariff is as under:

(₹in lakh)

	29.11.2012 to 31.1.2013 (Units I to III)	1.2.2013 to 31.3.2013 (Unit-IV)	1.4.2013 to 31.3.2014
Capital cost	**50813.21**	**67750.95**	**67750.95**

14. The calculations for Return on Equity, Interest on Working Capital and Depreciation has been considered as per provisions of the 2009 Tariff Regulations. The weighted average rate of interest on loan of 5.610% for 2012-13 (29.11.2012 to 31.3.2013) and 5.328% for 2013-14 has been considered in calculation of Interest on loan.

15. O&M expenses based on the capital cost of ₹79707 lakh and considering the R&R cost of ₹193 lakh proportionately for the period 29.11.2012 to 31.3.2013 and 2013-14 is allowed as under:

(₹in lakh)

	29.11.2012 to 31.1.2013 (Units I to III)	1.2.2013 to 31.3.2013 (Unit-IV)	1.4.2013 to 31.3.2014
O&M expenses	**177.83**	**218.58**	**1429.60**

16. The petitioner has claimed annual fixed charges in respect of all the units of the generating station for the period from 1.9.2011 to 31.3.2014 as under:

(₹in lakh)

	1.9.2011 to 31.3.2012	**2012-13**	**2013-14**
Annual Fixed Charges	8643.27	15066.89	15146.52

17. After carrying out due prudence check, we allow the provisional annual fixed charges for the generating station as under.

(₹in lakh)

	29.11.2012 to 31.1.2013 (Units I to III)	**1.2.2013 to 31.3.2013 (Unit-IV)**	**1.4.2013 to 31.3.2014**
Return on Equity	467.24	574.32	3552.97
Interest on loan	347.69	423.54	2383.73
Depreciation	445.51	547.60	3387.71
Interest on Working Capital	33.70	41.35	254.78
O&M expenses	177.83	218.58	1429.60
Total	**1471.97**	**1805.39**	**11008.79**

18. The annual fixed charges as above is allowed to be recovered by the petitioner along with the relaxation of operational /technical norms, deemed energy benefit for recovery of energy charges and NAPAF of 50% as allowed in Commission's order dated 31.12.2012 in I.A. No.15/2012.

19. The petitioner shall revise the figures in the petition based on the Revised Cost Estimate approved by the Ministry of Power and considering the appraisal report on the capital cost as vetted by the designated independent agency in respect of the generating station.

20. The provisional annual fixed charges allowed above is subject to adjustment as per proviso to Clause (3) of Regulation 5 of the 2009 Tariff Regulations.

Sd/-	*Sd/-*	*Sd/-*	*Sd/-*
[M.DEENA DAYALAN]	[V.S.VERMA]	[S.JAYARAMAN]	[DR.PRAMOD DEO]
MEMBER	MEMBER	MEMBER	CHAIRPERSON