

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

1. **Shri Ashok Basu, Chairperson**
2. **Shri K.N. Sinha, Member**
3. **Shri Bhanu Bhushan, Member**
4. **Shri A. H. Jung, Member**

Petition No.76/2005

In the matter of

Approval of revised fixed charges on account of additional capital expenditure for the period 1.4.2001 to 31.3.2004 in respect of Tanakpur Hydroelectric Project

And in the matter of

National Hydroelectric Power Corporation Ltd.. ... Petitioner

V/s

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

The following were present:

1. Er. P. Kaul, CE, NHPC
2. Er. P. Kumar, Dy. Manager, NHPC
3. Shri Ajay K. Arora, NHPC
4. Shri V.C. Gupta, Consultant, PSEB
5. Shri T.K. Mittal, Add. SE(ISP), RVPN
6. Shri B.K. Paliwal, Asst. Manager, DTL
7. Shri R.K. Arora, XEN, HPGC

**ORDER
(DATE OF HEARING : 13.9.2005)**

Through this petition, the petitioner seeks approval for the revised fixed charges in respect of Tanakpur Hydroelectric Project (4X120 MW) (Tanakpur HEP) for the period 1.4.2001 to 31.3. 2004 after considering the impact of additional capital expenditure incurred during the period.

2. The revised investment approval for Tanakpur HEP was accorded by Ministry of Power under its letter dated 25.3.1998, at a cost of Rs. 379.16 Crore, including IDC of Rs. 110.20 Crore.

3. Tanakpur HEP, comprising of three units of 31.4 MW each was commissioned during April 1993.

4. The terms and conditions for determination of tariff for the period 1.4.2001 to 31.3.2004 were notified by the Commission on 26.3.2001 in terms of the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2001 hereinafter referred to as "the notification dated 26.3.2001". A petition (No. 62/2001) was filed by the petitioner for approval of tariff for the period from 1.4.2001 to 31.3.2004, the basis for which was the notification dated 26.3.2001. The tariff was approved by the Commission by its order dated 7.2.2005. For the purposes of tariff, the capital cost of Rs. 378.64 Crore, as on 1.4.2001, was considered. The additional capitalisation for the period 1.4.2001 to 31.3.2004 was not considered while approving tariff for the period ending 31.3.2004.

5. The year-wise details of additional capitalisation on works (excluding FERV) claimed by the petitioner are as follows:

(Rs. in lakh)				
Additional Capital expenditure claimed	2001-02	2002-03	2003-04	Total
1. Works within the scope of approved cost - Balance payments				
(i) Balance Payments	0.00	383.93	0.00	383.93
(ii) Re-arrangement of Accounts Code	0.00	0.16	0.17	0.33
Sub-total (1)	0.00	384.09	0.17	384.26
2. Works not within the scope of approved cost				
(i) Balance Payments	0.77	0.00	2.24	3.01
(ii) New Works	0.00	0.00	39.10	39.10
(iii) Welfare Measures	0.52	0.00	3.03	3.55
(iv) Safety & security measures	0.34	12.09	13.01	25.44
(v) Replacement of obsolete/ worn out equipment	12.55	9.83	0.00	22.38
(vi) Improvement in efficiency & performance	63.10	530.96	74.02	668.08
(viii) Misc. assets incl. Minor assets (less than Rs. 5000/-)	17.58	4.08	33.55	55.21
Sub-total (1+2)	94.86	556.96	164.95	816.77
3. Capital spares	0.00	153.05	42.65	195.70
4. Deletions	16.74	27.53	18.87	63.14
Net additions(1+2+3-4)	78.12	1066.57	188.90	1333.59

6. Based on the above, the petitioner has claimed the revised fixed charges.

7. The petitioner's claim for additional capitalisation and the revised fixed charges is based on Clause 1.10 of the notification dated 26.3.2001, reproduced hereunder:

“1.10 Tariff revisions during the tariff period on account of capital expenditure within the approved project cost incurred during the tariff period may be entertained by the Commission only if such expenditure exceeds 20% of the approved cost. In all cases, where such expenditure is less than 20%, tariff revision shall be considered in the next tariff period.”

ADDITIONAL CAPITALISATION

8. In the first instance we consider the admissibility of additional capital expenditure claimed in the present petition.

WORKS WITHIN THE SCOPE OF APPROVED CAPITAL COST

Balance Payments

9. Tanakpur HEP was commissioned during April 1993. An expenditure of Rs. 383.93 lakh has been incurred during the years 2001-04 on making payments towards settlement of dispute regarding construction of forebay, civil works of penstock, PH and tail race tunnel. The settlement has been made based on a decision of High Court of Uttranchal. As the expenditure is of obligatory nature, capitalisation of the amount is justified and has been allowed.

Rearrangement of accounting codes

10. The petitioner has claimed an amount of Rs. 0.33 lakh during 2001-04 because of re-arrangement of accounting codes. However, the matching contra entry of Rs. 0.17 lakh corresponding to re-arrangement has not been shown. This has resulted in additional capitalization of this amount which is not permissible. Hence, capitalization of

an amount of Rs. 0.17 lakh during the year 2003-04 has not been allowed. The balance amount of Rs. 0.16 lakh has been allowed to be capitalized.

WORKS NOT WITHIN THE SCOPE OF APPROVED CAPITAL COST- NEW WORKS UNDERTAKEN

New works- Balance payments

11. The petitioner has claimed an amount of Rs. 3.01 lakh towards balance payments on new works undertaken during 2001-04. The expenses under this head include capitalization of balance payments in respect of testing and erection charges of V-SAT system added in 2000-01, freight charges of Dozer added in 2000-01 and final payments of the new guest house constructed. Considering the nature of expenses, capitalization of Rs. 3.01 lakh has been allowed.

Welfare measures

12. The petitioner has claimed a sum of Rs. 3.55 lakh for purchase of a fogging machine for anti-malaria operation, an auto analyzer and pathological incubator for the project hospital. Since the equipment procured is meant to provide better medical facilities to the project employees, located in remote area, capitalization of the amount is allowed.

Safety and Security Expenses

13. An amount of Rs. 25.44 lakh (Rs. 0.34 lakh in 2001-02, Rs. 12.09 lakh in 2002-03 and Rs. 13.0 lakh in 2003-04) has been claimed by the petitioner under this category during the period 2001-04. The expenses claimed pertain to construction of security check posts/watch towers at different strategic locations for the CISF security personnel/ establishment deployed for the security, installation of high- mast flood lights, shifting of

Diesel PH due to sinking of land/ floor for safety of men and machinery and breathing apparatus for safety of firemen etc. Capitalization of Rs. 25.44 lakh under the head safety and security expenses on account of addition of above assets /works has been permitted.

Replacement of obsolete / worn out equipment

14. The petitioner has claimed capitalization of an amount of Rs 22.38 lakh during the period 2001-04 (Rs. 0.34 lakh in 2001-02, Rs. 12.09 lakh in 2002-03 and Rs. 13.0 lakh in 2003-04) on replacement of obsolete/worn out equipment after de-capitalizing an amount of Rs. 2.21 lakh on account of disposal of vehicles and air compressors as replacement of old assets to claim additional capitalisation of new assets. The assets/equipment which has been claimed against replacement includes car and jeeps, air compressors and Photostat machine. The capitalisation of the total amount of Rs. 22.38 lakh as per the year-wise details given in the following table has been allowed:-

(Rs. in lakh)		
Year	ACE claimed	Net ACE allowed
2001-02	12.55	12.55
2002-03	9.83	9.83
2003-04	0.00	0.00
Total	22.38	22.38

New works/equipment for improving efficiency and performance

15. Tanakpur HEP was commissioned in the year 1993 and is about 12 years old. The petitioner has claimed additional capital expenditure of Rs. Rs. 668.08 lakh during 2001-04 (Rs. 63.10 lakh in 2001-02, Rs.530.96 lakh in 2002-03 and Rs.74.02 lakh in 2003-04) on procurement of new equipment and undertaking new works.

16. We have carried out prudence check from the point of view of necessity of various assets under this category for normal plant operation. The additional capitalization

claimed includes expenses for addition of submersible pumps for installation of hydro suction ejector to remove silt deposit, hydraulic jack and hydraulic wrench to facilitate maintenance work, centrifugal separator for turbine oil handling & purification system, HF & VHF sets to get advance warning of high river discharge to access flood situation, a complete new runner assembly in place of old one which has been damaged beyond repairs due to heavy silt, control panel for battery charger for 220 volts DC battery bank, computers and computer software & hardware like printers, modem, LAN for upgrading & strengthening the IT system of the power station, V-SAT for improvement in communication facilities, rotary hammer drill, hydraulic bolt tensioner and tiltable ladder for repair and maintenance work at power house, etc.

17. The justification given by the petitioner for addition of these assets for reliable and efficient operation of the generating station is found to be in order, except for an amount of Rs. 16.02 lakh in respect of which sufficient justification has not been given. The year-wise break up of expenditure claimed for capitalization/de-capitalisation and that allowed is as follows:-

(Rs. in lakh)			
Year	ACE claimed	ACE not allowed	Net ACE allowed
2001-02	63.10	15.72	47.38
2002-03	530.96	0.00	530.96
2003-04	74.02	0.30	73.72
Total	668.08	16.02	652.06

Miscellaneous Assets including minor assets, costing less than Rs.5000/-

18. The petitioner has claimed capitalisation of an aggregate expenditure of Rs. 55.21 lakh (Rs 17.58 lakh in 2001-02, Rs 4.08 lakh in 2002-03 and Rs. 33.55 lakh in 2003-04) in 2001-04 on miscellaneous assets including minor assets costing less than Rs. 5000/-. The miscellaneous assets claimed are DG set to provide reliable power supply, mono block pump for drinking water supply at barrage, furniture for the new guest house, air

conditioners, exhaust fans & water coolers for hospital, office complex & field hostel, furniture for furnishing residential office of head of the project, refrigerator & aqua guards for hospital use, construction of addl. shops in project area, construction of fire tender garage, construction of auditorium for project school etc. In addition, there is long list of minor assets costing less than Rs. 5000/- which were also added during the period 2001-04. These assets include room heaters, calculators, heat convectors, tables, sofa sets, pedestal fans, mattresses, carpet, steel almirahs, plastic chairs (550 nos.), dressing tables, table lamps, beds, study tables, dining tables, water tanks, etc.

19. The respondents Ajmer Vidyut Vitran Nigam Ltd., Jaipur Vidyut Vitran Nigam Ltd, UPPCL and RRVNL have objected to capitalization of these items as, according to them, the expenditure is of regular nature, having been incurred every year during 2001-04.

20. The generating station is in operation for the last 12 years. The petitioner has not given specific location, adequate justification or essentiality of adding most of the miscellaneous / minor assets. As such, it will not be justified to add value of such assets to the capital base for tariff. Further, the petitioner was asked to de-capitalize the existing old assets so that a reasonable additional capitalization for assets under this head could be considered. However, the petitioner has not submitted any details of the old items to be replaced by new items. Hence capitalisation of all the assets has not been allowed.

21. However, in case of other assets where specific location and adequate justification has been furnished or otherwise considered necessary, capitalization of such assets have been allowed. The additional capitalisation claimed, additional capitalisation

disallowed and additional capitalisation allowed for miscellaneous and minor assets during the period 2001-04 are given in the following table:

(Rs. in lakh)			
Year	ACE claimed	ACE disallowed/ de-capitalized	ACE allowed
2001-02	17.58	4.06	13.52
2002-03	4.08	2.11	1.97
2003-04	33.55	4.67	28.88
Total	55.21	10.84	44.37

CAPITALIZATION OF SPARES

22. The petitioner has claimed an amount Rs. 195.70 lakh (Rs. 153.05 lakh in 2002-03 and Rs. 42.65 lakh in 2003-04) towards capitalization of spares, as per its accounting policy and based on Accounting Standard-2 of the Institute of Chartered Accountants of India. Capitalization of additional spares is over and above the reasonable spares already capitalized as initial spares within the approved capital cost. The generating station has been in operation for nearly 12 years. Capitalization of spares claimed by the petitioner cannot be allowed at this stage after the commissioning. However, the spares to the extent actually consumed for repairs & maintenance works during the years 2002-03 and 2003-04 may be considered as part of O&M expenses.

DELETIONS

23. Tanakpur HEP was completed in the year 1993. The heavy construction machinery such as excavators, dumpers, dozers, tippers, compactors, tunneling equipment, cranes etc. acquired for construction has been de-capitalized by the petitioner during the years 2001-04.

24. De-capitalisation of an amount of Rs. 63.14 lakh for the construction equipment has been allowed during the period 2001-04. Year-wise break up of de-capitalized amount is as follows:

(Rs. In lakh)

Year	De-capitalization claimed	Amount De-capitalized
2001-02	16.74	16.74
2002-03	27.53	27.53
2003-04	18.87	18.87
Total	63.14	63.14

25. Based on discussions in the preceding paragraphs, the following additional capital expenditure has been allowed:

(Rs. In lakh)

Addl. Capital expenditure	ACE claimed	Additional capital expenditure allowed			
		2001-02	2002-03	2003-04	Total
1.Works within the scope of approved cost					
(i) Balance Payments	383.93	0.00	383.93	0.00	383.93
(ii) Rearrangement of Account Codes	0.33	0.00	0.16	0.00	0.16
Sub-total (1)	384.26	0.00	384.09	0.00	384.09
2. Works not within the scope of approved cost					
(i) Balance Works	3.01	0.77	0.00	2.24	3.01
(ii) New Works	39.10	0.00	0.00	39.10	39.10
(iii) Welfare Measures	3.55	0.52	0.00	3.03	3.55
(iv) Safety & security measures	25.44	0.34	12.09	13.01	25.44
(v) Replacement of obsolete/ worn out equipment	22.38	12.55	9.83	0.00	22.38
(vi) Improvement in efficiency & performance	668.08	47.38	530.96	73.72	652.06
(vii) Misc. including minor assets	55.21	13.52	1.97	28.88	44.37
Sub-total (1+ 2)	816.77	75.08	554.85	159.98	789.91
3. Capital spares	195.70	0.00	0.00	0.00	0.00
4.Deletions (De- capitalization)	63.14	16.74	27.53	18.87	63.14
5. Net additions (1+2+3-4)	1333.59	58.34	911.41	141.11	1110.86

ASSETS NOT IN USE

26. At the hearing, the petitioner was directed to submit list of assets (including construction machinery & equipment) not in use as on 1.4.2004. The petitioner has submitted details of 9 assets/ equipment such as compactors, batching plant, pumps, air compressors and vehicles not in use as on 1.4.2004 for an aggregate amount of Rs. 55.06 lakh. This amount is being deducted to arrive at the capital base for the tariff period 2004-09.

CAPITAL COST AS ON 1.4.2004

27. After taking into account additional capitalization considered above for the period 2001-04, the capital cost as on 1.4.2004 (excluding FERV) is worked out as follows-

	(Rs. In crore)
Capital cost as on 1.4.2001	378.64
Additional capitalization for 2001-02	0.58
Capital cost as on 1.4.2002	379.22
Additional capitalization for 2002-03	9.11
Capital cost as on 1.4.2003	388.33
Additional capitalization for 2003-04	1.41
Capital cost as on 1.4.2004	389.74
Assets not in use	(-)0.55
Net Capital cost as on 1.4.2004	389.19

28. The opening capital cost for the purpose of tariff for the period 2004-09 as on 1.4.2004 shall be Rs.389.19 Crore.

REVISION OF FIXED CHARGES

29. Next arises the question of revision of fixed charges for the period 1.4.2001 to 31.3.2004. In the order dated 31.3.2005 in petition no. 139/2004, (NTPC V/s UPPCL & others), the Commission has held that the additional capital expenditure during the tariff period, not exceeding 20% of the approved capital cost does not qualify for revision of tariff for this period. In the present case, the additional capital expenditure is less than 20% of the approved cost. For the reasons given in the said order dated 31.3.2005, the revision of fixed charges for the period 1.4.2001 to 31.3.2004 is not warranted. However, cost of servicing of investment on this additional expenditure is to be reimbursed to the petitioner during tariff for 2004-09. Therefore, as per the decision in Petition No.139/2004, the impact of capitalisation of expenditure on return on equity and interest on loan for the period 1.4.2001 to 31.3.2004 will be worked out while approving tariff for Tanakpur HEP for the period 1.4.2004 to 31.3.2009.

30. With the above observations the petition stands disposed of.

Sd/-
(A. H. JUNG)
Member

Sd/-
(BHANU BHUSHAN)
Member

Sd/-
(K.N. SINHA)
Member

Sd/-
(ASHOK BASU)
Chairperson

New Delhi, dated 3rd February, 2006