

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

1. **Shri K.N. Sinha, Member**
2. **Shri Bhanu Bhushan, Member**

Petition No.169/2004

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 Vindhyachal Super Thermal Power Station Stage – I.

And in the matter of

National Thermal Power Corporation Ltd.

... **Petitioner**

Vs

1. Madhya Pradesh State Electricity Board, Jabalpur
2. Maharashtra State Electricity Board, Mumbai
3. Gujarat Electricity Board, Vadodara
4. Chhattisgarh State Electricity Board, Raipur
5. Electricity Department, Govt. of Goa, Panaji, Goa
6. Electricity Department, Administration of Daman & Diu, Daman
7. Electricity Department, Administration of Dadra and Nagar Haveli, Silvassa...**Respondents**

The following were present:

1. Shri A.M Misra, NTPC
2. Shri Shri D.G. Salpekar, NTPC
3. Shri S.K. Kapoor, NTPC
4. Shri R.A. Goyal, NTPC
5. Shri V.B.K. Jain, NTPC
6. Shri I.J. Kapoor, NTPC
7. Shri R.M. Arya, NTPC
8. Shri C.P. Singh, NTPC
9. Shri Sanjay Madan
10. Shri Shankar Saran, NTPC
11. Shri S.K. Samvi, NTPC
12. Shri C.S. Gupta, NTPC
13. Shri M.G. Ramachandran, NTPC
14. Shri S.K. Johar, DGM(C), NTPC
15. Shri N.N. Sadasivan, NTPC
16. Shri S.K. Sharma, NTPC
17. Shri Manoj Saxena, NTPC
18. Shri S.D. Jha, Sr. Manager (C), NTPC
19. Shri J. Roy, NTPC

20. Ms. Taruna Singh Baghel, NTPC
21. Shri A.K. Juneja, NTPC
22. Shri Manoj Mathur, DGM(C), NTPC
23. Shri C.S. Srinivas, NTPC
24. Shri A. Ravindra, NTPC
25. Ms. Alka Saigal, NTPC
26. Shri G.K. Dua, NTPC
27. Shri Balaji Dubey, Dy. Mgr. Law, NTPC
28. Shri S. Naik, Mgr (Commerce), NTPC
29. Shri P.B. Venkatesh, Dy. Mgr. (Comml), NTPC
30. Shri Surendra, NTPC
31. Shri A. Sardana, NTPC
32. Shri D. Khandelwal, SE, MPSEB
33. Shri Deepak K. Shrivastava, EE(Comml.), MPSEB

ORDER
(DATE OF HEARING: 13.1.2005)

Through this petition, the petitioner seeks approval for the revised fixed charges in respect of Vindhyachal Super Thermal Power Station Stage –I (Vindhyachal STPS-I) for the period 1.4.2001 to 31.3.2004 after considering the impact of additional capital expenditure incurred during the period.

2. Vindhyachal STPS-I with a capacity of 1260 MW comprises of six units of 210 MW each. The generating station was commissioned on 1.2.1992. The Central Government in Ministry of Power by its letter dated 20.11.1990 had accorded investment approval for Rs.1460.37 Crore including IDC of Rs.121.15 Crore and working capital margin of Rs.16.65 Crore. Further, the Central Government in Ministry of Power vide its letter dated 31.5.1989 accorded approval for Additional transmission system under which a provision of Rs.16.01 crore for Vindhyachal STPS switchyard extension was admitted by the Commission in Petition No.35/2002. Subsequently, CEA accorded the approval for Rs. 38.7 Crore vide letter dated 4.7.1996 for R&M under Environment Action Plan. As such, the total approved cost of Vindhyachal STPS-I (excluding working capital margin) is Rs. 1498.43 Crore.

3. 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.32/2001) was filed by the petitioner for approval of tariff for the period from 1.4.2001 to 31.3.2004 in respect of Vindhyachal STPS-I, the basis for which was stated to be the notification dated 26.3.2001. In the tariff claimed, the petitioner had considered the impact of additional capitalisation for the period 1.4.2001 to 31.3.2004. The tariff was approved by the Commission by its order dated 6.11.2003. For the purpose of tariff, the capital cost of Rs.1398.49 Crore as on 1.4.2001 was considered. The additional capitalisation claimed by the petitioner was not considered since it was based on the estimated capital expenditure and was without the supporting auditor’s certificate.

4. The year-wise details of additional capitalisation claimed with reference to the balance sheet are as follows:

(Rs.in lakh)

	2001-02	2002-03	2003-04	Total
Total additional expenditure on the generating station (A)	1099.96	5294.95	483.39	6878.29
Exclusions (B)				
FERV capitalized	3.20	82.23	6.92	92.35
Replacement	(-)9.71	(-)256.50	(-)61.93	(-)328.14
Unserviceable Capital Spares	0.00	(-)124.71	(-)93.98	(-)218.68
Sub-Total Exclusions (B)	(-)6.52	(-)298.97	(-)148.98	(-)454.47
Additional capital expenditure Claimed (A)-(B)	1106.47	5593.92	632.37	7332.76

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

6. 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.”

Exclusions

7. It is observed that additional capitalization as per books of accounts is Rs.6878.29 lakh including FERV of Rs.92.35 lakh. Since impact of FERV was being claimed separately from the beneficiaries, the total capital expenditure claimed for the station after excluding FERV should be Rs.6785.94 lakh. However, the petitioner has claimed additional capitalization of Rs. 7332.76 lakh. The difference is mainly on account of re-inclusion (negative entries in exclusions in above table) of certain assets in capital base.

8. In the first instance we consider the exclusions in the claim for additional capital expenditure

(a) **FERV**:-The exclusion of an amount of Rs. 92.35 lakh for 2001-04 on account of impact of FERV claimed has been allowed as the amount has been billed directly to the beneficiaries as per notification dated 26.3.2001.

(b) **Replacement exclusion** - An amount of (-) Rs 328.14 lakh for 2001-04 has been excluded under this head. The petitioner by way of negative entries in exclusions has sought to re-include certain assets like unserviceable calculators, photocopiers, cars, jeeps, furniture, office equipment, coolers , etc. The petitioner has submitted that the Commission, while considering additional capitalization for the years 1997-2001 did not allow capitalization of such items, and in accordance with new regulations also these items will not be

allowed for capitalization. It is submitted that since capitalization of these items was not allowed their de-capitalization also should not be considered.

It is noted that these items were the part of the admitted capital cost for the purpose of tariff and have been de-capitalized on becoming unserviceable. Therefore, re-inclusion of such items as replacement (23) cannot be allowed.

The other assets sought to be included by the petitioner by way of negative entries are unserviceable construction equipment like crane, road roller, tractor trolley etc. The justification for re-inclusion of these assets as furnished by the petitioner is that these equipment were available as construction equipment and have become unserviceable. Hence these were de-capitalized from books of accounts as per requirement of Accounting Standard. Investment made in these equipments has not been returned and hence servicing of the same has to be continued.

These items were the part of the admitted capital cost and have been de-capitalized on becoming unserviceable. As such, the re-inclusion of such items as replacement (Category-23) cannot be allowed since the assets are no longer in use.

(c) **Exclusion of unserviceable capital spares-** An amount of (-) Rs. 218.68 lakh has been excluded under this head. The justification for re-inclusion of these unserviceable capital spares as furnished by the petitioner is similar to that given for re-inclusion of 'replacement exclusion'. For the reason already indicated above while dealing with re-inclusion of the 'replacement exclusions' the re-inclusion of such items (Category-22B) is not to be allowed.

Additional Capitalisation

9. Now we consider the admissibility of additional capital expenditure claimed in the present petition. The year-wise and category-wise break up of the additional expenditure claimed by the petitioner is as follows-

(Rs. in lakh)

Details of additional capitalization claim	2001-02	2002-03	2003-04	Total
(A) Within the Scope of approved Cost or Admitted works by GOI/CERC after the date of commercial operation				
a)Balance payment against works admitted by the Central Government/Commission (Category-10A)	(-)3.98	2.35	187.92	186.28
b)New works within approved Revised Cost Estimates (Category-21A)	941.08	4915.49	279.42	6136.00
Sub-Total (A)	937.10	4917.84	467.34	6322.28
(B) Not within the Scope of approved Cost and works not admitted by the Commission				
(a)New works not in approved Revised Cost Estimates (Category-21B)	31.82	224.09	5.16	261.07
(b)Spares not in approved cost (Category-22B)	145.58	450.42	159.87	755.86
(c)Replacement (Category.-23)	(-)10.66	0.00	0.00	(-)10.66
(d)Rearrangement (Category-24)	3.81	0.00	0.00	3.81
(e)Inter unit transfer (Category-11)	(-)1.17	1.57	0.00	0.40
Sub Total (B)	169.37	676.08	165.03	1010.48
Total of additional Capitalisation claimed (A)+(B)	1106.47	5593.92	632.37	7332.76

10. The expenditure claimed for additional capitalisation and our decisions thereon have been discussed as under:

Additional capital expenditure within the scope of approved cost/ admitted works by the Central Government/Commission

(a) Additional Capital Expenditure relating to balance payments against works admitted by the Central Government/Commission - The balance

payments of Rs. 186.28 lakh against works admitted by the Central Government/Commission is found to be in order and has been allowed.

(b) Expenditure on new works within approved cost - The petitioner has claimed capital expenditure of Rs. 6136.00 lakh on new works within approved cost. It is observed that majority of the items covered under this head can be classified in following two categories-

(i) Civil works relating to raising of ash dyke and garlanding of lagoons within original scope of works/approved cost.

(ii) Works relating to Environmental action plan approved by CEA.

The works relating to ash dykes/lagoons like raising of ash dykes, construction of drains, construction of pedestals for laying pipes etc. are taken up in stages and is a normal practice. The expenditure relating to Environmental Action Plan is also in order. Therefore, the expenditure of Rs. 6136.00 lakh claimed under this head has been allowed for capitalization for the purpose of tariff.

Additional capital expenditure not within the scope of approved cost and works admitted by the Central Government/Commission

(a) Expenditure on new works not within approved cost- An amount of Rs. 261.07 lakh has been claimed under this head. The petitioner has furnished asset -wise justifications for incurring this expenditure. On scrutiny of the items/assets procured under this head, it has been observed that these items can be broadly categorized as items related to environment protection,

statutory norms, technology up-gradation and replacement due to obsolescence. However, it is observed that for certain items replaced by the petitioner, the corresponding de-capitalization of the replaced assets was not effected. The same was brought to the notice of the petitioner during hearing. Subsequently, petitioner vide affidavit dated 7.3.2005 submitted the gross/estimated value of the assets replaced for the purpose of de-capitalization. The gross value of the replaced assets is being de-capitalized for the purpose of tariff irrespective of the fact that these assets will be de-capitalized from books of accounts in subsequent years. After prudence check of the assets capitalized under this category and after reducing the de-capitalisation amount as submitted by the petitioner, the expenditure of Rs.203.99 lakh out of Rs.261.07 lakh has been found to be admissible for capitalization for the purpose of tariff. The year-wise break up of the expenditure claimed and that allowed to be capitalized under this head is as follows-

(In Rs).

	Claimed	Allowed	Disallowed
2001-02	3181582	1979143	1202439
2002-03	22409266	18279134	4130132
2003-04	516137	140320	375817
Total	26106985 (Rs.261.07 lakh)	20398597 (Rs.203.99 lakh)	5708388 (Rs.57.08 lakh)

(b) Expenditure on spares not in approved cost- The petitioner has claimed an amount of Rs. 755.86 lakh during 2001-04 on spares, which are not a part of approved cost. The petitioner has submitted that these items are not repetitive /consumptive nature. These spares are required for safety against break down, which if not available in time would lead to loss of generation and aggravation of already power deficit condition. Since these critical spares are required to be

procured from the Original Equipment Manufacture (OEM), lead-time itself could be one to one and a half-year. To avoid long outage of units it is necessary to maintain stock of these spares in capital account of spares.

The generating station is in operation for about 13 years and capitalization of additional spares is over and above the reasonable spares already capitalized as initial spares within the approved capital cost. The Commission while dealing with additional capitalization petitions of the generating stations belonging to the petitioner, for the period prior to 2001, has not allowed capitalization of additional spares in such cases. The Commission felt that consumption of such spares should form part of O&M. On the same considerations, capitalisation of spares as claimed has not been allowed.

(c) Expenditure on replacement of assets - An amount of (-) Rs. 10.66 lakh has been claimed under this head with proper de-capitalization of the old assets. The same is in order and has been allowed.

(d) Expenditure on account of rearrangement - An amount of 3.81 lakh. has been indicated under this head. Normally, rearrangement of accounting code shall lead to “zero” sum and has not been allowed in other cases. However, for the present case, the petitioner has submitted that these are on account of shifting of items from one account code to other account code. Some of the entries are stated to be on account of transfer of assets from Vindhyachal STPS Stage-I to Stage –II and net balance of this item of Rs 380833 for Stage-I is to be considered.

It has been verified from the additional capitalisation petition of Vindhyachal STPS –II that the negative entry under rearrangement head is Rs. 447026 and is not matching with the amount as mentioned above. In view of the above, we have ignored the rearrangement for the purpose of tariff for both Vindhyachal STPS-I and Vindhyachal STPS-II.

(e) Expenditure on inter-unit transfer- An amount of Rs. 0.40 lakh has been claimed under this head, which is on account of-

- (i) Permanent inter-unit transfer of furniture & transformer to various generating stations belonging to the petitioner, resulting in de-capitalisation at the present generating station to the tune of (-) Rs.117170 (Rs.1.17 lakh). The petitioner during the hearing has confirmed that value of these assets had been capitalized in the books of accounts of the generating station concerned involved with the transfer. Such permanent transfers from other generating stations are need-based and are allowed as replacement of old assets at the receiving generating station. As such, this negative entry has been allowed.
- (ii) Transfer of “Mill bottom” on returnable basis from Singrauli STPS to the present generating station has resulted in a positive entry of Rs.157104 (Rs.1.57 lakh). These kind of need-based transfers to older stations cannot be allowed without any de-capitalisation of old/replaced assets at the receiving generating station. As there is no de-capitalisation of old/replaced “mill bottom” at the instant generating station, the capitalization of Rs.1.57 lakh cannot be allowed.

Accordingly, an amount of Rs.1.17 lakh has been allowed to be de-capitalized on account of inter-unit transfers against Rs.0.40 lakh claimed by the petitioner.

11. The following additional capital expenditure has been allowed based on discussions in the above paragraphs:

(Rs. In lakh.)				
Details of additional capitalization claim	2001-02	2002-03	2003-04	Total
(A) Within the Scope of approved Cost or Admitted works by the Central Government/Commission after the date of commercial operation				
Balance payment against works admitted by the Central Government/Commission (Category-10A)	(-)3.98	2.35	187.92	186.28
New works within approved Revised Cost Estimates (Category-21A)	941.08	4915.49	279.42	6136.00
Sub-Total (A)	937.10	4917.84	467.34	6322.28
(B) Not within the Scope of approved Cost and works not admitted by the Commission				
New works not in approved Revised Cost Estimates (Category-21B)	19.79	182.79	1.40	203.99
Spares not in approved cost (Category-22B)	0	0	0	0
Replacement (Category-23)	(-)10.66	0.00	0.00	(-)10.66
Rearrangement (Category-24)	0	0	0	0
Inter unit transfer(Category.11)	(-)1.17	0.00	0.00	(-)1.17
Sub Total (B)	7.96	182.79	1.4	192.16
Additional Capitalisation (A)+(B)	945.06	5100.63	468.74	6514.44
Exclusions not permitted (C)				
Replacement exclusions (category -.23)	(-)9.71	(-)256.50	(-)61.93	(-)328.14
Unserviceable capital spares exclusions (Category-.22B)	0.00	-124.71	(-)93.98	(-)218.68
Sub-total (C)	(-)9.71	(-)381.21	(-)155.91	(-)546.82
Total of Additional Capitalisation allowed (A)+(B)+(C)	935.35	4719.42	312.83	5967.62

12. Next arises the question of revision of fixed charges for the period 1.4.2001 to 31.3.2004. In the order dated 31st March 2005 in Petition No. 139/2004, (National Thermal Power Corporation Ltd Vs Uttar Pradesh Power Corporation Ltd and others) the Commission has held that the additional capital expenditure incurred during the tariff period, not exceeding 20% of the approved capital cost, does not qualify for retrospective revision of tariff. In the present case, the additional capital expenditure approved is less than 20% of the approved cost. For the reasons given in the said order dated 31st March 2005, the retrospective revision of fixed charges for the period 1.4.2001 to 31.3.2004 is not warranted. However, the additional capital expenditure approved shall be added to the gross block as on 1.4.2001 to arrive at the gross block as on 1.4.2004 for the purpose of fixation of tariff for the tariff period 2004-05 to 2008-09.

13. After taking into account additional capitalization allowed, the opening gross block as on 31.3.2004 works out as follows:

	(Rs. in crore)		
	2001-02	2002-03	2003-04
Capital cost as on 1 st April	1398.49	1407.84	1455.03
Additional capitalisation	9.35	47.19	3.13
Capital cost as on 31 st March of respective financial year	1407.84	1455.03	1458.16

14. Further, for the reasons recorded in order dated 31.3.2005 in Petition No.139/2004, the petitioner shall be entitled to earn return on equity @ 16% on the equity portion of additional capitalisation now approved by us. Similarly, the petitioner shall also be entitled to interest on loan at the rate, as applicable, during the relevant period. Return on equity and interest shall be worked out on the additional

capitalisation from 1st April of the financial year following the financial year to which additional capital expenditure relates and up to 31.3.2004. The lump sum of the amount of return on equity and interest on loan so arrived shall be payable by the respondents along with the tariff for the period 2004-09 to be approved by the Commission. The exact entitlement of the petitioner on this account shall be considered by the Commission while approving tariff for the period 2004-09.

15. With the above, the present petition stands disposed of.

Sd/-
(BHANU BHUSHAN)
MEMBER

Sd/-
(K.N. SINHA)
MEMBER

New Delhi dated the 13th April 2005