CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Coram:

1. **Shri Ashok Basu, Chairman**
2. **Shri K.N. Sinha, Member**
3. **Shri Bhanu Bhushan, Member**

Petition No.195/2004

In the matter of

Approval of revised fixed charges due to additional capitalisation for the period 1.4.2001 to 31.3.2004 in respect of Korba Super Thermal Power Station (2100 MW)

And in the matter of

National Thermal Power Corporation Ltd. **…Petitioner**

V/s

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

The following were present:

1. Shri V.B.K. Jain, NTPC
2. Shri I.J. Kapoor, NTPC
3. Shri S.K.Sharma, NTPC
4. Ms Alka Saigal, NTPC
5. Shri S.K.Johar, NTPC
6. Shri B.K.Garg, NTPC
7. Shri G.Rastogi, NTPC
8. Shri A.K.Acharya,NTPC
9. Shri G.K.Dua, NTPC
10. Shri S.N. Goel AGM, NTPC
11. Shri E. Surendra, NTPC
12. Shri D. Khandelwal, MPSEB
13. Shri Deepak Shrivastava, MPSEB

ORDER

(DATE OF HEARING 18.1.2005)

Through this petition, the petitioner has sought approval for the revised fixed charges in respect of Korba Super Thermal Power Station (2100 MW) for the period 1.4.2001 to 31.3.2004 after considering the impact of additional capital expenditure incurred during the period.

2. Korba STPS with a capacity of 2100 MW, comprises of three units each of 200 MW and 500 MW. The dates of commercial operation of different units are as follows:

Stage –I	Unit-I. 1.8.83,	Unit-II 1.1.84,	Unit-III 1.6.84,
Stage-II	Unit-IV 1.3.88,	Unit-V 1.4.89,	Unit-VI 1.6.90.

3. The Central Government in Ministry of Power by its letter dated 1.8.1990 had accorded investment approval of Rs.1603.11 Crore, including IDC of Rs.7.65 Crore and excluding WCM of Rs. 22.14 Crore. Subsequently, CEA accorded the approval for Rs.31.19 Crore vide letter dated. 4.7.1996 for R&M under Environment Action Plan. CEA vide letter dated 22.8.2000 further approved an estimated expenditure of Rs.106.86 Crore, under R&M. This was followed by another approval of Rs 6.07 Crore by CEA for additional rolling stock. As such, the total approved cost of the generating station is Rs. 1747.23 Crore.

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 (here in after referred to as "the notification dated 26.3.2001"). A petition No. 30/2001

was filed by the petitioner for approval of tariff for the period from 1.4.2001 to 31.3.2004, the basis of which was stated to be the notification dated 26.3.2001. The tariff was approved by the Commission by its order dated 6.8.2003. For the purpose of tariff, the capital cost of Rs.1473.89 Crore as on 1.4.2001 was considered.

5. 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 station as per books of accounts including ERV (A)	15673.06	3357.15	5908.74	**24938.95**
Exclusions (B)				
FERV capitalized (a)	(-)35.02	585.04	15.96	565.98
Works not admitted by the Commission (b)	(-)0.13	0.00	0.00	(-)0.13
Replacement Exclusion (c)	0.00	(-)16.08	(-)72.24	(-)88.32
Inter Unit Transfers (d)	0.00	(-)18.38	525.08	506.70
Sub Total (a)+(b)+(c)+(d)	(-)35.15	550.58	468.80	984.23
Additional capital expenditure claimed (A)-(B)	15708.21	2806.58	5439.94	**23954.73**

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 petition.

9. Additional capitalisation as per books of accounts is Rs. 24938.95 lakh, including FERV of Rs. 565.98 lakh. As the impact of FERV is claimed separately from the respondent beneficiaries, the total capital expenditure claimed after excluding FERV should have been Rs. 24372.97 lakh. However, the petitioner has claimed additional capitalisation of Rs. 23954.73 lakh.

10. The year-wise and category-wise break up of additional expenditure claimed by the petitioner is as follows:-

(Rs.in Lakh)

	2001-02	2002-03	2003-04	Total
(A) Within the scope of approved cost or admitted works by Central Government/Commission after date of commercial operation				
Balance payment against works admitted by Central Government / Commission	(-)378.38	8.78	103.67	(-)265.92
New works within approved Revised Cost Estimates	15282.80	1183.21	4260.71	20726.72
Total (A)	**14904.42**	**1191.99**	**4364.38**	**20460.8**
(B) Not within the scope of approved cost				
New works not in approved Revised Cost Estimates	211.08	227.09	289.11	727.28
Spares not in approved cost	40.44	1384.93	819.95	2245.33
Replacements	560.41	5.19	(-)30.32	535.27
Inter unit-transfers	(-)8.14	(-)2.63	(-)3.17	(-)13.94
Total (B)	**803.79**	**1614.58**	**1075.57**	**3493.94**
Total of additional capitalisation claimed (A)+(B)	**15708.21**	**2806.58**	**5439.94**	**23954.73**

11. The difference in the amount of additional capitalisation as per books of accounts vis-à-vis the claim preferred by the petitioner is mainly on account of re-inclusion (negative entries in exclusions) of certain assets in capital base, as discussed below:-

(a) **FERV:** An amount of Rs.565.98 lakh for 2001-04 on account of FERV has been excluded from the claim as the impact of FERV has been billed directly to the beneficiaries in terms of notification dated 26.3.2001.This is in order and has been allowed.

(b) **Exclusion of balance payments of works not admitted by the Commission earlier:** An amount of (-) Rs.0.13 lakh has been excluded on works not admitted by the Commission earlier. Since the original works were not allowed, the balance payments of these works, both positive and negative, need to be excluded for the purpose of tariff. As such, this exclusion is in order and is allowed.

(c) **Replacement exclusions:** An amount of (-) Rs.88.32 lakh for 2001-04 has been excluded under this head. The petitioner by way of negative entries in exclusions is re-including certain assets like unserviceable cars, bus, Matador, construction equipments etc. de-capitalised from the books of accounts on the ground that the Commission while considering additional capitalisation for the years 1997-2001 did not allow capitalisation of such items and as such de-capitalisation of these items should not be considered. As to the re-inclusion of construction equipments like dozer, crane, tractor trolly, road roller etc., the petitioner submitted that the equipments have become unserviceable and hence were de-capitalised from books of accounts as a requirement of Accounting

Standard, as also that the investment made in such equipments have not been returned and, therefore, servicing of the same has to be continued.

In this regard it is noted that the above items constituted part of the admitted cost for the purpose of tariff and have to be de-capitalised on becoming unserviceable. The 'such items' referred to by the petitioner is generic term and do not refer specifically to cars, bus, Matador etc. which were in fact included in the capital cost for tariff purpose. Accordingly, re-inclusion of such items cannot be allowed as these assets are not in use. As regards unserviceable construction equipments, it is noted that the items formed part of the admitted cost and have been de-capitalised on becoming unserviceable. The equipments are no longer in use. As such, its re-inclusion as replacement cannot be allowed. Hence exclusion of an amount of Rs. (-) 88.32 lakh for 2001-2004 is not allowed and has been de-capitalised.

(d) **Inter-unit transfer exclusions:** An amount of Rs. 506.70 lakh for 2001-04 has been excluded under this head due to temporary transfer of rotor from FSTPS and the transfer of JCB excavator, linear drafting machine and crane from this generating station to Sipat. Since the transfer is on temporary basis, these exclusions are in order and hence allowed.

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

Additional capital expenditure within the scope of approved cost

(a) **Balance payments against admitted works:** The balance payments of Rs. 265.92 lakh against admitted works has been allowed as the expenditure is within the approved cost.

(b) **<u>Expenditure on new works within approved cost :</u>** The petitioner has claimed capital expenditure of Rs. 20726.72 lakh on new works is within approved cost. It is observed that majority of the items covered under this head can be classified in following categories:

(Rs. in lakh)

(i)	Works relating to or incidental to construction of a new Ash- Dyke at village Dharna	**16260.59**
(ii)	Works relating to Environmental Action Plan approved by CEA vide letter dated 4.7.1996	**2277.88**
(iii)	Works relating to R&M approved by CEA vide letter dated.22.8.2000	**2188.25**
	Total	**20726.72**

The petitioner has submitted that the construction of new ash dyke at village Dharna was envisaged in original scope of works of Stage-II but could not be taken up due to delay in getting the environment clearance for the ash pond. As such, ash pond for Stage-I was used for the disposal of ash for Stage-II as well. Now this work has been taken up after acquisition of land after getting the environment clearance. The original approval was for a total expenditure of Rs. 134.55 Crore out of which Rs. 40.25 Crore were capitalised up to 1996-97. However, against a balance amount of Rs. 94.30 Crore, an amount of Rs. 168.29 Crore has been spent so far and claimed. Out of this, an amount of 5.68 Crore was claimed during 1997-01 period and Rs. 162.61 Crore has been claimed for the period 2001-04. However, considering the price level of the estimate at the time of approval and considering actual performance level of the generating station which is of the order of 90% and above and high performance norm under ABT, the expenditure appears to be justified and hence is allowed.

The expenditure relating to Environmental Action Plan on items like Performance Enhancement of ESP's, Dry Ash Extraction System, Effluent Treatment plant, Sewage treatment plant etc. is allowed on environmental considerations.

As regards works relating to R&M activities, it is to mention that in the period prior to 2001, there have been instances when the Commission disallowed R&M expenses on certain works/items because the petitioner failed to convince the Commission regarding benefits to the beneficiaries in view of the relaxed norms of operations. Now in the present scenario, it is imperative to keep in view that ABT has been implemented in all the regions of the country requiring daily declaration of availability by the generating stations, imposition of UI charges for failure to generate as per schedule and higher benchmarks of Availability and PLF. Further, in the light of severe power shortages in the country and large capital requirement for setting up new generation capacity, it is of paramount importance that the capital expenditure on R&M activities may be allowed subject to prudence, so that the aging generating capacity of generating stations are not allowed to deteriorate and consumers are not made to suffer on account of capacity degradation or breakdown of the generating station. Korba STPS is in operation since August 1983. As such, it is desirable to allow expenditure on R&M activities as per CEA approval.

However, it is observed that the decapitalisation of replaced assets was not effected for some of the assets capitalized. Subsequently, the petitioner vide affidavit dated 6.4.2005 has informed the de-capitalisation amount against most of the replaced assets. Accordingly, the amount to be capitalised for the purpose of tariff has been worked out after reducing the de-capitalisation amount furnished by the petitioner, irrespective of the fact that the same will be de-capitalised in the books of accounts in the year 2004-2005. The capitalisation for the purpose of the tariff has been disallowed wherever decapitalisation of the replaced asset has not been effected. Further, it was observed that the capitalized amount on certain activities/works approved by CEA has exceeded the approved estimates. The petitioner vide affidavit dt.9.6.05 has sough to justify such increase by stating as follows-

" CEA approval was based on Engineer's estimate and the procurement was done by open tender process. The award was finalized based on competitive bidding with the lowest bidder. The difference could be due to prevailing market conditions. There is no change of scope."

In view of the clarification furnished, the expenditure higher than the approved estimates, has been accepted.

Based on the above methodology an amount of Rs.20541.43 lakh out of Rs. 20726.72 lakh as claimed by the petitioner under this head, has been found justified and is allowed. The year wise break up of the claimed, allowed and disallowed capital expenditure under this head is as follows:-

(Rs. in lakh)

Year	Claimed	Allowed	Disallowed
2001-02	15282.80	15166.33	116.47
2002-03	1183.21	1112.93	70.28
2003-04	4260.71	4262.17	(-)1.46
Total	**20726.72**	**20541.43**	**185.29**

<u>Additional capital expenditure not within the scope of approved cost</u>

(a) **<u>Expenditure on New works not within the approved cost:</u>** An amount of Rs.727.28 lakh has been claimed under this head. 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 safety, employee welfare, environment protection, technology up-gradation and replacement of assets after useful life. It is observed that for certain items replaced by the petitioner, the corresponding de-capitalization of the replaced asset was not effected. Subsequently, petitioner vide affidavit dated 6.4.05 has submitted the estimated gross value of the assets replaced for the purpose of de-capitalization. After the prudence check of the expenditure sought to be capitalized under this category, the expenditure of Rs. 617.21 lakh out of Rs. 727.28 lakh has been found to be admissible for capitalization for the purpose of tariff. The year wise break up of the claimed, allowed and disallowed capital expenditure under this head is as follows-

(Rs. in lakh)

Year	Claimed	Allowed	Disallowed
2001-02	211.08	179.24	31.84
2002-03	227.09	178.20	48.89
2003-04	289.11	259.78	29.33
Total	**727.28**	617.21	**110.07**

(b) **<u>Expenditure on spares not within the approved cost</u>**: The petitioner has claimed expenditure of Rs.2245.33 lakh towards capitalisation of spares on the ground that the items are of repetitive/consumptive nature and are required for safety against break down and that non-availability of these spares in time may lead to loss of generation and deterioration in the power availability. According to petitioner, it is imperative to maintain stock of these spares in capital account of spares.

It is observed that the generating station is in operation for long and capitalisation of additional spares is over and above the reasonable spares already capitalised as initial spares within the approved capital cost. The Commission while dealing with additional capitalisation petitions for other generating stations belonging to the petitioner did not allow capitalisation of such spares. Accordingly, capitalisation of spares not within the approved cost has not been permitted.

(c) <u>Expenditure on Replacement</u> : An amount of Rs.535.27 Lakh has been claimed under this head for replacement of obsolete assets with decapitalisation of the replaced assets at gross book value. However, for some of the assets there is no corresponding de-capitalisation of old asset and such replacements have not been allowed. Further, for some capitalised assets de-capitalisation of the old asset was done in subsequent years. But for the purpose of tariff de-capitalisation has been shifted to the year of capitalisation. Based on above methodology following amounts in the respective have qualified under this head:

(Rs. in lakh)

	2001-02	2002-03	2003-04	Total
Amount claimed (a)	560.41	5.19	(-)30.32	535.27
Amount disallowed (without corresponding De-capitalisation and not found admissible) (b)	(-)1.73	(-)9.45	(-)0.80	(-)11.98
De-capitalisation shifted to the same year of capitalisation (c)	(-)25.55	3.64	21.91	0.0
Amount allowed (a)+(b)+(c)	533.13	(-)0.62	(-)9.22	523.29

As such, capitalisation of an amount of Rs. 523.29 lakh out of Rs. 535.27 qualifies for the purpose of tariff and is allowed.

(d) **<u>Additional Capital Expenditure relating to Inter-unit transfer :-</u>** An amount of (-) Rs.13.94 lakh has been capitalized on account of inter-unit transfers on permanent basis. These inter-unit transfers are of following types-

(i) Capital spares/equipment transferred to various stations belonging to the petitioner resulting in (-) negative entries in the books. These transfers are of permanent nature and since the asset is not in use at the instant station, negative entries arising out of such permanent transfer are allowed.

(ii) Assets transferred from various other stations of the petitioner to the instant station resulting in (+) positive entries in the books. Such transfers to the stations which are beyond their procurement stage can only be allowed as replacement with decapitalisation of the replaced assets. As such in the absence of the decapitalisation of the replaced assets, these positive entries do not qualify for the purpose of tariff.

(iii) Assets transferred from other generating stations of the petitioner to the instant station for providing basic canteen facilities to the employees and contract labour working at the newly constructed Dhanras ash dyke and booster pump house, which is located at 16km far away from plant. As such these inter unit transfers to the extent of Rs.1.29 lakhs are allowed.

Based on above principles, an amount of (-)Rs. 17.56 lakh is allowed for the purpose of tariff on account of inter-unit transfers.

13. In light of the above discussion, the following additional expenditure is found to be admissible and is allowed:

(Rs in lakh)

	2001-02	2002-03	2003-04	Total
(A) Within the Scope of approved cost or admitted works by Central Government/Commission after date of commercial operation				
(a)Balance payment against works admitted by Central Government/Commission	(-)378.38	8.78	95.67	(-)273.92
(b)New works within approved Revised Cost Estimates	15166.33	1112.93	4262.17	20541.43
Total (A)	**14787.95**	**1121.72**	**4357.84**	**20267.51**
(B) Not within the Scope of approved Cost and works not admitted by				
(a)New works not in A Approved Revised Cost Estimates	179.24	178.20	259.78	617.21
Spares not in approved cost	0.00	0.00	0.00	0.00
Replacements	533.13	(-)0.62	(-)9.22	523.29
Inter-unit transfers	(-)8.14	(-)6.24	(-)3.17	(-)17.56
Total (B)	**704.23**	**171.33**	**247.39**	**1122.95**
Total of additional capitalisation found justified (A)+(B)	**15492.18**	**1293.05**	**4605.23**	**21390.46**
Replacement exclusions not permitted (C)	0.00	(-)16.08	(-)72.24	(-)88.32
Additional capitalisation allowed (A)+(B)+(C)	**15492.18**	**1276.97**	**4532.99**	**21302.14**

14. 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 Vs 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 and 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, the additional 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 period 2004-05 to 2008-09.

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

16. After taking into account additional capitalisation allowed for the period 2001-04, the capital cost as on 31.3.2004, excluding FERV for the period 2001-04, is worked out as follows:

(Rs. in crore)

Capital cost as on 1.4.2001 admitted by Commission	**1473.89**

Additional capitalization for 2001-2002	154.92
Capital cost as on 1.4.2002	**1628.81**
Additional capitalization for 2002-2003	12.77
Capital cost as on 1.4.2003	**1641.58**
Additional capitalization for 2003-2004	45.33
Capital cost as on 31.3.2004	**1686.91**

17. As such opening capital cost for the purpose of tariff for the period 2004-09 as on 1.4.2004 shall be Rs. 1686.91 Crore, excluding FERV for the period 2001-04.

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

SD/-	**SD/-**	**SD/-**
(BHANU BHUSHAN) **MEMBER**	**(K.N.SINHA)** **MEMBER**	**(ASHOK BASU)** **CHAIRMAN**

New Delhi, Dated the 14th July 2005