

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

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

Petition No.190/2004

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 Singrauli Super Thermal Power Station (2000 MW)

And in the matter of:

National Thermal Power Corporation Ltd.

....Petitioner

V/s

1. Uttar Pradesh Power Corporation Ltd., Lucknow
 2. Jaipur Vidyut Vitran Nigam Ltd., Jaipur
 3. Ajmer Vidyut Vitran Nigam Ltd., Ajmer
 4. Jodhpur Vidyut Vitran Nigam Ltd., Jodhpur
 5. Delhi Transco Ltd., New Delhi
 6. Haryana Vidyut Prasaran Nigam Ltd., Panchkula
 7. Punjab State Electricity Board, Patiala
 8. Himachal Pradesh State Electricity Board, Shimla
 9. Power Development Department (J&K), Srinagar
 10. Power Department, Union Territory of Chandigarh, Chandigarh
 11. Uttaranchal Power Corporation Ltd., Dehradun
-Respondents**

The following were present:

1. Shri V.B.K. Jain, NTPC
2. Shri I.J. Kapoor, NTPC
3. Shri S.B.Dasgupta, NTPC
4. Shri J.Roy, NTPC
5. Shri Shankar Saran, NTPC
6. Shri D.G Salpekar, NTPC
7. Ms Alka, NTPC
8. Shri A.K.Midha, NTPC
9. Shri Mukesh Kumar, NTPC
10. Shri K.N.Thakur, NTPC
11. Shri Ajay Dua, NTPC
12. Shri R.Singhal, NTPC
13. Shri S.D.Jha, NTPC
14. Shri G.H.Dua, NTPC
15. Shri Shankar Saran, NTPC

16. Shri G.K. Dua, NTPC
17. Shri T.K. Srivastava, EE, UPPCL
18. Shri P.K.Gupta, JdVVNL
19. Shri S.K.Yadav, JVVNL
20. Shri S.R.G.Sabal, AVVNL
21. Shri R.K.Arora, XEN, HVPNL
22. Shri Satish Agnihotri, DTL
23. Shri Rohit Singh, DTL

ORDER
(DATE OF HEARING : 27.1.2005)

Through this petition, the petitioner has sought approval for the revised fixed charges in respect of Singrauli Super Thermal Power Station (2000 MW) for the period 1.4.2001 to 31.3.2004 after considering the impact of additional capital expenditure incurred during the period.

2. Singrauli STPS with a capacity of 2000 MW, comprises of five units of 200 MW each (Stage I) and two units of 500 MW each (Stage II). The dates of commercial operation of different units are as follows:

Stage-I	Stage II
Unit-I: 1.6.1982,	Unit-VI: 1.7.1987,
Unit-II: 1.2.1983,	Unit-VII: 1.5.1988.
Unit-III: 1.7.1983,	
Unit-IV: 1.1.1984,	
Unit-V: 1.6.1984.	

3. The Central Government in Ministry of Power by its letter dated 11.10.1995 had accorded investment approval of Rs.1176.57 Crore excluding WCM of Rs. 14.12 Crore. Subsequently, CEA accorded the approval for Rs. 50.50 Crore vide letter dated. 5.6.1996 for R&M under Environment Action Plan. Further, CEA vide letters

dated 6.3.2000, 4.7.2000 and 6.7.2000 approved an estimated expenditure of Rs. 60.21 Crore, under R&M. This was followed by further approval of Rs 101.76 Crore and 32.95 Crore under R&M vide CEA letters dated 23.9.2002 and dated 26.5.2003 respectively. As such, the total approved cost of the generating station is Rs. 1421.99 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 (hereinafter referred to as “the notification dated 26.3.2001”). A petition No. 39/2001 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 23.7.2003. For the purpose of tariff, the capital cost of Rs.1086.96 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 (A)	1648.36	5008.75	1395.67	8052.78
Exclusions (B)				
FERV capitalized (a)	31.92	156.31	9.32	197.55
Inter Unit Transfers (b)	0.00	6.93	703.78	710.70
Replacement (c)	(-)5.90	(-)1.77	0.00	(-)7.67
Works not admitted by the Commission (d)	(-)14.81	(-)3.98	0.00	(-)18.79
Unserviceable capital spares (e)	0.00	0.00	(-)115.49	(-)115.49
Sub-total Exclusions(B)= (a)+(b)+(c)+(d)+(e)	11.21	157.49	597.60	766.30
Additional capital expenditure claimed (A)-(B)	1637.15	4851.26	798.06	7286.47

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 Tariff1 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. 8052.78 lakh, including FERV of Rs. 197.55 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. 7855.23 lakh. However, the petitioner has claimed additional capitalisation of Rs. 7286.47 lakh.

10. The year-wise and category-wise break up of 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 Central Government/Commission after the date of commercial operation				
a)Balance payment against works admitted by Central Govt./Commission (category-10A)	(-)3.81	(-)10.25	3.64	(-)10.41
b)New works within approved Revised Cost Estimates (category-21A)	1130.47	2979.94	289.75	4400.17
Sub-total (A)	1126.66	2969.69	293.39	4389.76
(B) Not within the Scope of approved Cost and works not admitted by Commission				
a)Balance payment against works not admitted by Commission (Category 10B)	4.08	0	0	4.08
b)Inter unit transfer(Category 11)	7.19	6.38	(-)5.09	8.48
c)New works not in approved Revised Cost Estimates (Category-21B)	218.92	243.67	348.49	811.08
d)Spares not in approved cost (Category-22B)	283.28	1529.02	289.11	2101.41
e) Replacement (Category-23)	(-)3.00	102.50	(-)127.84	(-)28.34
Sub-total (B)	510.47	1881.57	504.67	2896.71
Total of additional Capitalisation claimed (A)+(B)	1637.15	4851.26	798.06	7286.47

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.197.55 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) **Inter-unit transfer exclusions:** An amount of (-)710.68 lakh for 2001-04 has been excluded under this head on the following two counts:

- (i) Due to temporary transfer of LP rotor, condenser tubes from Badarpur, support bearing spherical from Farakka to the instant generating station, an amount of Rs.713.93 lakh has been excluded for the purpose of tariff. The petitioner has submitted that on transfer of these assets to the instant generating station from other stations, they were capitalized in the books of accounts at the instant station. As such, the exclusion is in order and is allowed.
- (ii) Due to permanent inter-unit transfer of 4 Port router to Vindhyachal STPS, Stage-II, an amount of (-) Rs.3.23 lakh has been excluded since the capitalization of the same for the purpose of tariff was not allowed by the Commission for the period 1997-2001. The exclusion is in order and hence is allowed.

As such, the exclusion of (-) Rs.710.70 lakh is allowed.____

- (c) **Replacement exclusions:** An amount of (-) Rs.7.67 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, road roller, Matador, construction equipment 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 equipment, the petitioner has submitted that the equipment has become unserviceable and hence was de-capitalised from books of accounts as a requirement of Accounting

Standard, as also that the investment made in such equipment has 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 a generic term and do not refer specifically to cars, bus, Matador etc. which were in fact included in the capital cost for tariff purpose. This was clarified by the petitioner during hearing on 27.1.2005. Accordingly, re-inclusion of such items cannot be allowed as these assets are not in use. As regards unserviceable construction equipment, it is noted that the item was part of the admitted cost and has been de-capitalised on becoming unserviceable. The equipment is no longer in use. As such, its re-inclusion as replacement cannot be allowed. Hence, exclusion of an amount of Rs. (-) 7.67 lakh for 2001-2004 is not allowed and has been de-capitalised.

(d) Exclusion of balance payments of works not admitted by the

Commission : An amount of (-) Rs.18.79 lakh has been excluded on works not admitted by the Commission earlier . Since the original works were not allowed earlier, 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.

(e) Exclusion of unserviceable capital spares: An amount of (-) Rs. 115.49

lakh has been excluded under this head. The justification for excluding the negative entries arising out of decapitalisation of unserviceable capital spares, as sought to be furnished by the petitioner is that capital spares were decapitalised from the books of accounts as they were declared unserviceable. Capitalisation of capital spares for tariff purposes was not

permitted by the Commission earlier, therefore, decapitalisation of the same may be excluded for the revision of tariff due to additional capitalisation.

It is, however, not clear from the petition that these capital spares were part of the capital cost for tariff purpose as initial spares or were part of the capital spares disallowed by the Commission during additional capitalisation petitions for the period 2000-2001. The petitioner vide affidavit dated 29.4.2005 has informed that these initial spares are part of the capital spares disallowed by the Commission during 2000-2001. Considering the above, the exclusion appears to be in order and is allowed as the capitalization of the asset was not allowed for the purpose of tariff and therefore, its decapitalisation shall also be excluded.

Additional capital expenditure within the scope of approved cost

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

- (a) **Balance payments against admitted works:** The balance payments of Rs. 10.41 lakh against admitted works has been allowed as the expenditure is within the approved cost.
- (b) **Expenditure on new works within approved cost :** The petitioner has claimed capital expenditure of Rs. 4400.17 lakh on new works within

approved cost. It is observed that majority of the items covered under this head can be classified in following categories:

- (i) Civil works relating to raising of ash dyke and associated pipeline works.
- (ii) Works relating to R&M activities approved by CEA .
- (iii) Works relating to Environmental Action Plan (EAP) approved by CEA .

The works relating to raising of ash dykes are taken up in stages and this is the normal practice. The expenditure relating to Environmental Action Plan has been found to be in order and is allowed.

As regards works relating to R&M activities, it is to mention that in the past period prior to 2001, there have been instances when R&M expenses on certain works/items were disallowed by the Commission because the petitioner had failed to satisfy the Commission regarding benefits to the beneficiaries in view of the relaxed norms of operation. 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 have been prescribed. Further, in the light of severe power shortages in the country and large capital requirements 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 check, so that the generating capacity of the generating stations is not allowed to deteriorate and consumers are not made to suffer on account of capacity degradation or breakdown of the

generating station . Singraulli STPS is in operation since June, 1982 (date of commercial operation of Unit-I). As such, it is desirable to allow expenditure on R&M activities as approved by CEA.

However, it is observed that the decapitalisation of replaced assets was not effected for some of the assets capitalised . Subsequently, the petitioner vide affidavits dated 28.4.2005 and 6.5.2005 has informed of the decapitalisation amount against some of the replaced assets. Accordingly, the amount to be capitalised for the purpose of tariff has been worked out after reducing the decapitalisation amount furnished by the petitioner irrespective of the fact that the same will be decapitalised in the books of accounts in the year 2004-05. The capitalisation for the purpose of the tariff has been disallowed wherever decapitalisation of the replaced assets has not been effected. Further, it is observed that the capitalized amount on certain activities/works approved by CEA has exceeded the approved estimates.

The petitioner vide affidavit dated 6.5.2005 has sought 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 estimates approved by CEA has been accepted.

Based on the above methodology an amount of Rs. 4382.32 lakh out of the claimed amount of Rs. 4400.17 lakh, has been found to be justified under

this head and is allowed. The year-wise break up of the claimed and allowable/disallowable capital expenditure under this head is as follows:

(Rs. in lakh)

Year	Claimed	Allowed	Disallowed
2001-02	1130.47	1125.17	5.30
2002-03	2979.94	2973.79	6.15
2003-04	289.75	283.35	6.40
Total	4400.17	4382.32	17.85

Additional capital expenditure not within the scope of approved cost:

13. (a) **Balance payments against works not permitted by the Government of India/Commission:** An amount of Rs.4.08 lakh claimed under this head not admitted by the Commission is not allowed.

(b) **Expenditure on new works:** An amount of Rs. 811.08 lakh has been claimed by the petitioner towards expenditure incurred on new works beyond the scope of approved cost. On scrutiny, it is observed that for certain items replaced by the petitioner, the corresponding de-capitalisation of the replaced assets was not effected. The petitioner, subsequently, vide its affidavits dated 28.4.2005 and dated 6.5.2005 submitted the gross value of the assets replaced for the purpose of de-capitalisation. After a prudent check, the expenditure of Rs. 689.13 lakh against the claimed amount of Rs. 811.08 lakh has been found admissible for capitalisation for the purpose of tariff and has been allowed. The year-wise break-up of the amount claimed and that found to be admissible under this head is as under:___

(Rs. in lakh)

Year	Claimed	Allowed	Disallowed
2001-02	218.92	137.25	81.67

2002-03	243.67	233.66	10.01
2003-04	348.49	318.22	30.27
Total	811.08	689.13	121.95

- (c) **Expenditure on spares not within the approved cost:** The petitioner has claimed expenditure of Rs.2101.41 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 the petitioner, it is imperative to maintain stock of these spares in capital account of spares.

It is observed that the units of the generating station are 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.

- (d) **Expenditure on replacement of assets:** An amount of (-)Rs.28.34 lakh has been claimed with proper decapitalization of old assets at the gross book value.

However, it is observed that after decapitalising the gross book value of the replaced asset the petitioner has capitalised the salvage value of the same asset at 10% of the gross book value. The same is not being allowed for the purpose of tariff. Based on above

methodology an amount of Rs.44.46 lakh qualifies for the purpose of tariff out of claimed amount of (-)Rs.28.34 lakh. The apparent difference in approved and claimed amount is due to shifting of an amount of (-) Rs. 73.53 lakh corresponding to the decapitalisation for the year 2003-04 to the year 2001-02, that is, the year of capitalisation of new assets.

(e) **Inter-unit transfers:** An amount of Rs. 8.48 lakh has been claimed under this head on account of permanent transfer of following assets-

(i) Valve cone with spindles from other generating stations of the petitioner: Such assets are of the nature of maintenance spares. Such inter-unit transfers to the old generating stations like the instant one can only be allowed for replacement of assets, which have outlived their useful life with proper decapitalisation of the old assets. However, the decapitalisation of old asset which were replaced through inter-unit transfer has not been indicated. As such, the capitalization of these assets which are of the nature of spares is not allowed.

(ii) Gate valve assembly and 4 Port router from the instant generating station to other stations: Negative entries arising out of such permanent transfers from the generating station is allowed.

As such an amount of (-) Rs. 5.09 lakh has been found to be justified out of claimed amount of Rs. 8.48 lakh and is allowed.

14. In light of the above discussions, the following additional expenditure is admissible and is allowed:

(Rs.in lakh)

Details of additional capitalization	2001-02	2002-03	2003-04	Total
(A) Within the Scope of approved Cost or Admitted works by the Central Government/Commission				
(a)Balance payment against works admitted by Central Government/Commission (Category-10A)	(-)3.81	(-)10.25	3.64	(-)10.41
(b)New works within approved Revised Cost Estimates (Category-21A)	1125.17	2973.79	283.35	4382.32
Sub Total (A)	1121.37	2963.54	287.00	4371.91
(B) Not within the Scope of approved Cost and works not admitted by the Commission				
(a) Balance payment against works not admitted by Commission (Category 10B)	0.00	0.00	0.00	0.00
(b) New works not in approved Revised Cost Estimates (Category-21B)	137.25	233.66	318.22	689.13
(c) Spares not in approved cost (Category-22B)	0.00	0.00	0.00	0.00
(d) Replacements	(-)3.15	102.50	(-)54.90	44.45
(e)Inter unit transfer(Category 11)	0.00	0.00	(-)5.09	(-)5.09
Sub-total (B)=(a)+(b)+(c)+(d)+(e)	134.10	336.15	258.24	728.49
Total of Additional Capitalisation (A)+(B)	1255.47	3299.69	545.24	5100.40
Exclusions not permitted (C)				
Replacement exclusions	(-)5.90	(-)1.77	0.00	(-)7.67
Sub-total (C)	(-)5.90	(-)1.77	0.00	(-)7.67
Additional Capitalisation allowed (A)+(B)+(C)	1249.57	3297.92	545.24	5092.73

15. 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.

16. 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.

17. 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 the Commission	1086.96
Additional capitalization for 2001-2002	12.50
Capital cost as on 1.4.2002	1099.46
Additional capitalization for 2002-2003	32.98

Capital cost as on 1.4.2003	1132.44
Additional capitalization for 2003-2004	5.45
Capital cost as on 31.3.2004	1137.89

18. As such opening capital cost for the purpose of tariff for the period 2004-09 as on 1.4.2004 shall be Rs. 1137.89 Crore excluding FERV for the period 2001-04.

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

Sd/-

(K.N.SINHA)
MEMBER

Sd/-

(ASHOK BASU)
CHAIRMAN

New Delhi, Dated the 7th July 2005