

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 126/2009 with IA. No.38/2009

Coram

- 1. Shri.S.Jayaraman, Member**
- 2. Shri V.S. Verma, Member**

Date of hearing: 9.2.2010

Date of order: 15.6.2010

In the matter of

Determination of impact of additional capital expenditure incurred during the years 2006-07, 2007-08 and 2008-09 on fixed charges in respect of Kahalgaon Super Thermal Power Station, Stage-I (840 MW).

And in the matter of

NTPC Ltd, New Delhi

.....Petitioner

Vs

1. West Bengal State Electricity Board, Kolkata
2. Bihar State Electricity Board, Patna
3. Jharkhand State Electricity Board, Ranchi
4. Grid Corporation of Orissa Ltd., Bhubaneswar
5. Damodar Valley Corporation, Kolkata
6. Power Department, Govt. of Sikkim, Gangtok
7. Tamil Nadu Electricity Board, Chennai
8. Union Territory of Pondicherry, Electricity Deptt, Pondicherry
9. Uttar Pradesh Power Corporation Ltd, Lucknow
10. Power Development Department, Govt. of J&K, Srinagar
11. Power Deptt. Union Territory of Chandigarh, Chandigarh
12. Madhya Pradesh Power Trading Ltd., Jabalpur
13. Gujarat Urja Vikas Nigam Limited, Baroda
14. Electricity Deptt, Administration of Daman & Diu, Daman
15. Electricity Deptt. Administration of Dadra and Nagar Haveli, Silvassa
16. BSES Rajdhani Power Limited, New Delhi
17. BSES Yamuna Power Limited, Delhi
18. North Delhi Power Ltd, New Delhi
19. Maharashtra State Electricity Distribution Company Ltd., Mumbai... Respondents

The following were present

1. Shri V.K.Padha, NTPC
2. Shri Ajay Dua, NTPC
3. Shri D.Kar, NTPC
4. Shri R.B Sharma, Advocate, BSEB
5. Shri R.Krishnaswami, TNEB
6. Shri S.Balaguru, TNEB

ORDER

The petitioner, NTPC, has made this application for approval of the revision of fixed charges in respect of Kahalgaon Super Thermal Power Station, Stage-I (840 MW) (hereinafter referred to as "the generating station") for the period 2006-09, after accounting for additional capital expenditure incurred during 2006-07, 2007-08 and 2008-09, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as "the 2004 regulations"). The petitioner has made the following specific prayers:

- (a) *Approve the impact on fixed charges for 2004-09 (Annexure-I) for this station due to:*
 - (i) *inclusion of disallowed capital liabilities of Rs.164.90 lakh and Rs.1.04 Lacs for the years 2004-05 and 2005-06, respectively in CERC order dated 29.9.2008 and corrigendum to the order dated 11.12.2008 in Petition No. 27/2007 into capital base for tariff for the years 2005-06 & 2006-07, respectively as per Hon'ble ATE Judgment brought out in para -8 above.*
 - (ii) *additional capital expenditure incurred during 2006-07, 2007-08 & 2008-09.*
- (b) *Allow the recovery of filing fee of this petition from the beneficiary respondents.*
- (c) *allow the recovery of Income Tax from the respondents on account of any additional billing arising out of determination of revised tariff for the period 2004-09 and being billed after march 2009.*
- (d) *pass any other order in this regard as the Hon'ble Commission may find appropriate in the circumstances pleaded above.*

2. The generating station has a capacity of 840 MW comprising of 4 units of 210 MW each. The date of commercial operation of the generating station was 1.8.1996. The Commission by its order dated 23.11.2006 in Petition No. 120/2005 determined the tariff for the generating station for the period 2004-09. Subsequently, the Commission by orders dated 29.9.2008 and 11.12.2008 in Petition No.27/2007 revised the annual fixed charges on account of additional capital expenditure incurred during the years 2004-05 and 2005-06 based on the capital cost as under:

(Rs. in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Opening Capital Cost	202704	203442	203488	203488	203488
Additional capital expenditure	737.66	46.12	0.00	0.00	0.00
Closing Capital Cost	203442	203488	203488	203488	203488

3. The Commission by its order dated 11.1.2010, further revised the annual fixed charges of the generating station for the period 2004-09 on account of capitalization of FERV on normative basis against loan (instead of equity) as under:

(Rs in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	644.70	67.25	0.00	0.00	0.00
Interest on Working Capital	2688.19	2705.31	2680.15	2715.05	2741.88
Depreciation	7462.34	7462.34	4444.68	4444.68	4444.68
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	14104.80	14104.80	14104.80	14104.80	14104.80
O & M Expenses	8736.00	9088.80	9450.00	9828.00	10222.80
TOTAL	33636.02	33428.50	30679.63	31092.53	31514.15

4. Reply to the petition has been filed by the respondents BSEB, TNEB and UPPCL.

INTERLOCUTORY APPLICATION

5. The petitioner has filed interlocutory application (I.A No.38/2009) for amendment of Annexure-I to the petition taking into account the revised calculations for fixed charges on the principles laid down in the tariff orders dated 23.11.2006, 29.9.2008 and 11.12.2008 of the Commission and the judgment dated 13.6.2007 of the Appellate Tribunal in Appeal Nos. 139 to142 etc of 2006 against the various tariff orders of the Commission for the period 2004-09 in respect of the generating stations of the petitioner and judgment dated 16.3.2009 in Appeal Nos. 133, 135 etc of 2008 as regards consideration of un-discharged liabilities.

6. The respondent No. 7 (TNEB) has submitted that the prayer in the interlocutory application for amendment of Annexure-I of the petition based on revised calculations after taking into account the judgment dated 13.6.2007 of the Appellate Tribunal in Appeal Nos 139,140 etc of 2006 could not be permitted as it is against the interim order dated 10.12.2007 in Civil Appeal No. 5434 of 2007 pending before the Hon'ble Supreme Court. The respondent has also submitted that the petitioner's claim for undischarged liabilities could not be considered by the Commission at this stage, since the Hon'ble Supreme Court had ordered notices on the stay and the appeal, in the Civil Appeal filed by it. The learned counsel for the respondent No. 2 (BSEB) has also submitted that the prayer of the petitioner for consideration of capital expenditure based on the judgment dated 16.3.2009 of the Appellate Tribunal is not legally tenable since the orders of the Commission dated 29.9.2008 and 11.12.2008 had attained finality. In response, the

petitioner has submitted that the prayer in the interlocutory application should be allowed in terms of the judgments of the Appellate Tribunal dated 13.6.2007 and 16.3.2009, since the same has not been stayed by the Hon'ble Supreme Court.

7. We now proceed to discuss as to whether the prayer of the petitioner for determination of tariff based on the revised calculations on the principles laid down in the judgments of the Appellate Tribunal dated 13.6.2007 and 16.3.2009 in Appeal Nos. 139 to 142 etc of 2006 and Appeal Nos. 133, 135 etc of 2008 can be considered.

8. The petitioner filed Appeal Nos. 139 to 142 etc of 2006 before the Appellate Tribunal challenging the various orders of the Commission determining tariff for its generating stations during the period 2004-09. The Appellate Tribunal by its judgment dated 13.6.2007 allowed the said appeals and remanded the matters for re-determination by the Commission. Against the said judgment the Commission has filed 20 appeals before the Hon'ble Supreme Court (in C.A. Nos. 5434/2007 to 5452/2007 and 5622/2007) on issues such as:

- (a) Consequences of refinancing of loan;*
- (b) Treating of depreciation as deemed repayment of loan;*
- (c) Cost of maintenance spares related to additional capitalization;*
- (d) Depreciation availability up to 90% in the event of dis-incentive; and*
- (e) Impact of de-capitalization of assets on cumulative repayment of loan*

9. The Hon'ble Supreme Court on 26.11.2007 granted an interim order of stay of the operation of the order dated 13.6.2007 of the Appellate Tribunal. However, on 10.12.2007, the Hon'ble Supreme Court passed an interim order as under:

"Learned Solicitor General appearing on behalf of the National Thermal Power Corporation stated that pursuant to the remand order, following five issues shall not be pressed for fresh determination:

- (a) Consequences of refinancing of loan;*
- (b) Treating of depreciation as deemed repayment of loan;*
- (c) Cost of maintenance spares related to additional capitalization;*
- (d) Depreciation availability up to 90% in the event of disincentive; and*
- (e) Impact of de-capitalization of assets on cumulative repayment of loan*

The Commission may, however, proceed to determine other issues.

It is clarified that this order shall apply to other cases also.

In view of this, the interim order passed by the Court on 26th November, 2007, is vacated. The interlocutory applications are, accordingly, disposed of."

10. The petitioner in its application has submitted that it has been advised that the statement of the Solicitor General of India (SGI) before the Hon'ble Supreme Court resulting in the interim order dated 10.12.2007 does not restrict it from claiming additional capitalization based on the principles laid down by the Appellate Tribunal in its judgment dated 13.6.2007 and that the effect of the statement of SGI was that it would not seek fresh determination pursuant to the remand order. The petitioner has also submitted that the Hon'ble Supreme Court has not stayed further proceedings before the Commission for determination of additional capitalization and even if it was construed as stay, the decision of the court (Appellate Tribunal) does not become *non est*.

11. The Hon'ble Supreme Court in its interim order dated 26.11.2007 had granted stay of the operation of the judgment dated 13.6.2007 of the Appellate Tribunal. In view of the undertaking given by the Solicitor General of India on behalf of the petitioner that "the five issues shall not be pressed for fresh determination", the Hon'ble Supreme Court vacated the interim order dated

26.11.2007 and directed that "the Commission may proceed to determine the other issues". It was clarified that "this order shall apply to other cases also". It is the contention of the petitioner that the undertaking before the Hon'ble Supreme Court does not restrict it from claiming additional capitalization based on the principle laid down by the Appellate Tribunal. In our view, the undertaking given by the petitioner before the Hon'ble Supreme Court that "the five issues shall not be pressed for fresh determination" is binding on the petitioner and the petitioner is estopped in law from seeking fresh determination of these issues. Moreover, the petitioner seems to create a distinction between the main tariff petition and the petition for additional capitalization by stating that while the undertaking is confined to the remand order pertaining to the main petition, the additional capitalization can be considered as per the principles laid down by the Appellate Tribunal. Such an approach will lead to dichotomous situation wherein tariff for the main petition and petition for additional capitalization are determined on the basis of different principles. The tariff for the period 2004-09 is a complete package which needs to be determined on the same principle. From the point of view of regulatory uniformity and continuity and also in line with the spirit of the interim order of the Hon'ble Supreme Court, we are of the view that the implementation of the judgment of the Appellate Tribunal on the five issues should be deferred till the final disposal of the said Civil Appeals by the Hon'ble Supreme Court. Accordingly, the impact of additional capitalization on the fixed charges is determined on the basis of the existing principles, subject to the final outcome of the Civil Appeals pending before the Supreme Court.

12. One more prayer of the petitioner in the application is for revision of capital cost of the generating station considering the undischarged liabilities, in terms of the judgment of the Appellate Tribunal dated 16.3.2009 in Appeal Nos. 133,135 etc of 2008.

13. The Commission in some of the petitions filed by the petitioner (Rihand and Ramagundam generating stations) revised the tariff for the period 2004-09 based on additional capital expenditure incurred, after deducting undischarged liabilities, on the ground that "*the expenditure for the liability incurred for which payment was not made would not come under the category 'actual expenditure incurred'*". Against the orders, appeals were filed by the petitioner before the Appellate Tribunal (Appeal No 151&152/2007) and the Appellate Tribunal by its judgment dated 10.12.2008 held as under:

"25. Accordingly, we allow both the appeals in part. We direct that the appellant be allowed to recover capital cost incurred including the portion of such cost which has been retained or has not yet been paid for. We also direct that in case the Commission attributes any loan taken at the corporate level to a particular project under construction and considers any repayment out of it before the date of commercial operation the sum deployed for such repayment would earn interest as pass through in tariff.

26. The Commission is directed to give effect to the directions given herein in the truing up exercise and consequent subsequent tariff orders."

14. Similar appeals (Appeal Nos.133, 135,136 and 148/2008) were filed by the petitioner before the Appellate Tribunal against the orders of the Commission in respect of other generating stations by the petitioner on the question of deduction of undischarged liabilities, IDC etc. The Appellate Tribunal, following its judgment

dated 10.12.2008 *ibid*, allowed the claim of the petitioner and directed the Commission to give effect to the directions contained in the said judgments.

15. Against the judgments of the Appellate Tribunal dated 10.12.2008 and 16.3.2009 above, the Commission has filed Civil Appeal Nos. 4112-4113/2009 and Civil Appeal Nos. 6286 to 6289/2009 before the Hon'ble Supreme Court. These Civil Appeals are pending and there is no stay of the operation of the judgments of the Appellate Tribunal. Accordingly, it has been decided to revise the tariff of the generating station in terms of the directions contained in the judgment *ibid* subject to the final outcome of the appeals before the Supreme Court.

16. The Appellate Tribunal in its judgment dated 10.12.2008 had directed that the capital cost incurred in respect of the generating station including the portion of such cost which has been retained or has not been paid for shall be recovered in tariff. In other words, un-discharged liability in respect of works which have been executed but payments deferred for future date has to be capitalized. As regards IDC, if the loan amount has been repaid out of the internal resources before the date of commercial operation, such repayments would earn interest. The Commission has been directed by the Appellate Tribunal to give effect to the directions contained in the judgment in the truing up exercise and subsequent tariff orders.

17. The directions of the Appellate Tribunal pertain to additional capitalization for the tariff period 2004-09 which has come to an end on 31.3.2009 and the exercise for implementation of the directions have been undertaken after the

expiry of the said tariff period. Accordingly, tariff of the generating station is revised after considering the additional capital expenditure, capitalization of undischarged liabilities and IDC after truing up of the expenditure as on 31.3.2009. While truing up, the liabilities discharged, liabilities reversed on account of de-capitalization of assets during the tariff period have been accounted for.

18. The Interlocutory Application No. 38/2009 is disposed of as above. We now proceed to consider the petition on merits.

19. The details of the additional capital expenditure for the period 2006-07, 2007-08 and 2008-09 claimed by the petitioner is as under:

Year	(Rs. in lakh)		
	2006-07	2007-08	2008-09
Additional capital expenditure	215.97	109.68	275.26

Additional Capitalization

20. Regulation 18 of the 2004 regulations provides for considering the additional capital expenditure for tariff as under:

"18. (1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission, subject to prudence check:

- (i) Deferred liabilities;*
- (ii) Works deferred for execution;*
- (iii) Procurement of initial capital spares in the original scope of work, subject to ceiling specified in regulation 17;*
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
- (v) On account of change in law.*

Provided that original scope of work along with estimates of expenditure shall be submitted along with the application for provisional tariff.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the generating station. .

(2) Subject to the provisions of clause (3) of this regulation, the capital expenditure of the following nature actually incurred after cut off date may be admitted by the commission, subject to prudence check:

(i) Deferred liabilities relating to works/services with in the original scope of work;

(ii) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

(iii) On account of change in law;

(iv) Any additional works/services which have become necessary for efficient and successful operation of the generating station, but not included in the original project cost; and

(v) Deferred works relating to ash pond or ash handling system in the original scope of work.

(3) Any expenditure on minor items/assets like normal tools and tackles, personal computers, furniture, air-conditioners, voltage stabilizers, refrigerators, fans, coolers, TV, washing machine, heat-convectors, carpets, mattresses etc. brought after the cut off date shall not be considered for additional capitalization for determination of tariff with effect from 1.4.2004.

(4) Impact of additional capitalization in tariff revision may be considered by the Commission twice in a tariff period, including revision of tariff after the cut-off date.

Note 2

Any expenditure on replacement of old assets shall be considered after writing off the gross value of the original assets from the original project cost, except such items as are listed in clause (3) of this regulation."

Note 3

Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 20.

Note 4

Any expenditure admitted by the Commission for determination of tariff on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified in regulation 20 after writing off the original amount of the replaced assets from the original capital cost."

21. The additional capital expenditure claimed as per books of accounts is as under:

	(Rs.in lakh)		
	2006-07	2007-08	2008-09
Total additional expenditure of the generating station as per books of accounts (A)	470.38	278.40	(-) 1024.45
Exclusions for additional capitalization vis-à-vis books of accounts (B)	254.41	168.72	(-) 1299.71
Total additional capitalization (A-B)	215.97	109.68	275.26

22. The summary of exclusions from the books of accounts claimed is as under:

	(Rs in lakh)		
Description	2006-07	2007-08	2008-09
Capital spares (Capitalized)	254.41	311.81	225.35
Capital spares (De-capitalized)	0.00	(-) 215.33	(-) 148.93
Inter-unit transfer	0.00	72.24	(-) 29.55
Unserviceable assets (De-capitalized)	0.00	0.00	(-) 19.18
FERV	0.00	0.00	(-) 1327.41
Total Exclusions	254.41	168.72	(-) 1299.71

Exclusions

23. In the first instance, we consider the exclusions under different heads in the claim.

(a) **Capitalisation of spares:** The petitioner has procured spares amounting to Rs.254.41 lakh, Rs.311.81 lakh and Rs.225.35 lakh for the period 2006-07, 2007-08 and 2008-09 respectively. Since capitalization of spares over and above initial spares procured after cut-off date are not allowed for the purpose of tariff, as they form part of O&M expenses when consumed, the petitioner has excluded the said amounts. The exclusion of the said amounts under this head is allowed.

(b) **De-capitalization of spares:** The petitioner has de-capitalized capital spares in books amounting to Rs.215.33 lakh, Rs.148.93 lakh during the years 2007-08 and 2008-09, respectively on their becoming un-serviceable. The petitioner has also prayed that negative entries arising out of de-capitalization of the assets be retained in the capital base for the purpose of tariff. The ground on which the exclusion is sought by the petitioner is as under.

"Capitalization as well as de-capitalization of capital spares is not being claimed since the same are not being allowed as part of capital cost by CERC."

The prayer of the petitioner for exclusion of de-capitalized spares is justified if these de-capitalized spares are the ones which were disallowed for the purpose of tariff. The petitioner vide affidavit dated 26.11.2009 has certified that-

"The amount of de-capitalized spares indicated in the exclusions for the year 2007-08 and 2008-09 in petition no. 126/2009 is on account of consumption of those spares which were not allowed in tariff."

In view of the above, the exclusion of de-capitalized spares for the purpose of tariff is allowed, since any consumption out of spares which are not a part of capital cost is to be eventually booked in O&M for purposes of tariff and as such the component/spares taken out of service for such replacement is not de-capitalized for the purpose of tariff. To elaborate, in case a revenue spare like "coupling bolt" is consumed under regular repair and maintenance activity under O&M, then the original bolt taken out of service is not de-capitalized for the purpose of tariff. Hence, by extending the same treatment to the capital spares which were disallowed for the purpose of tariff, their subsequent consumption under O&M does not warrant the de-capitalization of original component/spares.

(c) **Inter-unit transfers:** The petitioner has excluded amounts of Rs. 72.24 lakh and (-) Rs. 29.55 lakh during the years 2007-08 and 2008-09 on account of inter-unit transfer

of 1055 BLC Tata Crane and Traction Generator from and to other generating stations of the petitioner. The petitioner has submitted that the Commission in the past had permitted exclusion of such temporary transfers for tariff purposes and allowed it to be retained in the capital base of the originating station. Accordingly, the petitioner has excluded the amounts as per the entries in the books of accounts for its claim for additional capitalization. The Commission while dealing with application for additional capitalization in respect of other generating stations of the petitioner has decided that both positive and negative entries arising out of inter-unit transfers of temporary nature shall be ignored for the purposes of tariff. In consideration of the said decisions, the exclusion of the amount of Rs. 72.24 lakh and (-) Rs. 29.55 lakh on account of inter-unit transfer of assets is allowed.

(d) **De-capitalization of unserviceable assets:** The petitioner has de-capitalized an amount of (-) Rs 19.18 lakh in books of accounts during 2008-09, in respect of unserviceable assets (10 nos. of wagons). However, the petitioner has prayed that negative entries arising out of de-capitalization of these assets be retained in the capital base for the purpose of tariff. The ground on which the exclusion is sought by the petitioner is as under:

“Procurement action for capitalization against the same is in progress. De-capitalization of these wagons may be considered at the time of capitalization.”

The petitioner's prayer for exclusion of negative entries arising due to de-capitalization of unserviceable assets on the ground that corresponding new assets would be purchased in future, is not allowed as these assets do not provide service to the beneficiaries. The petitioner is at liberty to approach the Commission

after procurement of new assets.

(e) **FERV:** The claim for exclusion of an amount of (-) Rs.1327.41 lakh for the year 2008-09 on account of FERV is allowed, as the petitioner has billed the said amount directly to the beneficiaries in accordance with the 2004 regulations.

24. In view of the above discussions, the following amounts have been allowed:

(Rs in lakh)			
Description	2006-07	2007-08	2008-09
Capital spares (Capitalized)	254.41	311.81	225.35
Capital spares (De-capitalized)	0.00	(-) 215.33	(-) 148.93
Inter-unit transfer	0.00	72.24	(-) 29.55
Unserviceable assets (De-capitalized)	0.00	0.00	0.00
FERV	0.00	0.00	(-) 1327.41
Total Exclusions allowed	254.41	168.72	(-) 1280.53

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

(Rs.in lakh)			
Nature of Capitalization	2006-07	2007-08	2008-09
Deferred liabilities relating to works with in original scope of work- 18(2)(i)	(-) 24.05	0.40	0.00
Award of arbitration or for compliance of the order or decree of a court- (18(2)(ii))	2.60	79.73	186.49
Any additional works/ services which have become necessary for efficient and successful operation of the generating station but not included in the original project cost- 18(2)(iv)	32.51	29.55	109.58
Deferred works relating to ash pond or ash handling system in original scope of work- 18(2)(v)	204.91	0.00	0.00
De-capitalization/ Replacement	0.00	0.00	(-) 20.81
Total	215.97	109.68	275.26

26. After examining the asset-wise details and justification for additional capitalization claimed by the petitioner, under various categories and by applying prudence check, the admissibility of additional capitalization is discussed in the

subsequent paragraphs.

Deferred liabilities relating to works within the original scope of work: Regulation 18 (2) (i)

27. The petitioner has claimed amounts of (-) Rs.24.05 lakh and Rs.0.40 lakh under this head for the years 2006-07 and 2007-08 respectively, as shown under:

Description	(Rs in lakh)	
	2006-07	2007-08
Supply & Erection of TG & SG	7.47	0.00
Construction of boundary wall for administrative building	7.76	0.00
400 kV switchyard extension works	(-) 39.28	0.00
Fire detection & protection system	0.00	0.40
Total	(-) 24.05	0.40

28. The expenditure incurred by petitioner on "supply & erection of TG & SG" and "fire detection & protection system" is in the nature of capital expenditure actually incurred towards deferred liabilities, on account of balance payments relating to works/services within the original scope of work already admitted by the Commission. Hence, capitalization of Rs.7.47 lakh and Rs.0.40 lakh for the years 2006-07 and 2007-08, respectively is allowed under this head.

29. In respect of expenditure of Rs.7.76 lakh on "construction of boundary wall for administrative building" the petitioner has submitted that these works are part of the scope of approved project cost. From the justification submitted by the petitioner, it appears that the expenditure is in the nature of deferred works and not deferred liability. In terms of the 2004 regulations, capitalization of expenditure on account of deferred works, after the cut-off date, is not permissible. In view of this, the petitioner's claim for expenditure on this count is not allowed.

30. The petitioner's claim for expenditure of (-) Rs.39.28 lakh on "400 KV switchyard extension works" the petitioner vide its rejoinder affidavit dated 9.11.2009, in reply to the reply of the respondent BSEB has submitted that -

"the amount of (-) Rs.3927936 during the year 2006-07 (sl. no. 3 / Annexure-6) indicated as final payment adjustment in work CS:4210:572:9:SU:LOA:4176/4179 is a part of un-discharged liability declared by petitioner at Row No. 13 of Annex-I in the additional submission for additional capitalization petition (Petition No. 27/2007) for 2004-06. The respondent's understanding that it is the outcome of non-certification of additional capital expenditure by auditors or out of any error committed by petitioner and wrongly admitted by Hon'ble Commission and hence needs correction with retrospect effect, is wrong and incorrect. Hence, respondent's contention may be rejected."

31. In view of the fact that the amount claimed do not form part of capital base and is on account of reversal of liabilities which was earlier not allowed, the capitalization of negative entry is not allowed.

Liabilities to meet award of arbitration or for compliance of order or decree of a court: Regulation 18 (2) (ii)

32. The petitioner has claimed amounts of Rs.2.60 lakh, Rs.79.73 lakh and Rs.143.05 lakh for the years 2006-07, 2007-08 and 2008-09, respectively on account of payments made towards enhanced compensation for the land acquired in terms of the order of the Court. The Commission directed the petitioner to submit copies of Court orders along with details of land acquired and land for which enhanced compensation has been paid and the petitioner vide its affidavit dated 23.3.2010 has furnished copies of the same. The expenditure incurred is found to be in order and hence allowed to be capitalized.

33. In addition to the above, the petitioner has also claimed an amount of Rs.43.45 lakh for the year 2008-09 under this head, in respect of expenditure towards "construction of GM bungalow" and "erection, testing & commissioning of TG & Aux." pursuant to the Award made by the Court. The expenditure is in order and allowed to be capitalized.

Additional works/services necessary for efficient and successful operation of the generating station, but not included in the original project cost- Regulation 18 (2)(iv)

34. The petitioner has claimed expenditure of Rs.32.51 lakh, Rs.101.55 lakh and Rs.109.58 lakh in respect of "replacement of economizer stage-I in boiler" under this head, for the years 2006-07, 2007-08 and 2008-09, respectively. In addition, the petitioner has de-capitalized an amount of Rs.72.00 lakh during the year 2007-08 against capitalization of Rs.32.51 lakh and Rs.101.55 lakh during the year 2006-07 and 2007-08, respectively. The petitioner has submitted that an amount of Rs.88.00 lakh was the estimated de-capitalization against the capitalization of Rs.109.58 lakh claimed during the year 2008-09. The petitioner has submitted the justification for such expenditure as under:

"Replacement of Economiser Stage-1 in boiler, rendered un-serviceable due to severe erosion as a result of design deficiency. De-capitalization against the same done during 2007-08 at sl. No.4."

35. The respondents UPPCL and BSEB have objected towards capitalization of the asset. The petitioner, during the hearing has clarified that the word 'design deficiency' has been used wrongly. The petitioner also submitted that the replacement of economizer tubes were necessary due to their frequent failures

due to poor quality of coal being supplied to the generating station than the coal for which it was designed. The petitioner has further submitted that the boilers were designed to burn coal with ash content from 35-40% and that the coal received in the generating station in the last few years contained ash up to 45-50%.

36. In order to substantiate the above, the Commission, directed the petitioner to furnish information on the following:

- (i) Nature of problems leading to replacement of economizers of boilers of Stage-I may be elaborated clearly and to clarify as to whether similar problems have been witnessed at Farakka STPS or not.*
- (ii) Design coal quality, Range of coal quality for which boilers were designed and actual quality of coal being fed to the boilers in Kahalgaon and Farakka STPS (for last five years).*
- (iii) Average PLF of Kahalgaon STPS since its COD.*

37. In response, the petitioner vide its affidavit dated 23.3.2010 has furnished information as under:

- (a) Consequent upon removal of various bottlenecks e.g. power evacuation from eastern region, coal supply augmentation through Indian Railways from various other CIL mines, generation at Kahalgaon Stage-I units improved from a PLF-level of less than 55% before 1999-00 to above 80% after 2002-03. However, there was significant deterioration in the coal quality.
- (b) The ash content in the coal during the above period has been observed to vary from 41.23% to 50.49 % as fired for a typical day. The ash content in the coal as fired has been found to above the design range of ash of 46% for most of time.
- (c) Erosion of support clamps in economizer stage-I caused misalignment of coils aggravating the coil-erosion problem. The severity of erosion could not be noticed earlier due to non-feasibility of in-situ inspection in case of economizer Stage-I because of very low pitch between the coils.
- (d) Failure of economizer was 5 times in the year 2003-04 and 2004-05, 4 times during 2005-06 and 2 times during 2006-07. The replacement of economizer tubes for stage-I was taken up from 2006-07 onwards and subsequently the outage had drastically come down to 'nil' during 2007-08 and once during 2008-09.
- (e) No problem was witnessed in the economizers of Farakka STPS boilers. The

reason for not encountering such problem in Farakka was that the boilers of Farakka are of BHEL design (200MW) and Ansaldo design (500MW) with conventional rotary air heaters, and whereas in Kahalgaon STPS Stage-I, the boilers were of Russian design with tubular air heater. Moreover, almost 50% of coal during 2002-03 to 2005-06 was fed to the Kahalgaon boilers from other than common-linked MGR source for Kahalgaon and Farakka STPS.

38. From the details submitted by the petitioner, it is observed that the weighted monthly GCV of coal for the period 2002-03 to 2008-09 ranges from a lowest level of 2501 kcal/kg to a highest level of 3155 kcal/kg as against the design range of quality of coal from 2700 kcal/kg to 4000 kcal/kg. It is also observed that in most of the months GCV of coal received was less than 2700 kcal/kg as against design coal GCV of 3200 kcal/kg. It also appears that the failure of economizer tubes was not on account of design deficiency but due to the poor quality of coal. The justification submitted by the petitioner is in order and hence, the claim of the petitioner on replacement of economizer is allowed in terms of Note-2 under Regulation 18, after writing off the gross value of the original assets amounting to Rs.17.46 lakh and Rs.54.54 lakh (pro-rata values of Rs.72.00 lakh de-capitalized during 2007-08) and Rs.88.00 lakh (estimated) during the years 2006-07, 2007-08 and 2008-09, respectively.

Deferred works relating to ash pond or ash handling system in original scope of work- Regulation 18(2)(v)}

39. The petitioner has claimed an amount of Rs. 204.91 lakh for raising of Ash dyke lagoon under this head, relating to ash pond, within the original scope of work. In view of the fact that raising of ash dyke is a continuous process and is required to be undertaken after 2-3 years of operation of the generating station, this expenditure is allowed under this head.

40. The petitioner has also de-capitalized an amount of Rs.20.81 lakh during the year 2008-09 on account of transfer of "500 KVA DG Set" to its North Karanpura generating station on permanent basis. In view of the fact that inter-unit transfer on temporary basis is allowed to be excluded by the Commission, the petitioner's claim for negative entry of Rs.20.81 lakh is allowed for the purpose of tariff.

Un-discharged Liabilities

41. The Commission directed the petitioner to furnish the un-discharged liabilities included in its claim for additional capital expenditure. The petitioner vide affidavit dated 26.11.2009 has submitted that un-discharged liability amounting to Rs.43.45 lakh, in respect of construction of GM bungalow and erection, testing & commissioning of TG & Aux is included in the additional capital expenditure claim. Since, the amount has been not been discharged till 31.3.2009, the same has not been allowed for capitalization.

42. In addition, the petitioner vide affidavit dated 8.2.2010, has submitted that out of liabilities amounting to Rs.164.90 lakh and Rs.1.04 lakh for the years 2004-05 and 2005-06, respectively, disallowed by the Commission vide order dated 29.9.2008, amounts of Rs.164.22 lakh (for the year 2004-05) and Rs.1.04 lakh (for the year 2005-06) has been discharged during 2006-07 and 2007-08, respectively.

43. It is observed that an amount of Rs.39.28 lakh on account of reversal of liabilities in respect of "400 KV Switchyard Extension work" has also been Included in the amount of Rs.164.22 lakh discharged during the year 2006-07 (as above). As reversal of liability is different from discharge of liability, the amount of Rs.39.28 lakh

cannot be considered as a discharged amount. Hence, liability deducted for the period 2004-05 stands reduced to Rs.125.62 lakh.

44. In view of the above, out of the liabilities disallowed earlier, amounts of Rs.124.94 lakh and Rs.1.04 lakh has been allowed as liabilities discharged during the year 2006-07 and 2007-08, respectively.

Interest During Construction (IDC)

45. The petitioner has submitted that no IDC has been included in the additional capital expenditure for the period 2006-09.

46. Based on the above discussions, the additional capital expenditure allowed for the purpose of tariff for the year 2006-09 is as under:

Nature of capitalization	(Rs. in lakh)		
	2006-07	2007-08	2008-09
Deferred liabilities relating to works/ services within the original scope of work- (18(2)(i))	7.47	0.40	0.00
Award of arbitration or for compliance of the order or decree of a court- (18(2)(ii))	2.60	79.73	186.49
Additional works for efficient & successful operation of the generating station, but not included in the original project cost- (18(2)(iv))	15.05	47.01	21.58
Deferred works relating to ash pond or ash handling system in the original scope of work- (18(2)(v))	204.91	0.00	0.00
De-capitalization on account of inter-unit transfer	0.00	0.00	(-)20.81
Add: Exclusions not allowed	0.00	0.00	(-)19.18
Less: Un-discharged liabilities included above	0.00	0.00	43.45
Add: Discharge of liabilities disallowed earlier	124.94	1.04	0.00
Net additional capital expenditure allowed for the purpose of tariff	354.97	128.19	124.64

Capital cost

47. As stated above, the Commission in its order dated 23.11.2006 in Petition No. 120/2005 had admitted the capital cost of Rs.202704.41 lakh as on 1.4.2004.

48. Taking into account the capital cost as on 1.4.2004, the additional capital expenditure earlier allowed for the years 2004-05 and 2005-06 and the additional capital expenditure approved at para 46 above, the capital cost as on 1.4.2004 is worked out as under:

(Rs. in lakh)					
Financial Year	2004-05	2005-06	2006-07	2007-08	2008-09
Opening Capital cost as on 1.4.2004	202704.41	203442.07	203488.19	203843.17	203971.35
Additional capital expenditure allowed earlier vide order dated 29.9.2008	737.66	46.12	-	-	-
Additional capital expenditure approved for 2006-09 as above	-	-	354.97	128.19	124.64
Closing Capital cost	203442.07	203488.19	203843.17	203971.35	204095.99
Average Capital cost	203073.24	203465.13	203665.68	203907.26	204033.67

Debt-Equity ratio

49. Clause (1) of Regulation 20 of the 2004 regulations provides as under:

“(1) In case of the existing generating stations, debt-equity ratio considered by the Commission for the period ending 31.3.2004 shall be considered for determination of tariff with effect from 1.4.2004:

Provided that in cases where the tariff for the period ending 31.3.2004 has not been determined by the Commission, debt-equity ratio shall be as may be decided by the Commission:

Provided further that in case of the existing generating stations where additional capitalisation has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 18, equity in the additional capitalization to be considered shall be,-

*(a) 30% of the additional capital expenditure admitted by the Commission; or
(b) equity approved by the competent authority in the financial package, for additional capitalization; or*

(c) actual equity employed,

Whichever is the least:

Provided further that in case of additional capital expenditure admitted under the second proviso, the Commission may consider equity of more than 30% if the generating company is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public”.

50. The petitioner has submitted that entire additional capital expenditure claim for the years 2006-07, 2007-08 and 2008-09 has been financed out of the internal resources. Since the equity component of additional capitalization is more than 30%, the debt equity ratio of 70:30 has been considered for additional capitalization, in terms of sub-clause (a) of clause (1) of Regulation 20 of the 2004 regulations. Accordingly, the additional notional equity of the generating station on account of capitalization approved above, works out as under:

	(Rs. in lakh)		
	2006-07	2007-08	2008-09
Additional Notional Equity	106.49	38.46	37.39

Return on Equity

51. Return on equity is allowed @ 14% on the average normative equity, as under:

	(Rs. in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Opening Equity as per order dated 11.1.2010	100748.57	100969.87	100983.71	101090.20	101128.65
Addition of Equity due to additional capital expenditure allowed vide order dated 29.9.2008 in Petition No. 27/2007	221.30	13.84	-	-	-
Addition of Equity due to additional capital expenditure approved as above	-	-	106.49	38.46	37.39
Closing Equity	100969.87	100983.71	101090.20	101128.65	101166.05
Average equity	100859.22	100976.79	101036.95	101109.43	101147.35
Return on Equity @ 14%	14120.29	14136.75	14145.17	14155.32	14160.63

Interest on loan

52. Interest on loan has been worked out as mentioned below:

(a) Gross opening loan on normative basis on 1.4.2004 as considered in order dated 11.1.2010 in Petition No.120/2005 was Rs.101955.84 lakh corresponding to the capital cost of Rs.202704.41 lakh.

(b) Cumulative repayment of loan on 1.4.2004 as considered in order dated 11.1.2010 in Petition No. 120/2005 was Rs.93490.52 lakh.

(c) Net opening loan on normative basis on 1.4.2004 as considered in order dated 11.1.2010 in Petition No. 120/2005 was Rs.8465.32 lakh.

(d) There is addition of notional loan amounting to Rs.248.48 lakh during 2006-07, Rs.89.73 lakh during 2007-08 and Rs.87.25 lakh during 2008-09.

(e) Weighted average rate of interest as considered in order dated 11.1.2010 is considered for calculation of interest on loan.

(f) Normative repayment of the normative loan has been calculated based on following formula:

$$\text{Normative repayment} = \frac{\text{Actual Repayment} \times \text{Normative Loan}}{\text{Actual Loan}}$$

(g) Normative repayment of normative loan considered is equal to the admissible depreciation for the year or normative repayment whichever is higher, as considered in the determination of the tariff for other generating stations of the petitioner for the period 2004-09. This is however subject to the final decision of the Hon'ble Supreme Court in Civil Appeal No. 5434/2007 and other related appeals.

(h) Interest on loan after considering the additional capital expenditure approved vide order dated 29.9.2008 and the additional capital expenditure allowed as above, has been computed as under:

	(Rs. In lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Opening Loan as per order dated 11.1.2010	101955.84	102472.20	102504.49	102752.97	102842.70
Cumulative Repayment of loan upto previous year	93490.52	100966.44	102504.49	102752.97	102842.70
Net Loan Opening	8465.32	1505.76	0.00	0.00	0.00
Addition of loan due to additional capital expenditure allowed vide order dated 29.9.2008	516.36	32.28	-	-	-
Addition of loan due to additional capital expenditure approved as above	-	-	248.48	89.73	87.25
Repayment of loan during the year	7475.92	1538.05	248.48	89.73	87.25
Net Loan Closing	1505.76	0.00	0.00	0.00	0.00
Average Loan	4985.54	752.88	0.00	0.00	0.00
Weighted Average Rate of Interest on Loan	13.6180%	13.4105%	13.0959%	12.4823%	10.5388%
Interest on Loan	678.93	100.97	0.00	0.00	0.00

Depreciation

53. Weighted average rate of depreciation of 3.6814% as mentioned in order dated 29.9.2008 has been used to calculate the depreciation allowed for the tariff period 2004-09. However, as the normative opening loan balance as on 1.4.2006 is 'nil', the remaining depreciation has been spread over the balance useful life of 15.55 years of the generating station from the year 2006-07. The depreciable value has been adjusted on account of additional capital expenditure allowed pertaining to land. Adjustment of cumulative depreciation on account of de-capitalization of assets has been considered in the calculations as carried out in

the tariff orders for the period 2004-09 for other generating stations of the petitioner. The necessary calculations are as under:

	(Rs. in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost	202704.41	203442.07	203488.19	203843.17	203971.35
Closing capital cost	203442.07	203488.19	203843.17	203971.35	204095.99
Average capital cost	203073.24	203465.13	203665.68	203907.26	204033.67
Depreciable value @ 90%	180319.08	180671.78	180849.93	180995.59	180980.62
Balance depreciable value	84371.36	77273.66	69961.47	65619.36	61135.02
Balance useful life	17.55	16.55	15.55	14.55	13.55
Depreciation	7475.92	7490.34	4499.13	4509.92	4511.81

Advance Against Depreciation

54. The petitioner has not claimed Advance Against Depreciation. Therefore, the petitioner's entitlement to Advance Against Depreciation is "nil".

O&M expenses

55. The O&M Expenses as considered in order dated 11.1.2010 has been considered for revision of tariff.

Target Availability

56. The target availability of 80% considered by the Commission in the order dated 11.1.2010 remains unaltered. Similarly other parameters viz. specific fuel consumption Auxiliary Power consumption and Station Heat rate etc considered in the order dated 11.1.2010 have been considered for the purpose of calculation of the revised fixed charges.

Interest on Working capital

57. For the purpose of calculation of working capital the operating parameters including the price of fuel components as considered in the order dated 11.1.2010 have been kept unchanged. The "receivables" component of the working capital

has been revised for the reason of revision of return on equity interest on loan etc. The necessary details in support of calculation of interest on working capital are as under:

(Rs. in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Coal Stock – 1.1/2 months	7059.43	7059.43	7059.43	7078.77	7059.43
Oil Stock-2 months	274.66	274.66	274.66	275.42	274.66
O & M expenses	728.00	757.40	787.50	819.00	851.90
Spares	2870.87	3043.12	3225.71	3419.25	3624.41
Receivables	15303.98	15274.54	14816.59	14915.50	14960.45
Total Working Capital	26236.95	26409.16	26163.90	26507.94	26770.85
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Total Interest on Working capital	2689.29	2706.94	2681.80	2717.06	2744.01

58. The revised annual fixed charges (after considering the impact of orders dated 29.9.2008, 11.12.2008 and 11.1.2010 and the impact of additional capital expenditure allowed in the petition) for the period from 1.4.2004 to 31.3.2009 are summarized as under:

(Rs. in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on loan	678.93	100.97	0.00	0.00	0.00
Interest on Working Capital	2689.29	2706.94	2681.80	2717.06	2744.01
Depreciation	7475.92	7490.34	4499.13	4509.92	4511.81
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	14120.29	14136.75	14145.17	14155.32	14160.63
O & M Expenses	8736.00	9088.80	9450.00	9828.00	10222.80
Total	33700.43	33523.80	30776.10	31210.31	31639.25

59. The petitioner shall claim the difference in respect of the tariff determined by order dated 11.12.2008 /11.1.2010 and the tariff determined by this order from the beneficiaries in three equal monthly installments.

60. In addition to the charges approved above, the petitioner is entitled to

recover other charges like incentive, claim for reimbursement of income-tax, other taxes, cess levied by statutory authority, in accordance with the 2004 regulations, as applicable.

61. The petitioner's claim for reimbursement of filing fees is not allowed in terms of the Commission's general order dated 11.9.2008 in Petition No. 129/2005 wherein it was directed that filing fee during the period 2004-09 would not be reimbursed, as the same has been factored in the normalized O&M expenses under the 2004 regulations.

62. Petition No.126/2009 stands disposed of in terms of the above.

**Sd/-
(V.S. VERMA)
MEMBER**

**Sd/-
(S.JAYARAMAN)
MEMBER**