

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 150/2009**

**Coram**

**Shri S.Jayaraman, Member**

**Shri M.Deena Dayalan, Member**

**DATE OF HEARING: 16.11.2010**

**DATE OF ORDER: 28.4.2011**

**In the matter of**

Revision of fixed charges for 2004-09 due to additional capital expenditure incurred during the period 2006-09 in respect of Farakka STPS, (1600 MW)

**And in the matter of**

NTPC Ltd, New Delhi

.....**Petitioner**

Vs

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

.....**Respondents**

**The following were present**

1. Shri Ajay Dua, NTPC
2. Shri Shyam Kumar, NTPC
3. Ms. Alka Saigal, NTPC



4. Shri R.B.Sharma, BSEB & GRIDCO
5. Shri Manish Garg, UPPCL

### **ORDER**

The petitioner has made this application for approval of the revised fixed charges for the period 2004-09, after considering the impact of additional capital expenditure incurred during for the years 2006-07, 2007-08 and 2008-09 in respect of Farakka STPS, (1600 MW), (hereinafter referred to as “the generating station”) 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:

- (i) *Approve the impact of revised fixed charges for 2004-09 (Annexure-1) for this station due to:*
  - (a) *Considering FERV of ₹2582 lakh in the capital base as of 31.3.2004 corresponding to normative loan instead of ₹1881 lakh considered earlier;*
  - (b) *Inclusion of disallowed capital liabilities of ₹112.26 lakh and ₹194.86 lakh for the year 2004-05 and 2005-06 respectively in CERC order dated 22.7.2008 and corrigendum to order dated 24.12.2008 in Petition No. 32/2007 into capital base for the respective years as per Hon’ble Tribunal judgment as brought out in para 9 above;*
  - (c) *Additional capital expenditure incurred during 2006-07, 2007-08 and 2008-09.*
  - (d) *Reduction of depreciation recovered in respect of de-capitalized assets from the cumulative depreciation recovered.*
- (ii) *Allow the recovery of filing fees from the beneficiary respondents.*
- (iii) *Allow the recovery of income tax from the respondents on account of any additional billing arising out of the determination of revised tariff for the period 2004-09 and being billed after March’2009.*
- (iv) *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 total capacity of 1600 MW, with 3 units of 200 MW each and 2 units of 500 MW each. The date of commercial operation of the generating station is 1.7.1996. The tariff of the generating station for the period 1.4.2004 to 31.3.2009, was determined by the Commission by its order dated 9.5.2006 in Petition No.153/2004 and I.A. 55/2005. Subsequently, the



tariff of the generating station was revised by Commission's order dated 27.10.2006 in Review Petition No.59/2006 (in Petition No.153/2004). Thereafter, the tariff for the generating station for the period 2004-09 was further revised by Commission's order dated 22.7.2008 in Petition No. 32/2007 on account of additional capital expenditure incurred for the period 2004-05 and 2005-06 based on the capital cost of ₹307562.10 lakh as on 31.3.2006 after deduction of un-discharged liabilities amounting to ₹112.26 lakh and ₹194.86 lakh for the years 2004-05 and 2005-06 respectively and deduction of Interest During Construction (IDC) amounting to ₹23.09 lakh for the year 2005-06. Thereafter, by orders dated 24.12.2008 and 23.12.2009 respectively in Petition No.32/2007, the tariff for the generating station was revised after rectifying the ministerial errors contained in orders dated 22.7.2008 and 24.12.2008 and after allowing IDC of ₹23.09 lakh which was disallowed for the year 2005-06. The capital cost of the generating station approved by the Commission was as under:

<b>Particulars</b>	<b>(₹ in lakh)</b>				
	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Opening Capital Cost	305438.14	306241.74	307585.19	307585.19	307585.19
Additional capital expenditure	803.60	1343.45	0.00	0.00	0.00
<b>Closing Capital Cost</b>	<b>306241.74</b>	<b>307585.19</b>	<b>307585.19</b>	<b>307585.19</b>	<b>307585.19</b>

3. Accordingly, the annual fixed charges approved by the Commission by order dated 23.12.2009 is as under:

<b>Particulars</b>	<b>(₹ in lakh)</b>				
	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Interest on Loan	587.43	173.25	0.00	0.00	0.00
Interest on Working Capital	4548.56	4585.52	4558.72	4614.47	4656.01
Depreciation	11399.99	11440.01	7456.79	7456.79	7456.79
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	21397.55	21442.63	21470.85	21470.85	21470.85
O & M Expenses	15600.00	16222.00	16870.00	17540.00	18252.00
<b>TOTAL</b>	<b>53533.53</b>	<b>53863.42</b>	<b>50356.36</b>	<b>51082.11</b>	<b>51835.65</b>

## **INTERLOCUTORY APPLICATION**

4. The petitioner has filed interlocutory application (I.A No.42/2009) for amendment of Annexure-I to the petition taking into account the revised calculations for fixed charges based on the principles laid down in the tariff orders of the Commission and the judgment dated 13.6.2007 in Appeal Nos.139 to142 etc of 2006 and judgment dated 16.3.2009 in Appeal Nos. 133,135 etc of 2008 of the Appellate Tribunal passed against the various tariff orders of the Commission for the period 2004-09 in respect of the generating stations of the petitioner.

5. We now proceed to examine 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 in Appeal Nos.139 to142 etc of 2006, and judgment dated 16.3.2009 in Appeal Nos.133,135 etc of 2008 as discussed in subsequent paragraphs.

6. The petitioner filed Appeal Nos.139 to142 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 redetermination 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 disincentive; and*
- (e) Impact of de-capitalization of assets on cumulative repayment of loan*



7. 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.”*

8. 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*.

9. The Hon'ble Supreme Court in its interim order dated 26.11.2007 had granted stay on 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.

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

11. 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 un-discharged 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.”*



12. 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 un-discharged 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.

13. Against the judgments of the Appellate Tribunal dated 10.12.2008 and 16.3.2009 as 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 judgments *ibid* subject to the final outcome of the Civil appeals pending before the Supreme Court. Accordingly, the un-discharged liabilities disallowed vide order dated 22.7.2008 in Petition No. 32/2007 has been allowed as claimed in the petition. Further, un-discharged liabilities corresponding to assets allowed in the instant petition has been treated as part of capital cost for the purpose of tariff.

14. The distinction between the main tariff petition and the petition for additional capitalization could not be made since tariff for 2004-09 was a composite package which needs to be determined on the same principle. Also, the Appellate Tribunal in its judgment dated 4.2.2011 in Appeal No. 92/2010 (NTPC-v- CERC & ors) has observed that pendency of civil appeals against the judgment of the Appellate Tribunal dated 13.6.2007 before the Hon'ble

Supreme Court is not a ground to ignore the orders of the Appellate Tribunal. The Commission is in the process of filing Civil Appeal against this judgment. In line with the observations of the Appellate Tribunal in Appeal No. 92/2010 and keeping in view that tariff for 2004-09 is a composite package to be determined on the same principle, the tariff in respect of the generating station is revised by this order subject to the final outcome of the Civil Appeals pending before the Supreme Court.

15. Accordingly, the claims of the petitioner in the I.A. has been considered in the light of the judgments of the Appellate Tribunal dated 13.6.2007 and 16.3.2009 respectively and after adjustments, the additional capital expenditure for the period 2004-06 has been revised as under:

<b>Particulars</b>	<i>(₹ in lakh)</i>	
	<b>2004-05</b>	<b>2005-06</b>
Additional Capital Expenditure allowed vide order dated 23.12.2009 (A)	803.60	1343.45
Un-discharged liabilities disallowed (B )	112.26	194.86
<b>Additional Capital Expenditure allowed (C= A+B)</b>	<b>915.86</b>	<b>1538.31</b>

16. The interlocutory application is disposed of in terms of the above. We now proceed to consider the claims of the petitioner on merits.

17. The petitioner has claimed revised fixed charges based on additional expenditure as under:

<b>Particulars</b>	<i>(₹ in lakh)</i>		
	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Additional capital expenditure	2919.86	1449.96	1557.27

#### **Additional Capitalization for 2006-09**

18. 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 cutoff date may be admitted by the commission, subject to prudence check:*

- (i) Deferred liabilities relating to works/ services within 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 cutoff 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 1*

*Any expenditure admitted on account of committed liabilities within original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt equity ratio specified in regulation 20.*

*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.”

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

Particulars	(₹ in lakh)		
	2006-07	2007-08	2008-09
Closing Gross Block	317999.62	320058.66	317005.69
Less: Opening Gross Block of the year	315005.51	317999.62	320058.66
Additional capital expenditure as per books	2994.12	2059.04	(-)3052.97
Less: Expenditure pertaining to Stage-III	93.09	195.42	338.08
Net additional capital expenditure for Stage-I&II	2901.02	1863.61	(-)3391.05
Less: Exclusions	(-)18.84	413.65	(-) 4948.32
<b>Net additional capital expenditure claimed</b>	<b>2919.86</b>	<b>1449.96</b>	<b>1557.27</b>

20. Reply to the petition has been filed by the respondents, UPPCL, BSEB, GRIDCO, MPPTCL and TNEB.

21. The summary of exclusions claimed as per books of account is as under:

Head	(₹ in lakh)		
	2006-07	2007-08	2008-09
Foreign Exchange Rate Variation (FERV)	0.14	0.00	(-) 5869.93
Capitalization of spares	352.63	603.52	1393.40
De-capitalization of spares	(-) 106.71	(-) 34.44	(-) 263.19
Capitalization of Miscellaneous Bought Out Assets	16.97	0.00	0.00
De-Capitalization of Miscellaneous Bought Out Assets	(-) 31.09	0.00	0.00
Inter-Unit transfer	(-) 123.85	38.23	0.00
De-cap of Un-serviceable wagon	(-) 126.91	(-) 193.66	(-) 208.60
Total	<b>(-) 18.84</b>	<b>413.65</b>	<b>(-) 4948.32</b>

22. In the first instance, we consider the exclusions under different heads of claim.

### **Exclusions**

(a) **FERV:** The claim for exclusion of a net amount of (-) ₹ 5869.79 lakh (₹0.14 lakh in the year 2006-07 and (-) ₹5869.93 lakh in the year 2008-09) on account of FERV is allowed. The petitioner may recover the FERV amount directly from the beneficiaries in accordance with the 2004 regulations.

(b) **Inter-Unit Transfers:** An amount of (-) ₹85.62 lakh ((-) ₹123.85 lakh during 2006-07 and ₹38.23 lakh during 2007-08) has been excluded under this head on account of temporary inter-unit transfer of certain assets like coal handling capital spares, thrust & journal bearing, turbine compensator, LP turbine rotor blade, coupling bolt, Bull dozer, TG bearing and sealing ring, support bearing and Tata 1055 BLC crane. The Commission while dealing with applications 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 should be ignored for the purposes of tariff. In consideration of the said decision, exclusion of an amount of (-) ₹85.62 lakh for the year 2006-08, on account of inter-unit transfer of temporary nature has been allowed.

(c) **Capitalization of spares:** The petitioner has excluded an amount of ₹2349.55 lakh (₹352.63 lakh in 2006-07, ₹603.52 lakh in 2007-08 and ₹1393.40 lakh in 2008-09) under this head. The petitioner has not claimed capitalization of these spares for the purpose of tariff on the ground that capitalization of spares after the cut-off date is not permissible. As such, the exclusion of spares amounting to ₹2349.55 lakh is in order and has been allowed.

(d) **De-capitalization of capital spares:** The petitioner has de-capitalized capital spares in books amounting to (-) ₹404.34 lakh [( -) ₹106.71 lakh in 2006-07, (-) ₹34.44 lakh in 2007-08 and (-) ₹263.19 lakh in 2008-09]] under this head on their becoming unserviceable. However, the petitioner has submitted that the negative entries arising out of de-capitalization of capital spares may be ignored for the purpose of tariff. In other words, these de-capitalized unserviceable capital spares are to be retained in the capital base for the purpose of tariff.

The petitioner vide its affidavit dated 1.2.2010 has certified that the de-capitalization of these spares was on account of consumption of those spares which were not allowed by the Commission in tariff. The petitioner has also certified that the de-capitalized spares are not the initial spares which were allowed to be capitalized for the purpose of tariff. Hence, exclusion of the same should be allowed.

In view of the fact that these spares do not form part of the capital cost of the generating station for the purpose of tariff, their de-capitalization, has been allowed to be excluded.

(e) **Capitalization of Miscellaneous Bought Out Assets (MBOA):** The petitioner has capitalized MBOA items amounting to ₹16.97 lakh during the year 2006-07 in the books of accounts. Since capitalization of minor assets is not permissible after the cut-off-date of the generating station, the exclusion of ₹16.97 lakh is in order and has been allowed.

(f) **De-capitalization of Miscellaneous Bought Out Assets (MBOA):** The petitioner by way of exclusion has de-capitalized MBOA amounting to ₹31.09

lakh during 2006-07, in books of accounts on the assets becoming unserviceable. The 2004 regulations specified by the Commission do not provide for capitalization of minor assets. Prior to these regulations, the MBOA were allowed as part of capital cost, based on prudent check. The exclusion of these assets is justified, if the de-capitalization pertains to the assets claimed for capitalization during 2004-06. Since, no proper justification or clarification has been submitted by the petitioner, in this connection, the exclusion of de-capitalized MBOA is not justified and the same has not been allowed.

(g) **De-capitalization of unserviceable wagons:** The petitioner has excluded amounts of ₹126.91 lakh for de-capitalization of 9 (nine) nos. of unserviceable wagons during the year 2006-07, ₹193.66 lakh for de-capitalization of 15 (fifteen) nos. of unserviceable wagons for the year 2007-08 and ₹208.60 lakh for de-capitalization of 11 (eleven) nos. of unserviceable wagons during 2008-09. The petitioner has submitted that action for procurement of wagons is in progress and accordingly de-capitalization of these wagons may be considered at the time of capitalization. Since de-capitalization of these assets should be effected immediately when the assets have been taken out from use, the submission of the petitioner is not acceptable. Hence, the exclusion of unserviceable assets which are not in use, have not been allowed.

23. Based on the above discussions, the exclusions allowed are as under:

<i>(₹ in lakh)</i>				
<b>(Particulars)</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>Total</b>
FERV	0.14	0.00	(-) 5869.93	(-) 5869.79
Capitalization of spares	352.63	603.52	1393.40	2349.55
De-capitalization of spares	(-) 106.71	(-) 34.44	(-) 263.19	(-) 404.34
Capitalization of MBOA items	16.97	0.00	0.00	16.97
De-capitalization of MBOA items	0.00	0.00	0.00	0.00
Inter-Unit transfer	(-) 123.85	38.23	0.00	(-) 85.62
De-cap of Un-serviceable wagon	0.00	0.00	0.00	0.00
<b>Total</b>	<b>139.17</b>	<b>607.31</b>	<b>(-) 4739.72</b>	<b>(-) 3993.24</b>

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

				(₹ in lakh)
Nature of capitalization	2006-07	2007-08	2008-09	Total
Deferred Liabilities relating to works within original scope of work <b>[18(2)(i)]</b>	60.59	31.34	340.79	432.72
Award of arbitration or for compliance of the order or decree of a court <b>[18(2)(ii)]</b>	0.00	0.00	11.73	11.73
On account of change in law <b>[18(2) (iii)]</b>	3.14	0.00	32.14	35.28
For efficient and successful operation of generating station, but not included in original project cost <b>[18(2) (iv)]</b>	2846.01	1206.65	1172.60	5225.27
Deferred works relating to Ash pond or Ash handling system, in original scope of work <b>[18(2)(v)]</b>	10.12	211.97	0.00	222.09
<b>Net additional capital expenditure claimed</b>	<b>2919.86</b>	<b>1449.96</b>	<b>1557.27</b>	<b>5927.09</b>

25. After examining the asset-wise details and justification for additional capitalization/de-capitalization claimed by the petitioner under various categories, considering the submissions of the petitioner and the respondents, the admissibility of additional capitalization on prudence check is discussed in the succeeding paragraphs.

**Expenditure on balance payments against admitted works {Regulation 18(2)(i)}**

26. The petitioner has claimed capital expenditure of ₹432.72 lakh (₹60.59 lakh for 2006-07, ₹31.34 lakh for 2007-08 and ₹340.79 lakh for 2008-09) under this head. The capitalization of an amount of ₹60.59 lakh (including de-capitalization of an amount of ₹3.70 lakh) during 2006-07 on account of balance payments has been allowed under the head. However, the claim of the petitioner for ₹31.34 lakh during 2007-08 and ₹340.79 lakh during 2008-09 towards balance payments against capitalization of works already admitted by Govt. of India in its tariff notification dated 7.5.1999 has not been allowed,

since the petitioner has not submitted proper justification as to why the balance payment was pending for the last 8 to 9 years. Hence, the claim has been disallowed for want of proper justification.

27. Based on the above, the details of the year-wise additional capitalization/ de-capitalization claimed and allowed under this head is as under:

<i>(₹ in lakh)</i>			
<b>Year</b>	<b>Claimed</b>	<b>Allowed</b>	<b>Disallowed</b>
2006-07	60.59	60.59	0.00
2007-08	31.34	0.00	31.34
2008-09	340.79	0.00	340.79
<b>Total</b>	<b>432.72</b>	<b>60.59</b>	<b>372.13</b>

**Expenditure on payment for award of arbitration {Regulation 18(2)(ii)}**

28. The petitioner has claimed additional capital expenditure of ₹11.73 lakh during 2008-09 on account of payment made in respect of an Arbitration award relating to Ash Bund construction (Ash Dyke) for Stage-I units. Since, the payment of the amount is in compliance with the arbitration award, the same has been allowed under this head.

**Expenditure on account of change in law {Regulation 18(2)(iii)}**

29. The petitioner has claimed an amount of ₹35.28 lakh (₹3.14 lakh during 2006-07 and ₹32.14 lakh during 2008-09 for 2 (two) nos 100 mm dia Hume pipe for condenser cooling water re-circulation and for township metering system to comply with the requirement of energy audit in terms of the provisions of the Energy Conservation Act. In view of this, the capitalization of the said amount has been allowed under this head.

**Additional works/services for efficient operation of the generating station, but not included in the original project cost {Regulation 18(2)(iv)}**

30. The petitioner has submitted that some of the R&M schemes were approved by CEA based on the number of operating hours and the norms laid down therein for the purpose. It is observed that most of the R&M schemes approved by CEA have been capitalized along with corresponding de-capitalization of the old assets. Also, some of the R&M schemes were new and hence corresponding de-capitalization has not been made. It is further observed that CEA vide its letters dated 19.7.2002 and 9.9.2002 respectively had cleared 8 proposals for R&M schemes and the remaining 42 proposals for R&M schemes were cleared by its letter dated 24.3.2003.

31. On prudence check, it is noticed that R&M works carried out by the petitioner during the period from 2006-07 to 2008-09 conform to the approvals of the CEA as stated above, In addition to the R&M schemes approved by CEA, the petitioner has claimed capitalization of works in respect of other than CEA approved R&M schemes. The capital expenditure claimed on CEA approved R&M schemes and other than CEA approved works are discussed in subsequent paragraphs.

**(A) Expenditure relating to works under CEA approved scheme with replacement of old assets:**

32. The petitioner has claimed additional capital expenditure of ₹1280.45 lakh for 2006-07, ₹558.64 lakh for 2007-08 and ₹722.83 lakh (excluding de-capitalization of ₹9.23 lakh for expansion joints for boiler which was considered during 2007-08) for 2008-09 in respect of CEA approved R&M schemes. These R&M works undertaken on CEA approved schemes are justified and are in order and hence the same has been allowed. It is observed that the expenditure



claimed in respect of some of the CEA approved R&M works is higher than the CEA approved cost. The petitioner vide its affidavit dated 18.10.2010 has justified the reason for the increase in the expenditure incurred over and above the CEA approved cost and has submitted that the said increase in expenditure were primarily due to price escalation, upgraded version of the package, the price of steel etc. which were not included in the CEA approved cost, which was based on the 2001-02 price level. The reason for the increase in the actual expenditure on some of the items other than the CEA approved cost is found to be in order and hence allowed as discussed in the subsequent paragraphs.

(a) The claim for an expenditure of ₹49.85 lakh during 2006-07 and ₹19.21 lakh during 2007-08 on renovation of expansion joints for boiler (in addition to an amount of ₹15.04 lakh allowed in 2005-06) has been allowed against the CEA approved cost of ₹55.0 lakh. The petitioner has submitted that the increase in actual cost was on account of the inclusion of cost of steel which was not included in CEA approved cost. The justification submitted by the petitioner is found to be in order and capitalization of the amount has been allowed along with corresponding de-capitalization.

(b) The claim for ₹170.69 lakh during 2006-07 towards renovation of hydraulic system of plough feeder is found to be in order and has been allowed in view of the justification for the increase in actual cost more than the CEA approved cost of ₹125.00 lakh. Thus, an amount of ₹125.0 lakh has been allowed along with corresponding de-capitalization.

(c) The claim for ₹169.65 lakh (₹79.68 lakh in 2007-08 and ₹89.97 lakh in 2008-09) for design, manufacturing, supply, erection & commissioning of

stator water and seal of signaling panel against the CEA approved cost of ₹86.0 lakh is found to be in order. The difference in the actual cost is on account of the installation of upgraded version being a C&I item and due to price escalation due to passage of time between the actual procurement and the estimated cost. Thus, expenditure of ₹169.65 lakh (₹79.68 lakh in 2007-08 and ₹89.97 lakh in 2008-09) has been allowed to be capitalized along with the corresponding de-capitalization.

33. Based on the above, the additional capitalization claimed and allowed along with corresponding de-capitalization, is as under:

*(₹ in lakh)*

<b>Year</b>	<b>Claimed</b>	<b>Allowed</b>
2006-07	1280.45	1280.45
2007-08	558.64	558.64
2008-09	722.83	722.83
<b>Total</b>	<b>2561.92</b>	<b>2561.92</b>

**(B) Expenditure relating to new works/addition under CEA approved scheme:**

34. The petitioner has claimed amounts of ₹648.47 lakh, ₹90.71 lakh and ₹235.90 lakh for 2006-07, 2007-08 and 2008-09 respectively.

35. The petitioner has claimed ₹137.47 lakh (₹100.31 lakh during 2006-07 and ₹36.56 lakh during 2007-08) as against the CEA approved cost of ₹88.00 lakh towards the supply and installation of on-line and multi-channel vibration analyzer. Since the increase in actual expenditure has occurred on account of price escalation due to passage of time, the same has been allowed. Accordingly, the total claim of the petitioner for an amount of ₹137.47 lakh (₹100.31 lakh during 2006-07 and ₹36.56 lakh during 2007-08) is allowed for capitalization.

36. The petitioner has claimed ₹38.21 lakh (₹4.21 lakh in 2006-07 and ₹34.00 lakh in 2007-08) towards renovation of metal detectors as against the CEA approved cost of ₹24.0 lakh. It is observed that the increase in the actual expenditure is on account of the normal escalation in the price (than the price at the time of estimation). In view of this, the expenditure for ₹38.21 lakh (₹4.21 during 2006-07 and ₹34.0 lakh during 2007-08) is allowed to be capitalized.

37. The expenditure claimed in respect of other assets/items like dual fuel gas conditioning system, fire detection & alarm system, coal bunker level monitoring system in stage-I, digital exciter system, surface wheel lath machine, procurement of new test equipment etc, as new additions under the CEA approved scheme are within the approved cost and hence allowed to be capitalized.

38. Based on the above, details of the additional capital expenditure claimed and allowed is as under:

Year	<i>(₹ in lakh)</i>	
	Claimed	Allowed
2006-07	648.47	648.47
2007-08	90.71	90.71
2008-09	235.90	235.90
<b>Total</b>	<b>975.08</b>	<b>975.08</b>

**(C) Expenditure on works/assets other than CEA approved schemes:**

39. The petitioner has claimed an expenditure of ₹2095.40 lakh under this head and has furnished the asset-wise justification for incurring the expenditure. The items/assets procured are mainly pertain to augmentation of data communication network, 10 nos wagons, 10 T and 12 T hydra crane, replacement of current transformers and replacement of condenser tubes of Stage-I units etc. The asset-wise claim of the petitioner is discussed as under:

40. The petitioner has claimed an expenditure of ₹51.73 lakh on account of data communication network and an expenditure of ₹9.78 lakh for data acquisition system for ABT during 2006-07. It is observed that an amount of ₹277.00 lakh was allowed during the period 2001-04 for augmentation of IT and communication network. Also, an expenditure of ₹17.13 lakh was allowed during 2004-05 for supply, installation & commissioning of ABT meters and ₹4.41 lakh was allowed for 2005-06 for augmentation of communication network. In view of this, further capitalization of ₹51.73 lakh and ₹9.78 lakh during 2006-07 is not justified and has not been allowed.

41. Expenditure for ₹289.40 lakh has been claimed during 2006-07 on account of procurement of 10 nos of wagons against replacement of 10 nos. of wagons rendered unserviceable in 2003-04. These wagons were procured and put to use during June, 2006. It is observed that the petitioner has transferred 30 nos. of wagons during 2006-07 to its other generating station namely, Talcher TPS-II. From the above, it is clear that procurement of new wagons was not necessary for the generating station. In view of this, it would not be justifiable and prudent to capitalize the cost of new wagons and burden the beneficiaries when 30 nos. of wagons have been transferred to other generating station of the petitioner. Also, the corresponding de-capitalization of ₹283.90 lakh has been ignored.

42. Expenditure for ₹27.46 lakh has been claimed during 2006-07 on account of capitalization of 10 T and 12 T Hydra crane has not been allowed since the de-capitalization of the same has not been considered in respect of Talcher TPS-II generating station.

43. Expenditure for ₹154.99 lakh claimed during 2007-08 on account of construction of embankment and new culvert has not been allowed since the work involved is in the nature of maintenance and the expenditure on this count should form part of O&M expenses.

44. Expenditure for ₹225.54 lakh claimed during 2008-09 is on account of capitalization of SAP (ERP system). It is observed that the generating station was unable to operate to its full capacity and also to achieve the normative plant availability factor (PAF) due to insufficient supply of coal. The petitioner has already approached the Commission for relaxation of norms for availability on this ground. In view of this, the capitalization of ₹225.54 lakh is not justified. Since ERP would bring in more operational efficiency and availability to the generating station in case of sufficient availability of fuel, it would enable the generating station to earn incentive for higher availability and saving in O&M and efficiency norms. Thus, there is no need for capitalization of the expenditure on ERP and the said amount is disallowed.

45. Expenditure for ₹10.64 lakh on account of e-attendance recording system has not been allowed in terms of Regulation 18 (3) of the 2009 regulations, in view of the assets being minor in nature.

46. Based on the above, an expenditure for ₹1609.78 lakh has been allowed to be capitalized for other than CEA approved schemes, along with corresponding de-capitalization on replaced assets, as per details summarized as under:

<i>(₹ in lakh)</i>			
<b>Year</b>	<b>Claimed</b>	<b>Allowed</b>	<b>Disallowed</b>
2006-07	1260.28	1165.83	94.45
2007-08	598.93	443.95	154.99
2008-09	236.18	0	236.18
<b>Total</b>	<b>2095.40</b>	<b>1609.78</b>	<b>485.62</b>

**Deferred works relating to ash pond or ash handling system {Regulation 18(2)(v)}**

47. The petitioner has claimed an expenditure of ₹222.09 lakh (₹10.12 lakh in 2006-07 and ₹211.97 lakh in 2007-08) on new works for raising of ash dykes. The raising of ash dyke is a normal expenditure in the life of the coal based generating station. As the work of ash dyke has been undertaken by the petitioner for utilization of ash and protection of the environment, the expenditure for ₹222.09 lakh has been allowed to be capitalized under this head.

48. The petitioner has considered de-capitalization of ₹41.64 lakh during the year 2007-08 and ₹22.30 lakh in the year 2008-09, but the actual de-capitalization has been worked out to ₹105.56 lakh in the year 2007-08 and ₹16.07 lakh in the year 2008-09 due to the following reason:

49. By affidavit dated 1.2.2010, the petitioner has furnished the de-capitalization of an amount of ₹54.68 lakh towards condenser tube cleaning during 2007-08. Also, the de-capitalization of ₹9.23 lakh considered during 2007-08 has been claimed in 2008-09 since capitalization of expansion joints for boiler has been claimed in 2007-08.

50. De-capitalization of an amount of ₹3.00 lakh for renovation of stator water and seal oil signaling during 2008-09 submitted vide affidavit dated 28.12.2010.

51. Based on the discussions in the preceding paragraphs, the additional capital expenditure allowed during the years 2006-07, 2007-08 and 2008-09 is summarized as under:

(₹ in lakh)			
<b>Nature of capitalization</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Deferred Liabilities relating to works within original scope of work. <b>[18(2)(i)]</b>	60.59	0.00	0.00
Award of arbitration or for compliance of the order or decree of a court <b>[18(2)(ii)]</b>	0.00	0.00	11.73
On account of change in law <b>[18(2) (iii)]</b>	3.14	0.00	32.14
For efficient and successful operation of generation station, but not included in original project cost <b>[18(2)(iv)]</b>	2751.56	987.74	942.66
Deferred works relating to Ash pond or Ash handling system, in original scope of work <b>[18(2)(v)]</b>	10.12	211.97	0.00
<b>Total before adjustments of exclusions (A)Total</b>	<b>2825.41</b>	<b>1199.71</b>	<b>986.53</b>
Exclusions not allowed (B)	(-)158.01	(-)193.66	(-)208.60
<b>Additional capital expenditure allowed (C=A+B)</b>	<b>2667.40</b>	<b>1006.05</b>	<b>777.93</b>

#### **FERV (2001-04)**

52. The Commission by its order dated 9.5.2006 in Petition No.153/2004 had allowed capitalization of FERV as on 1.4.2004, on normative basis, amounting to ₹1881.00 lakh for the period 2001-04.

53. The petitioner has claimed that the revised normative FERV amounting to ₹2582.00 lakh for the period 2001-04 based on notional loan outstanding (as revised by order dated 25.1.2008) may be considered as part of capital cost as on 1.4.2004 instead of ₹1881.0 lakh considered by the Commission in order dated 9.5.2006.

54. Based on the normative loan outstanding, FERV works out to ₹2597.477 lakh and the same has been admitted for the purpose of tariff. The necessary calculations are as stated overleaf:

(₹ in lakh)

Particulars	2001-02	2002-03	2003-04	Total
Net opening loan (actual) – (A)	55608.53	41585.93	33507.02	-
Net opening loan (normative) as per order dated 25.1.2008-(B)	42901.06	32082.86	25850.12	-
Actual FERV as per order dated 9.5.2006 –(C)	(-)279.16	2467.25	1178.77	<b>3366.86</b>
Normative FERV allowed in order dated 9.5.2006 –(D)	(-)195.81	1482.16	594.65	<b>1881.00</b>
FERV allowable on normative basis (E = C x B ÷ A)	(-)215.37	1903.44	909.40	<b>2597.47</b>

55. Thus the differential FERV considered for the tariff period 2001-04 works out to ₹716.48 lakh, which has been considered.

### Capital cost

56. As stated above, the Commission had admitted the capital cost of Rs.305438.14 lakh (inclusive of additional capital expenditure and FERV amounting to ₹1825.30 lakh and ₹1881.00 lakh respectively, for the period 1.4.2001 to 31.3.2004) as on 1.4.2004 for determination of tariff for the period 2004-09.

57. Taking into account the capital cost of the generating station as on 1.4.2004, the additional FERV allowed for tariff period 2001-04, the additional capital expenditure approved for 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09, the capital cost for the period 2004-09 is worked out as under:

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Opening Capital cost as on 1.4.2004 considered vide order dated 9.5.2006 in Petition No. 153/2004	305438.14	-	-	-	-
Add: Additional FERV on normative basis for tariff period 2001-04	716.48	-	-	-	-
Opening Capital cost (considered now)	306154.61	307070.47	308608.78	311276.18	312282.23
Additional capital expenditure allowed	915.86	1538.31	2667.40	1006.05	777.93
<b>Closing Capital cost</b>	<b>307070.47</b>	<b>308608.78</b>	<b>311276.18</b>	<b>312282.23</b>	<b>313060.16</b>
<b>Average Capital cost</b>	<b>306612.54</b>	<b>307839.63</b>	<b>309942.48</b>	<b>311779.21</b>	<b>312671.20</b>



## **Debt-Equity ratio**

58. Regulation 20 of the 2004 Regulations provides that:

*“(1) In case of the existing project, 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 31.03.2004 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 capitalization 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.*

59. The debt-equity ratio of 50:50 was considered by the Commission in respect of FERV (on normative basis amounting to ₹1881.00 lakh) for the period 1.4.2001 to 31.3.2004 vide order dated 9.5.2006. Accordingly, additional FERV for the period from 1.4.2001 to 31.3.2004 has been allowed in the debt-equity ratio of 50:50.

60. As a result, the gross opening loan (normative) and normative equity as on 1.4.2004 has been revised from ₹152719.07 lakh as considered in order dated 9.5.2006 to ₹153077.31 lakh.

61. Consequent to the above, the FERV amount for the period 1.4.2001 to 31.3.2004 would undergo revision and the impact of FERV for the period 2001-

04 on account of the said revision, may be mutually settled between beneficiaries and the petitioner.

62. The petitioner has submitted that the total additional capital expenditure claimed has been financed partly out of debt and partly out of internal resources. However after applying prudence check, the debt-equity ratio of 70:30 has been considered for the additional capital expenditure approved in terms of sub-clause (a) of clause (1) of Regulation 20 of Regulations, 2004. Accordingly, additional notional equity of the generating station on account of capitalization approved above, as also change in additional capital expenditure allowed for the period 2004-06 on account of including liability for the purpose of tariff works out as stated overleaf:

	(₹ in lakh)				
<b>Particulars</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Additional Notional Equity	274.76	461.49	800.22	301.82	233.38

### **Return on Equity**

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

	(₹ in lakh)				
<b>Particulars</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Equity - Opening considered now	153077.31	153352.07	153813.56	154613.78	154915.59
Addition of Equity due to additional capital expenditure approved above	274.76	461.49	800.22	301.82	233.38
Equity-Closing	153352.07	153813.56	154613.78	154915.59	155148.97
Average equity	153214.69	153582.81	154213.67	154764.69	155032.28
<b>Return on Equity @ 14%</b>	<b>21450.06</b>	<b>21501.59</b>	<b>21589.91</b>	<b>21667.06</b>	<b>21704.52</b>

### **Interest on loan**

64. Adjustment of repayment corresponding to de-capitalization of assets: In Petition No.153/2004, the petitioner had sought adjustment in cumulative repayment on account of de-capitalization of assets in such a manner that the

net loan opening prior to de-cap does not undergo a change. The Appellate Tribunal by its judgment dated 13.6.2007 has decided as under:

*“When asset is not in use it is only logical that the capital base for the purpose of tariff is also proportionately reduced. It follows therefore that the appellant will not earn any depreciation, return on equity and O&M charges. However, despite the de-capitalization, the appellant is required to pay interest on loan. Whereas 10% salvage value of the de-capitalized asset should be non-tariff revenue, the interest on loan has to be borne by the beneficiaries. If the salvage value is more than 10%, amount realized above 10% should be counted as additional revenue. If salvage value is less than 10%, it will be counted as loss in the revenue.*

*Therefore, in this view of the matter, the cumulative repayment of the loan proportionate to those assets de-capitalized required to be reduced. The CERC shall act accordingly”.*

65. In the instant petition, the petitioner has claimed such adjustment applying the formula as under:

$$\text{Repayment to be adjusted} = \frac{\begin{array}{c} \text{Cumulative repayment at the beginning} \\ \times \\ \text{Gross value of de-capitalised asset} \\ \times \\ \text{Debt proportion corresponding to normative debt} \\ \text{equity ratio for the respective period} \end{array}}{\text{Gross debt at the beginning of the year of de-} \\ \text{capitalisation}}$$

66. In terms of the above decision of the Appellate Tribunal, the cumulative repayment adjustment has been worked out proportionate to assets de-capitalized such that the net opening loan prior to de-capitalisation and after de-capitalisation do not change.

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

- (a) Revised gross opening loan on normative basis on 1.4.2004 as mentioned above is ₹153077.31 lakh.
- (b) Cumulative repayment of loan on normative basis amounting to ₹133514.49 lakh was considered as on 1.4.2004 vide order dated 23.12.2009. Further, there was de-capitalization amounting to ₹798.12 lakh during the period up to 31.3.2004. Accordingly, as stated above, cumulative repayment as on 1.4.2004 has been adjusted to 50% of the

value of the assets de-capitalized up to 31.5.2004. As such, an amount of ₹133115.43 lakh has been considered as cumulative repayment as on 1.4.2004 for the purpose of tariff.

- (c) Thus, the revised net opening normative loan as on 1.4.2004 is ₹19961.88 lakh.
- (d) There is addition of notional loan to the tune of ₹641.10 lakh, ₹1076.82 lakh, ₹1867.18 lakh, ₹704.24 lakh and ₹544.55 lakh for the years 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09 respectively, on account of admitted additional capital expenditure as above, after considering the revision of the additional capital expenditure for the period 2004-06.
- (e) Weighted average rate of interest as considered in order dated 23.12.2009 has been modified after taking into account the original GOI loans (as against the re-financed bonds) and effect of drawls during the period 2006-09.
- (f) Normative repayment = 
$$\frac{\text{Actual Repayment} \times \text{Normative Loan}}{\text{Actual Loan}}$$
- (g) As stated above cumulative repayment during 2004-09, has been adjusted on account of de-capitalized assets in proportion to debt-equity ratio adopted for allowing additional capital expenditure during the respective periods.
- (h) In the actual loan portfolio submitted by the petitioner, changes have been made in two original loans viz. IBRD Main and SBI-I as furnished in previous petitions. Calculations have been made considering these original loans as furnished in previous petitions and allowed by the Commission in all its tariff orders. Any variation in the actual loan portfolio on account of changes in the interest rates or scheduled repayment etc, if any, is to be settled mutually.

68. Interest on loan has been computed as stated overleaf:

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Opening loan – considered now	153077.31	153718.41	154795.23	156662.40	157366.64
Cumulative Repayment of loan upto previous year	133115.43	138798.77	144603.36	150276.70	153492.17
Net Loan Opening	19961.88	14919.64	10191.86	6385.70	3874.47
Addition of loan due to additional capital expenditure approved above	641.10	1076.82	1867.18	704.24	544.55
Repayment of loan (Normative)	5924.51	6096.85	6026.77	3424.93	640.58
Less: Adjustment for de-cap during the period	241.17	292.25	353.43	209.46	157.27
Repayment of loan during the year (net)	5683.34	5804.59	5673.34	3215.47	483.31
Net Loan Closing	14919.64	10191.86	6385.70	3874.47	3935.70
Average Loan	17440.76	12555.75	8288.78	5130.09	3905.09
Weighted Average Rate of Interest on Loan	4.3082%	4.3466%	4.7416%	6.4727%	4.0226%
<b>Interest on Loan</b>	<b>751.38</b>	<b>545.75</b>	<b>393.02</b>	<b>332.05</b>	<b>157.09</b>

### Depreciation

69. In order dated 9.5.2006, the balance depreciation recoverable as on 1.4.2004 was considered as ₹112959.03 lakh. This amount was arrived at after considering gross depreciable value and cumulative depreciation and advance against depreciation recovered in tariff as on 31.3.2004 amounting to ₹274124.75 lakh and ₹161165.72 lakh respectively. However, on account of revision to tariff for the period 2001-04 affected vide order dated 25.1.2008 in Petition No.36/2001, the cumulative depreciation as on 1.4.2004 was revised to ₹159518.21 lakh, which has been considered in this order. Accordingly, the balance depreciable value as on 1.4.2004 was revised to ₹114606.53 lakh. Further, on account of additional FERV (on normative basis) amounting to ₹716.48 lakh to the capital cost as stated above, the balance depreciation recoverable has been increased to ₹115224.44 lakh after adjustment of ₹26.92 lakh in respect of depreciation recovered on account of additional FERV for the

period 1.4.2001 to 31.3.2004. Thus, the cumulative depreciation is revised to ₹159545.13 lakh, as on 1.4.2004.

70. Weighted average rate of depreciation of 3.7274% as considered in order dated 23.12.2009 has been used to arrive at the depreciation allowed for the tariff period 2004-09. 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:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Opening capital cost	306154.61	307070.47	308608.78	311276.18	312282.23
Closing capital cost	307070.47	308608.78	311276.18	312282.23	313060.16
Average capital cost	306612.54	307839.63	309942.48	311779.21	312671.20
Depreciable value @ 90%	275181.71	276286.09	278178.66	279831.71	280634.50
Balance depreciable value	115636.58	105585.67	96366.79	86917.92	76360.74
Balance useful life	14.43	13.43	12.43	11.43	10.43
<b>Depreciation</b>	<b>11428.79</b>	<b>11474.53</b>	<b>11552.91</b>	<b>11621.38</b>	<b>11654.63</b>

#### **Advance Against Depreciation**

71. The petitioner has not claimed Advance Against Depreciation. Hence, the petitioner's entitlement to Advance Against Depreciation works out to "nil".

#### **O&M expenses**

72. O&M Expenses as considered in order dated 23.12.2009 has been considered for revision of tariff.

#### **Interest on Working capital**

73. For the purpose of calculation of working capital the operating parameters and price of oil as considered in the order dated 23.12.2009 has been kept unchanged. Also, the admitted additional capital expenditure after the date of commercial operation and as per revised admissibility of Normative

FERV and inclusion of liabilities has been considered while computing the maintenance spares for calculating the interest on working capital. However, the receivable component of working capital would undergo revision as discussed below.

74. The petitioner, in the interlocutory application No. 42/2009 has revised the cost of coal in working capital by its affidavit dated 9.9.2009 based on the judgment dated 13.6.2007 of the Appellate Tribunal. The Commission in its order dated 9.5.2006 in Petition No. 153/2004 has computed the weighted average price of coal in the working capital after considering the transit & handling loss @ 0.3% for the generating station, as a pit head station.

75. Aggrieved by the said order, the petitioner filed Appeal No.155 of 2006 before the Appellate Tribunal, and the Appellate Tribunal by its judgment dated 13.6.2007 has observed as stated overleaf:

*“The Commission has not admitted the claim of the appellant for higher transit losses on the plea that these two stations namely, ‘Farakka and Kahalgaon are the pit head stations and have their own MGRs. It is a fact that if appellant does arrange coal from sources other than linked mines, the power stations will operate at much below their capacity which will further accentuate the excruciating power shortages prevailing in the country. It is in no body’s interest to underutilize the available capacity in the country”.*

*We find logic and rationale in the plea of the appellant and therefore direct as under:*

- (i) For operation of the plant up to 62.8%, even if the appellant has to import coal from mines other than the linked mines transi loss of only 0.3% be allowed.
- (ii) Transit loss of 0.8% be allowed on the requirement of coal between 62.8% and up to 80% of PLF.
- (iii) Coal required for operation of the plant beyond 80% PLF where the appellant is entitled for an incentive of 25 paise per kWh, the additional losses of 0.5% should be absorbed by the appellant himself.

76. Accordingly, in terms of the observations contained in the judgment of the Appellate Tribunal as above, the coal stock for 1.5 months and energy charges for two months based on the weighted average transit and handling loss of 0.4075% have been revised as under:

GCV of Coal (as fired basis)	kCal/Kg	<b>2701.67</b>
Price of Coal (as procured basis)	Rs./MT	<b>976.22</b>

77. The total coal stock and energy charges for two months is worked out as under:

	(₹ in lakh)				
<b>Description</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Coal Cost (1.5 months)	12405.83	12405.83	12405.83	12439.82	12405.83
Energy Charges for two months	17045.32	17045.32	17045.32	17092.02	17045.32

78. The interest on working capital for 2004-09 is revised as under:

	(₹ in lakh)				
<b>Particulars</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Coal Stock- 1.5 months	12405.83	12405.83	12405.83	12439.82	12405.83
Oil stock -2 months	504.22	504.22	504.22	505.60	504.22
O & M expenses	1300.00	1351.83	1405.83	1461.67	1521.00
Spares	4828.00	5132.79	5466.97	5804.25	6159.98
Receivables	26020.10	26113.40	26232.39	26415.31	26477.45
<b>Total Working Capital</b>	<b>45058.15</b>	<b>45508.06</b>	<b>46015.23</b>	<b>46626.63</b>	<b>47068.47</b>
Rate of Interest	10.2500%	10.2500%	10.2500%	10.2500%	10.2500%
<b>Total Interest on Working capital</b>	<b>4618.46</b>	<b>4664.58</b>	<b>4716.56</b>	<b>4779.23</b>	<b>4824.52</b>

79. The revised annual fixed charges for the period from 1.4.2004 to 31.3.2009 is summarized as under:

	(₹ in lakh)				
<b>Particulars</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Interest on loan	751.38	545.75	393.02	332.05	157.09
Interest on Working Capital	4618.46	4664.58	4716.56	4779.23	4824.52
Depreciation	11428.79	11474.53	11552.91	11621.38	11654.63
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	21450.06	21501.59	21589.91	21667.06	21704.52
O & M Expenses	15600.00	16222.00	16870.00	17540.00	18252.00
<b>Total</b>	<b>53848.69</b>	<b>54408.45</b>	<b>55122.41</b>	<b>55939.72</b>	<b>56592.75</b>



80. The target availability of 80% considered by the Commission in order dated 23.12.2009 remains unchanged. Similarly other parameters viz. specific fuel consumption Auxiliary Power consumption and Station Heat rate etc considered in the order dated 23.12.2009 has been kept unchanged for the purpose of calculation of the revised fixed charges.

**Energy / Variable Charges**

81. Based on the weighted average price and GCV for coal procured and burnt during the preceding three months from January 2004 to March 2004 and after making adjustments towards the transit & handling losses for coal in terms of the judgment dated 13.6.2007 of the Appellate Tribunal, the base energy charges has been worked out to **98.669** paise/kWh.

**Others**

82. 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.

83. 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.

84. The annual fixed charges determined in this order are subject to the outcome of Civil Appeals as stated above, pending before the Hon'ble Supreme Court

85. The petitioner shall claim the difference in respect of the tariff determined by order dated 23.12.2009 and the tariff determined by this order, from the beneficiaries in three equal monthly installments.

86. Petition No.150/2009 stands disposed of in terms of the above.

Sd/-  
**(M.DEENA DAYALAN)**  
**MEMBER**

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

