

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 142/2009 with I.A. 36/2009**

**Coram**

- 1. Dr. Pramod Deo, Chairperson**
- 2. Shri R.Krishnamoorthy, Member**
- 3. Shri S. Jayaraman, Member**
- 4. Shri V.S.Verma, Member**

**DATE OF HEARING: 14.10.2009**

**DATE OF ORDER: 11.1.2010**

**In the matter of**

Approval of revised fixed charges for the period 2004-09, after considering the impact of additional capital expenditure incurred during 2006-07, 2007-08 and 2008-09 for Ramagundam STPS, Stage- I & II (2100 MW)

**And in the matter of**

NTPC Ltd, New Delhi  
Vs

.....**Petitioner**

- (1) Transmission Corp. of Andhra Pradesh Ltd, Hyderabad
- (2) AP Eastern Power Distribution Co. Ltd, Visakhapatnam
- (3) AP Southern Power Distribution Co. Ltd, Tirupathi
- (4) AP Northern Power Distribution Co. Ltd, Warangal
- (5) AP Central Power Distribution Co. Ltd, Hyderabad
- (6) Tamil Nadu Electricity Board, Chennai
- (7) Karnataka Power Transmission Corp. Ltd, Bangalore
- (8) Bangalore Electricity Supply Co. Ltd, Bangalore
- (9) Mangalore Electricity Supply Co. Ltd, Mangalore
- (10) Chamundeshwari Electricity Supply Corp. Ltd, Mysore
- (11) Gulbarga Electricity Supply Co. Ltd, Gulbarga
- (12) Hubli Electricity Supply Co. Ltd, Hubli
- (13) Kerala State Electricity Board, Thiruvananthapuram
- (14) Puducherry Electricity Department, Puducherry
- (15) Electricity Department, Govt. of Goa, Goa.

...**Respondents**

**The following were present:**

1. Shri V.K.Padha, NTPC
2. Shri A.K. Juneja, NTPC
3. Shri Sameer Aggarwal, NTPC
4. Shri S.Balaguru, TNEB
5. Shri R.Krishnaswami, TNEB

**ORDER**

The petitioner has made this application for approval of the revised fixed charges, after considering the impact of additional capital expenditure incurred during the years 2006-07, 2007-08 and 2008-09 for Ramagundam STPS, Stage- I and II (2100 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:

- (a) Approve the revised AFC for 2004-09 for Ramagundam STPS, Stage- I & II (2100 MW) as enclosed at Annexure – I due to:
  - (i) ACE for the period 01.04.2006 to 31.03.2009.*
  - (ii) Revision of capital base for FY 2004-05 and 2005-06 based on ATE Judgment dt. 16.03.09 in Appeal no. 133/2008 as mentioned in para – 6 & 7 of the petition.**
- (b) Allow recovery of filing fee from the beneficiaries.*
- (c) Normative FERV for 2001-04 as part of capital cost as on 01.04.2004 as per para – 11 of the petition.*
- (d) Allow servicing of debt as per para – 12 of the petition.*
- (e) Allow reimbursement of Income Tax as per Tariff Regulation 2004 as per para – 16 above.*
- (f) Pass any other order in this regard as the Hon'ble Commission may find appropriate in the circumstances pleaded above.*

2. The generating station with a capacity of 2100 MW comprises of three units of 200 MW each and three units of 500 MW each. The date of commercial operation of the generating station is 1.4.1991.

3. 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 30.6.2006 in Petition No.148/2004 based on the capital cost of Rs.225362.20 lakh (inclusive of FERV of Rs.426.07 lakh) as on 1.4.2004. Subsequently, by order dated 30.7.2008 in Petition No.29/2007, the Commission revised the annual fixed charges after accounting for additional capital expenditure incurred during the period 2004-05 and 2005-06, and the capital cost of Rs.226774.51 lakh was considered as on 31.3.2006. Further, the Commission by order dated 24.12.2008 (corrigendum to order dated 30.7.2008) in Petition No.29/2007, revised the annual fixed charges after correcting some ministerial errors. The capital cost of the generating station approved by the Commission, is as under:

(Rs. 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>
Opening Capital Cost	225362.20	226435.24	226774.51	226774.51	226774.51
Additional capital expenditure	1073.04	339.27	-	-	-
<b>Closing Capital Cost</b>	<b>226435.24</b>	<b>226774.51</b>	<b>226774.51</b>	<b>226774.51</b>	<b>226774.51</b>

4. The annual fixed charges allowed by the Commission by order dated 24.12.2008 is as under:

(Rs in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	602	202	0	0	0
Interest on Working Capital	4754	4791	4736	4793	4833
Depreciation	8172	8197	2658	2658	2658
Advance Against Depreciation	0	0	0	0	0
Return on Equity	15798	15828	15835	15835	15835
O & M Expenses	20280	21087	21930	22800	23727
<b>TOTAL</b>	<b>49605</b>	<b>50104</b>	<b>45159</b>	<b>46085</b>	<b>47053</b>

### **INTERLOCUTORY APPLICATION**

5. The petitioner has filed interlocutory application (I.A No.37/2009) 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 22.9.2006 and 18.6.2008 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.

6. The respondent No.6, 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. In response, the representative of the petitioner submitted that the prayer in the interlocutory application should be

allowed as the judgment of the Appellate Tribunal dated 13.6.2007 had 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 in Appeal Nos. 139 to 142 etc of 2006 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 disincentive; 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 situations 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, tariff for additional capitalization 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 the 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 respondent TNEB has submitted that the petitioner's claim for undischarged liabilities could not be considered by the Commission at this stage, as the Hon'ble Supreme Court has ordered notices on the stay and the appeal, in the Civil Appeal filed by it against the said judgment of the Appellate Tribunal.

14. The Commission in some of the petitions filed by the petitioner (Rihand and Ramagundam generating stations) had 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 in the said appeals 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. Against the judgment of the Appellate Tribunal dated 10.12.2008 the Commission has filed Civil Appeal Nos. 4112-4113/2009 and Civil Appeal Nos. 6286



to 6289/2009 before the Hon'ble Supreme Court. The 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 Civil Appeals before the Supreme Court.

15. 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.

16. 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.

17. The interlocutory application No. 37/2009 is disposed of as above. We proceed to consider the claims of the petitioner on merits.

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

(Rs in lakh)

Particulars	2006-07	2007-08	2008-09	Total
Additional capital expenditure	451.46	762.81	546.54	1760.81

19. Reply to the petition has been filed by the respondent TNEB.

### **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 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."*

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

(Rs in lakh)				
	2006-07	2007-08	2008-09	Total
Total additional expenditure of the generating station as per books of accounts (A)	574.40	717.70	(-) 4116.15	(-) 2824.05
Exclusions for additional capitalization vis-à-vis books of accounts (B)	348.94	168.82	(-) 4586.23	(-) 4068.47
Expenditure under CEA Approved Schemes - charged to revenue in Books of Accounts(C)	226.00	213.94	76.46	516.40
<b>Total additional capitalization (A-B+C)</b>	<b>451.46</b>	<b>762.81</b>	<b>546.54</b>	<b>1760.81</b>

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

(Rs in lakh)				
Description	2006-07	2007-08	2008-09	Total
Capital spares (Capitalized)	188.02	0.00	1626.93	<b>1814.95</b>
Capital spares (De-capitalized)	0.00	(-) 268.28	0.00	<b>(-) 268.28</b>
FERV in books	0.22	0.00	(-) 6055.97	<b>(-) 6055.75</b>
Inter unit transfer	166.40	519.08	-0.51	<b>684.97</b>
Unserviceable assets de-capitalized in books, however already de-capitalized by Commission's order dated 30.7.2008	(-) 5.71	0.00	(-) 156.68	<b>(-) 162.39</b>
Unserviceable assets (De-capitalized)	0.00	(-) 81.98	0.00	<b>(-) 81.98</b>
<b>Total Exclusions</b>	<b>348.94</b>	<b>168.82</b>	<b>(-) 4586.23</b>	<b>(-) 4068.47</b>

### Exclusions

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

(a) **Capital Spares:** The petitioner has procured spares amounting to Rs. 1814.95 lakh during the period 2006-09 for maintaining stock of necessary spares. 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.268.28 lakh during the year 2007-08 on their becoming unserviceable. The petitioner has submitted that the spares have been de-capitalized for accounting purposes only and are not to be de-capitalized for the purpose of tariff. The petition has sought exclusion on the following ground:

*"For older stations, capitalization of Spares has not been allowed by Hon'ble Commission. As per Hon'ble Commission, they are to be considered as part of O&M expenses as and when consumed. Therefore, the capitalization/de capitalization of these capital spares has been kept under exclusions in this Additional Capitalization petition"*

The petitioner's request for exclusion of de-capitalization of spares is justified if these de-capitalized spares are the ones which were not allowed to be capitalized by the Commission during the previous tariff period or the replacement of the de-capitalized spares/ components (unserviceable) are met from the spares disallowed for the purpose of tariff which are booked under O&M on consumption. The petitioner by its letter dated 3.12.2009 has submitted as under:

*(a) In case of Ramagundam Stage-I&II, prior to 2005-06 spares for an amount of Rs.69.70crs. were not allowed for capitalization. Further, in the Additional capitalization*

for the instant Petition, NTPC has kept capitalization and de-capitalization of spares under exclusions as per details given below:

Financial Year	Spares Capitalized / De-capitalized treated under exclusions in instant Petition
2006-07	188.02
2007-08	(-) 268.28
2008-09	1626.93

(b) The Petitioner hereby certifies that the amount of Rs. 268.28 lakh, pertaining to de-capitalization of spares in the year 2007-08 which has been kept under exclusion in Petition No.142/2009, is on account of consumption of spares which were not allowed in tariff.

In view of the justification submitted by the petitioner, the exclusion of de-capitalized spares for the purpose of tariff is allowed.

(c) **FERV:** The claim for exclusion of (-) Rs.6055.75 lakh for the period 2006-09 on account of FERV is allowed, as the petitioner has billed the said amount directly to the beneficiaries in accordance with the 2004 regulations.

(d) **Inter-unit transfers:** An amount of Rs. 684.97 lakh for the period 2006-09 has been excluded under this head on account of transfer of spares like f LP rotor, generator rotor and office equipments from other generating stations of the petitioner in 2006-07. 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 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 shall be ignored for the purposes of tariff. In consideration of the said decisions, the exclusion of the amount of Rs. 684.97 lakh on account of inter-unit transfer of equipment is allowed.

**(e) Unserviceable assets de-capitalized in books, however already de-capitalized by the Commission:** The petitioner has sought exclusion of negative entries of Rs.162.39 lakh arising out of de-capitalization of components/equipment like drive shaft & flange assembly and FRP blades of cooling tower fans and DAS. The Commission, while dealing with the additional capitalization petitions for the period 2004-06 of the petitioner had allowed capitalization of these components/equipments under replacement, after deduction of corresponding de-capitalization of Rs.162.39 lakh, not effected in books of accounts during 2004-06. The corresponding de-capitalization has now been effected by the petitioner in books of accounts during 2006-09. In view of the above, petitioner's prayer for exclusion of negative entries is allowed.

**(f) Unserviceable assets de-capitalized in books:** The petitioner has sought exclusion of negative entry of Rs.81.98 lakh during 2007-08 on account of de-capitalization of unserviceable components/equipment like MGE wagons, crane and hydraulic crane lorry ladder. The justification provided by the petitioner is as under:

*"These items were rendered unserviceable and retired from active use. After these cranes and wagons became unserviceable, the new cranes and wagons are proposed to be procured and the re-capitalization will be done against this de-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 will be purchased in the future, is not allowed. The petitioner is at liberty to approach the Commission after procurement of new assets.

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

(Rs in lakh)				
Description	2006-07	2007-08	2008-09	Total
Exclusion of Unserviceable assets de-capitalized in books	0.00	-81.98	0.00	(-) 81.98

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	Total
Deferred liabilities relating to works / services within original Scope of work- <b>18(2)(i)</b>	11.29	5.43	45.95	<b>62.67</b>
Liabilities to meet award of arbitration or for compliance of the order or decree of a court- <b>18(2) (ii)</b>	4.17	0.00	0.00	<b>4.17</b>
On account of change in law [ <b>18(2)(iii)</b> ]	6.97	0	62.13	<b>69.10</b>
Works/services which have become necessary for efficient and successful operation of the generating station, but not included in the original project cost- <b>18(2) (iv)</b>	421.13	467.00	438.45	<b>1326.58</b>
Deferred works relating to ash pond or ash handling system in the original scope of work [ <b>18(2)(v)</b> ]	7.90	290.39	0.00	<b>298.29</b>
<b>Total</b>	<b>451.46</b>	<b>762.81</b>	<b>546.54</b>	<b>1760.81</b>

26. After applying prudence check on the asset-wise details and justification of additional capitalization claimed by the petitioner under various categories for the



years, 2006-07, 2007-08 and 2008-09, the admissibility of additional capitalization is discussed in the succeeding paragraphs:

**Deferred liabilities relating to works / services within original Scope of work-18(2)(i)**

27. The petitioner has claimed an expenditure of Rs. 62.67 lakh for the period 2006-09 under this head. In respect of CEA approved schemes allowed by Commission during 2003-04, 2004-05 and 2005-06. In view of this, the expenditure is allowed to be capitalized for the purpose of tariff.

**Liabilities to meet award of arbitration or for compliance of the order or decree of a court- 18(2) (ii)**

28. The petitioner has incurred an expenditure of Rs.4.17 lakh towards "Land Compensation" in terms of the order of the Court. Hence, the amount is allowed for the purpose of tariff under this head.

**On account of change in law [18(2)(iii)]**

29. The petitioner has claimed an amount of Rs. 6.97 lakh and Rs.62.13 lakh under this head, for the years 2006-07 and 2008-09 respectively, which is discussed as under:

**2006-07**

30. The claim of the petitioner for the year 2006-07 is in respect of assets/works like fugitive dust control system, ash testing equipment like weighing balance for ash brick testing, planetary mortar mixer, table vibratory for compacting concrete ash and solar street lighting in township. Out of this, the expenditure of Rs. 0.68 lakh on "fugitive dust control" to safeguard the environment is allowed. The expenditure on ash testing equipment incurred to meet the Government guideline

of 100% ash utilization by the year 2014, is allowed, except for expenditure of Rs.0.17 lakh on weighing balance which is considered to be a minor asset. As regards the expenditure of Rs. 5.40 lakh incurred on "solar street lighting in township", the petitioner has submitted justification as under:

*"Non conventional energy source is used in certain areas like Parks, Gardens, Children play centre (Bal Bhavan) etc. as per GOI policy for promotion of NCES*

31. The respondent TNEB has pointed out that the claim of the petitioner under the head 'change in law' was on account of the promotion of non-conventional energy sources in terms of the policy of the Govt. of India and cannot be allowed for capitalization. As the petitioner has not indicated the specific provision of the law/change in law which made it mandatory to install the solar lighting in township, the expenditure is not allowed for the purpose of tariff.

32. In view of the above, an amount of Rs.1.42 lakh is allowed for the purpose of tariff against the claim of Rs.6.97 lakh during 2006-07.

### **2008-09**

33. The petitioner has claimed an expenditure of Rs. 62.13 lakh during 2008-09 under this head. It is observed that the expenditure has been incurred due to settlement of arbitration cases in respect of various plant packages originally capitalized during the construction of the generating station. As the liabilities incurred relate to settlement of arbitration cases, the claim of the petitioner under this category has been considered under sub-clause (ii) of clause (2) of Regulation 18 and allowed.

**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 amount of Rs. 421.13 lakh, 467.00 lakh and 438.45 lakh during the years 2006-07, 2007-08 and 2008-09 respectively. The admissibility of the said amounts are discussed as under:

**2006-07**

35. The total claim of the petitioner amounting to Rs. 421.13 lakh under this head is in respect of the following works/assets:-

**(a) Expenditure under CEA approved schemes (charged to revenue in books of accounts):** The petitioner has claimed an expenditure of Rs.226 lakh against schemes approved by CEA vide letter dated 12.2.2001. However, in books of accounts, the petitioner has included the amount in revenue and has prayed that the same be allowed to be capitalized for the purpose of tariff. The petitioner's prayer is not justified as assets of revenue nature cannot be allowed to be capitalized for the purpose of tariff.

**(b) Expenditure under CEA approved schemes:** The petitioner has claimed an expenditure of Rs.195.13 lakh incurred on various works/schemes approved by CEA. The works/assets covered under this claim are PLC for coal conveying system in CHP, construction of RCC pedestal with embedded plate for new fire water pipe line, 2 nos. complete rack and pinion type elevators, replacement of ash pipe line from clinker grinder to ash slurry sump, installation of total 12 nos.CO measuring instruments during 2006-07. On prudence check, the justification for the expenditure is found to be in order and allowed except for an expenditure of

Rs.19.20 lakh and Rs.24.94 lakh towards installation of CO measuring instruments and construction of RCC pedestal for new fire water pipe line, respectively. The expenditure on CO measuring instrument is not allowed as the asset is of O&M nature. The expenditure on RCC pedestal is not allowed as the expenditure on main works like "Replacement of underground fire water lines and badly corroded sluice valve" approved by CEA and claimed in the year 2007-08, has not been allowed, in the absence of corresponding de-capitalization. In view of the above, expenditure of Rs.150.99 lakh incurred on CEA approved schemes, has been allowed for the purpose of tariff.

36. In view of the above, an expenditure of Rs. 150.99 lakh for the year 2006-07 is allowed for the purpose of tariff under this head.

### **2007-08**

37. The total claim of the petitioner amounting to Rs. 467.00 lakh under this head is in respect of the following works/assets:-

**(a) Conversion of PC based record system to OPC compliant system:** The petitioner has claimed Rs.28.33 lakh in respect of the above work. Considering the fact that the asset is necessary for efficient operation of the generating station, the claim of the petitioner is allowed for the purpose of tariff.

**(b) Expenditure under CEA approved schemes:** The petitioner has claimed an amount of Rs.224.72 lakh on CEA approved R&M schemes like replacement of regeneration type H<sub>2</sub> drier with refrigeration type H<sub>2</sub> drier, Steam leak detection system for early detection of boiler tube leakages (Units 1-6), replacement of

cooling tower fan blades with improved design blades, replacement of underground fire water lines and badly corroded sluice valves. On prudence check, the justification for the expenditure is found to be in order and allowed except for expenditure of Rs. 50.62 lakh towards "replacement of underground fire water lines and badly corroded sluice valve", which is not allowed as the petitioner has not provided the gross value of the replaced assets. In terms of Note-2 under Regulation 18, any expenditure on replacement of old assets should be considered after writing off the gross value of the original assets from the original project cost. In this regard, the petitioner vide letter dated 3.12.2009 has submitted as under:

*"The expenditure of Rs.50.62 lakh is towards installation of additional fire water lines in cooling tower and MGR area connecting to the existing ring header for safety and fire protection. Inadvertently the word replacement was used in item description. Therefore no de-capitalization against this item is carried out."*

It is observed that the CEA approved scheme No.28 indicates that underground fire water lines and badly corroded sluice valves were required to be replaced under the scheme. As such, the petitioner's prayer that additional system has been put in place is not acceptable and capitalization of Rs.50.62 lakh is not allowed in the absence of corresponding de-capitalization. In view of the above, an expenditure of Rs.174.10 lakh is allowed to be capitalized against a claim of Rs.224.72 lakh on CEA approved R&M schemes.

**(c) Expenditure under CEA approved schemes (charged to revenue in books of accounts:** The petitioner has claimed Rs. 213.94 lakh for CEA approved R&M schemes. However, the petitioner has booked this amount in revenue in books of

the station and has prayed that the same be allowed to be capitalized for the purpose of tariff. The prayer of the petitioner is not justified since assets of revenue nature cannot be allowed to be capitalized for the purpose of tariff.

38. In view of the above, an expenditure of Rs. 202.44 lakh for the year 2007-08 is allowed for the purpose of tariff under this head.

**2008-09**

39. The total claim of the petitioner amounting to Rs. 438.45 lakh under this head is in respect of the following works/assets:-

(a) The petitioner has claimed an amount of Rs.361.99 lakh towards procurement of following assets like high temperature infrared thermometer for furnace, augmentation of breakers for Stage-II bottom ash slurry, procurement of spare closed circulation (CC) pump motor in Stage-II, hospital equipment, IT equipment and communication equipment

(b) Out of this, an expenditure of Rs.0.98 lakh and Rs.8.92 lakh on high temperature infrared thermometer for furnace and hospital equipment is allowed as the assets are considered necessary for the efficient operation of the generating station.

(c) The petition has incurred an expenditure of Rs.5.38 lakh towards augmentation of breakers for Stage-II bottom ash slurry. The justification submitted by the petitioner for the expenditure is as under:

*"In view of the frequency of operation and ageing of breakers lead to necessity of augmentation of existing breakers with new breakers of higher rating."*

The petitioner vide its letter dated 11.12.2009 has provided the gross value of the de-capitalized circuit breakers as Rs. 0.60 lakh. The expenditure of Rs. 5.38 lakh on replacement of breakers is allowed along with de-capitalization of Rs 0.60 lakh.

(d) As regards the expenditure of Rs. 177.46 lakh on procurement of spare motors, the petitioner has submitted the following justification:

*"There are 3CC pumps in each 500 MW unit and the availability of these became highly critical in view of their sensitivity. Maintenance of these motors requires specialization and attention of skilled personal from OEM. Also, any breakdown of these takes 7-10 days of outage and repair is possible in presence of OEM. Thus it became necessary to have a spare CC pump motor procured from Hayward Tyler, UK. Only way to achieve reliability of full capacity in view of older units of 3 X 500MW is to have spare CC pump motor for emergency restoration".*

The petitioner's claim towards procurement of spare motors is allowed as it will considerably reduce the outage period and is beneficial to the respondents/beneficiaries. It is pertinent to mention that the CEA has been permitting spare motor as insurance spare to be procured during commissioning of new projects.

(e) An expenditure of Rs.137 lakh and Rs.32.26 lakh on IT and Communication equipments are not allowed in the absence of a detailed break-up of expenditure. The expenditure, it appears is inclusive of minor assets like computers, printers, scanners, mobile sets for employees etc, and hence in terms of Regulation 18(3) has not been allowed for the purpose of tariff. In view of the above an expenditure of Rs. 192.13 lakh is allowed for the purpose of tariff against a claim of Rs.361.99 lakh.

(f) **Expenditure under CEA approved schemes (charged to revenue in books of accounts):** The petitioner has claimed Rs.76.46 lakh in respect of CEA approved R&M schemes. However, the petitioner has booked this amount in revenue in books of accounts of the generating station and has prayed that the same be allowed to be capitalized for the purpose of tariff. The petitioner's prayer is not justified since assets of revenue nature cannot be allowed to be capitalized for the purpose of tariff.

40. In view of the above, an expenditure of Rs. 192.13 lakh for the year 2008-09 is allowed for the purpose of tariff under this head.

**Deferred works relating to ash pond or ash handling system in the original scope of work [18(2)(v)]**

41. The petitioner has claimed Rs.7.90 lakh and Rs. 290.39 lakh during 2006-07 and 2007-08 under this head, which is considered as under:

**2006-07**

42. The petitioner has incurred an expenditure of Rs. 8.28 lakh on widening of the road in front of dry ash extraction plant for safe ash transportation to meet the statutory requirement of 100% ash utilization. The amount of Rs 7.90 lakh along with a negative entry of Rs.0.38 lakh towards adjustment of final bill in respect of works allowed during 2005-06, is allowed for the purpose of tariff.

**2007-08**

43. The petitioner has incurred expenditure of Rs. 290.39 lakh on raising of ash dyke. Considering the fact that raising of ash dyke is necessary after few years of



operation of the generating station, the expenditure is allowed for the purpose of tariff under 18(2)(v).

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

(Rs in lakh)

<b>Nature of capitalization</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>Total</b>
Deferred liabilities relating to works / services within original Scope of work- <b>18(2)(i)</b>	11.29	5.43	45.95	<b>62.67</b>
Liabilities to meet award of arbitration or for compliance of the order or decree of a court- <b>18(2) (ii)</b>	4.17	0.00	62.13	<b>66.30</b>
On account of change in law [ <b>18(2)(iii)</b> ]	1.42	0.00	0.00	<b>1.42</b>
Works/services which have become necessary for efficient and successful operation of the generating station, but not included in the original project cost- <b>18(2) (iv)</b>	150.99	202.44	192.14	<b>545.57</b>
Deferred works relating to ash pond or ash handling system in the original scope of work [ <b>18(2)(v)</b> ]	7.90	290.39	0.00	<b>298.29</b>
<b>Total before adjustments of exclusions(A)</b>	<b>175.78</b>	<b>498.25</b>	<b>300.22</b>	<b>974.25</b>
Exclusions not allowed (B)	0.00	(-) 81.98	0.00	<b>(-) 81.98</b>
Additional capital expenditure allowed (C=A+B)	175.78	416.27	300.22	<b>892.27</b>
Less: Undischarged liabilities included above	8.05	22.08	1.68	<b>31.82</b>
Add: Discharge of liabilities disallowed vide order dated 30.7.2008 in Petition No. 29/2007	0.00	27.97	0.00	<b>27.97</b>
Add: Discharge of liabilities disallowed	0.00	8.05	22.05	<b>30.10</b>
<b>Net additional capital expenditure allowed for the purpose of tariff</b>	<b>167.73</b>	<b>430.21</b>	<b>320.59</b>	<b>918.52</b>

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

45. The Commission vide its order dated 30.6.2006 in Petition No.148/2004 had allowed capitalization of FERV amounting to Rs.426.07 lakh for the period 2001-04.

The FERV allowed was based on the calculations as under:

(Rs in lakh)			
Particulars	2001-02	2002-03	2003-04
Total actual loan opening balance (a)	47188	38028	26085
Normative loan opening balance (b)	17777	8616	0
FERV (actual) claimed by petitioner (c)	(-)390	2529	1023
FERV equivalent to Normative loan opening balance [(c x b) ÷ a]	(-)146.92	572.99	0
<b>Total Normative FERV allowed</b>	<b>426.07</b>		

46. Subsequently, the Commission by order dated 27.5.2008 in Petition No.34/2001 revised the tariff of the generating station for the period 2001-04 after applying the normative debt repayment methodology, as per directions contained in judgment dated 14.11.2006 in Appeal No. 94 and 95/2005 of the Appellate Tribunal for Electricity(Appellate Tribunal). The revised net opening normative loan for 2001-04 is as under:

(Rs in lakh)			
Particulars	2001-02	2002-03	2003-04
Normative loan opening balance	33034	26621	18261

47. In the petition, the petitioner has prayed that FERV amounting to Rs.2213.53 lakh corresponding to revised normative loan should have been added to the capital cost as on 1.4.2004, in line with methodology adopted by the Commission in the tariff petitions for the period 2004-09, instead of an amount of Rs.426.07 lakh.

48. The petitioner's claim of FERV on normative basis has been examined. Based on the revised normative loan outstanding, FERV works out to Rs.2213.53 lakh, which has been admitted for the purpose of tariff. The necessary calculation is shown as under:

(Rs in lakh)

Particulars	2001-02	2002-03	2003-04
Total actual loan opening balance (a)	47188	38028	26085
Revised Normative loan opening balance (b)	33034	26621	18261
FERV (actual) claimed by petitioner (c)	(-) 390	2529	1023
FERV equivalent to Normative loan opening balance [(c x b) ÷ a]	(-) 273.02	1770.39	716.16
<b>Total Normative FERV allowed</b>			<b>2213.53</b>

49. Thus, the differential FERV considered for the tariff period 2001-04 works out to Rs.1787.46 lakh.

### Capital cost

50. As stated above, that the Commission had admitted the capital cost of Rs.225362.20 lakh (inclusive of FERV amounting to Rs.426.07 lakh for the tariff period 2001-04) as on 1.4.2004 for determining tariff for the period 2004-09.

51. Taking into account the capital cost of the generating station as on 1.4.2004, the additional FERV amounting to Rs.1787.46 lakh allowed for tariff period 2001-04, the additional capital expenditure approved earlier for the years 2004-05 and 2005-06 and the additional capital expenditure approved for the years 2006-07, 2007-08 and 2008-09 as per para 44 above, the capital cost for the period 2004-09 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 vide order dated.30.7.2008 in Petition No. 29/2007	225362.20				
Add: Additional FERV on normative basis for the period 2001-04	1787.46				
Opening Capital cost	227149.66	228222.70	228561.97	228729.70	229159.91
Additional capital expenditure	1073.04	339.27			

allowed vide order 30.7.2008 in Petition No. 29/2007					
Additional capital expenditure approved for 2006-09 as detailed above			167.73	430.21	320.59
<b>Closing Capital cost</b>	<b>228222.70</b>	<b>228561.97</b>	<b>228729.70</b>	<b>229159.91</b>	<b>229480.49</b>
<b>Average Capital cost</b>	<b>227686.18</b>	<b>228392.34</b>	<b>228645.83</b>	<b>228944.80</b>	<b>229320.20</b>

### Debt-Equity ratio

52. 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.*

53. The debt equity ratio of 50:50 was considered by the Commission in respect of FERV (on normative basis amounting to Rs.426.07 lakh) for the period 1.4.2001 to 31.3.2004 vide order dated 30.6.2006 in Petition No. 148/2004. The Appellate

Tribunal in its judgment dated 4.10.2006 in Appeal no. 135, 136, etc. of 2005, at para-16 has observed as under: :

*"Once the fixed cost has been agreed to be financed in a certain ratio of debt and equity, the equity can be affected by FERV only if equity is in foreign exchange. The provision of FERV as a pass through has been kept to ensure that any liability or gain, if any, arising on account of any variation in foreign exchange rates (whether debt or equity) is passed on to the beneficiary. In case there is no FERV liability or gain, as the case may be, there will not be any FERV adjustment. In the instant case the additional liability arising on account of FERV shall have an impact only on the debt liability and not equity capital. In this view of the matter, we hold that FERV adjustment is to be made in respect of debt liability and not in respect of the equity. Accordingly, we hold that the CERC is only to make adjustment in respect of debt liability and not in respect of the equity.*

*In view of the aforesaid discussions, the appeal is partly allowed to the extent indicated above. The Central Electricity Regulatory Commission shall re-calculate the effect of FERV on the debt liability."*

54. In view of the above and in consideration of the decision of the Commission in order dated 11.1.2010 in Petition No. 120/2005, the impact of FERV is adjusted against loan as it arises out of loan liability.

55. Accordingly, FERV of Rs.426.07 lakh allowed earlier and differential FERV amounting to Rs.1787.46 lakh for the period from 1.4.2001 to 31.3.2004, allowed in the petition, has been allocated to debt as on 1.4.2004.

56. As a result, the gross opening loan (normative) as on 1.4.2004 has been revised from Rs.112681.10 lakh as considered in order dated 24.12.2008 to Rs.114681.60 lakh. The normative equity as on 1.4.2004 is revised from Rs.112681.10 lakh to Rs.112468.07 lakh.

57. Consequent to the adjustment of FERV for the period 1.4.2001 to 31.3.2004, as above, the difference in the FERV recovered, shall be mutually settled between the parties.

58. Further, the petitioner has submitted that the additional capital expenditure claimed has been financed through loan of Rs.600 lakh drawn out LIC (T4 D4) during 2006-07 and the balance from internal accruals/resources. Considering the details of the capital work in progress furnished by the petitioner and the amount of de-capitalized assets, the equity component of additional capitalization is more than 30%. Hence, 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 2004 regulations. Accordingly, additional notional equity of the generating station on account of capitalization approved, works out as under:

	(Rs. In lakh)		
	2006-07	2007-08	2008-09
Additional Notional Equity	50.32	129.06	96.18

### Return on Equity

59. 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
Equity-Opening considered vide order dated 30.6.2006	112681.10	-	-	-	-
Addition of Equity due to additional FERV on normative basis for tariff period 2001-04 & on account of allocating FERV to debt only	(-)213.04	-	-	-	-
Equity – Opening	112468.07	112789.98	112891.76	112942.08	113071.14

Addition of Equity due to additional capital expenditure allowed vide order dated 30.7.2008 in Petition No. 29/2007	321.91	101.78	-	-	-
Addition of Equity due to additional capital expenditure approved above in the instant petition	-	-	50.32	129.06	96.18
Equity-Closing	112789.98	112891.76	112942.08	113071.14	113167.31
Average equity	112629.02	112840.87	112916.92	113006.61	113119.23
Return on Equity @ 14%	<b>15768.06</b>	<b>15797.72</b>	<b>15808.37</b>	<b>15820.92</b>	<b>15836.69</b>

### Interest on loan

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

- (a) Revised gross opening loan on normative basis on 1.4.2004 as mentioned at para 56 above is Rs.114681.60 lakh.
- (b) Cumulative repayment of loan on normative basis amounting to Rs.97741.17 lakh on 1.4.2004 as considered in order dated 24.12.2008 has been retained for the purpose of tariff.
- (c) The revised net opening normative loan as on 1.4.2004 is Rs.16940.42 lakh.
- (d) There is addition of notional loan to the tune of Rs.117.41 lakh, Rs.301.15 lakh and Rs.224.41 lakh on account of additional capital expenditure during the period 2006-07, 2007-08 and 2008-09, respectively.
- (e) The actual loan position as furnished by the petitioner has been used for arriving at the weighted average rate of interest to be applied on normative outstanding loan for calculating "Interest on Loan" for the purpose of tariff. The petitioner has not furnished the actual loan details and in the Form-13 it has been mentioned as "not applicable as there is no normative loan outstanding". Thus, in the absence of details of actual loans as on 1.4.2004

the weighted average rate of interest of 5.36% as calculated for the year 2003-04 has been applied.

- (f) While dealing with the additional capitalization petition for the period 2004-06 the weighted average rate of 5.36% was applied as the petitioner had submitted that no fresh loan was drawn for financing the additional capital expenditure. However, it is observed from the actual loan position now furnished by the petitioner that there has been a drawl of Rs.1400 lakh dated 15.9.2005 from CBI for financing the additional capital expenditure for the period 2004-06.
- (g) Considering the fact that the actual loan position furnished by the petitioner is beneficial to then respondents/beneficiaries, since the weighted average rate of interest for the years 2004-05 and 2005-06 works out to 4.56% and 4.62% instead of 5.36% considered in the absence of actual loan details, the actual loan details furnished now has been considered to work out the normative repayment applicable during the period/year, as under.

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

- (h) Interest capitalized has been adjusted for the purpose of calculating weighted average rate of interest.
- (i) Normative repayment of 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.

61. Interest on loan has been computed as under:

	(Rs. In lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Opening Loan as in order dated 30.6.2006	112681.10	-	-	-	-
Addition of loan due to additional FERV on normative basis for the period 2001-04 and on account of allocating FERV to debt	2000.50	-	-	-	-
Gross Opening Loan – Considered now	114681.60	115432.73	115670.21	115787.62	116088.77
Cumulative Repayment of Loan upto previous year	97741.17	105977.63	114239.62	115787.62	116088.77
Net Loan Opening	16940.42	9455.10	1430.59	0.00	0.00
Addition of loan due to additional capital expenditure allowed vide order dated 24.12.2008 in Petition No. 29/2007	751.13	237.49	-	-	-
Addition of loan due to additional capital expenditure approved above in the instant petition	-	-	117.41	301.15	224.41
Repayment of loan during the year	8236.45	8262.00	1548.00	301.15	224.41
Net Loan Closing	9455.10	1430.59	0.00	0.00	0.00
Average Loan	13197.76	5442.85	715.30	0.00	0.00
Weighted Average Rate of Interest on Loan	4.5567%	4.6243%	4.9740%	5.7997%	7.1711%
<b>Interest on Loan</b>	<b>601.38</b>	<b>251.69</b>	<b>35.58</b>	<b>0.00</b>	<b>0.00</b>

### Depreciation

62. In order dated 30.6.2006, the balance depreciation recoverable as on 1.4.2004 was considered as Rs.35648.90 lakh. This amount was arrived at after considering the gross depreciable value and cumulative depreciation amounting to Rs.200450.38 lakh and Rs.164801.48 lakh, recovered as on 1.4.2004 (inclusive of

Rs.21421 lakh in respect of depreciation for the period 2001-04, Rs.2.41 lakh in respect of depreciation recovered/to be recovered from beneficiaries as a impact of FERV amounting to Rs.426.07 lakh, for the period 2001-04 and after adjustment of Rs.475.20 lakh on account of de-capitalization of assets for the period 2001-04).

63. The Commission vide its order dated 27.5.2008 in Petition No. 34/2001 revised the depreciation amount recovered during the period 2001-04, from Rs.21421 lakh to Rs.24628 lakh pursuant to revision of tariff on account of revision of debt repayment methodology as per the directions contained in judgment dated 14.11.2006 of the Appellate Tribunal.

64. Accordingly, the cumulative depreciation recovered as on 1.4.2004 is revised to Rs.168008.48 lakh and the corresponding balance depreciable value reduced to Rs.32441.90 lakh.

65. However, on account of additional FERV on normative basis amounting to Rs.1787.46 lakh, the balance depreciation recoverable as on 1.4.2004 increases to Rs.33968.19 lakh, after adjustment of Rs.82.42 lakh in respect of depreciation recovered/ to be recovered from beneficiaries on account of additional FERV for the period from 1.4.2001 to 31.3.2004. Thus, the cumulative depreciation as on 1.4.2004 is revised to Rs.168090.90 lakh.

66. Weighted average rate of depreciation of 3.62% considered in order dated 30.7.2008 has been considered to arrive at the depreciation allowed for the period 2004-09. However, as the normative opening loan balance as on 1.4.2007 is 'nil', from the year 2007-08 onwards, the balance depreciation has been spread over the balance useful life of 6.85 years of the generating station. 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	227149.66	228222.70	228561.97	228729.70	229159.91
Closing capital cost	228222.70	228561.97	228729.70	229159.91	229480.49
Average capital cost	227686.18	228392.34	228645.83	228944.80	229320.20
Depreciable value @ 90%	202541.96	203177.50	203405.65	203674.72	204012.58
Balance depreciable value	34451.06	27081.35	19131.20	11129.10	9919.02
Balance useful life	9.85	8.85	7.85	6.85	5.85
Depreciation	8236.45	8262.00	8271.17	1624.69	1695.56

### **Advance Against Depreciation**

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

### **O&M expenses**

68. The O&M Expenses as considered in order dated 30.7.2008 has been considered for revision of tariff.

### Interest on Working capital

69. For the purpose of calculation of working capital the operating parameters including the price of fuel components as considered in the order dated 24.12.2008 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	13452.07	13452.07	13452.07	13488.92	13452.07
Oil stock -2 months	771.54	771.54	771.54	773.66	771.54
O & M expenses	1690.00	1757.25	1827.50	1900.00	1977.25
Spares	3488.24	3697.54	3919.39	4154.55	4403.83
Receivables	26980.99	27072.70	27187.43	26262.22	26386.95
Total Working Capital	46382.84	46751.10	47157.93	46579.35	46991.63
Rate of Interest	10.2500%	10.2500%	10.2500%	10.2500%	10.2500%
Total Interest on Working capital	<b>4754.24</b>	<b>4791.99</b>	<b>4833.69</b>	<b>4774.38</b>	<b>4816.64</b>

70. The revised annual fixed charges 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	601.38	251.69	35.58	0.00	0.00
Interest on Working Capital	4754.24	4791.99	4833.69	4774.38	4816.64
Depreciation	8236.45	8262.00	8271.17	1624.69	1695.56
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Return on Equity	15768.06	15797.72	15808.37	15820.92	15836.69
O & M Expenses	20280.00	21087.00	21930.00	22800.00	23727.00
<b>Total</b>	<b>49640.13</b>	<b>50190.40</b>	<b>50878.81</b>	<b>45019.99</b>	<b>46075.89</b>

71. The target availability of 80% considered by the Commission in the order dated 30.7.2008 remains unchanged. Similarly other parameters viz. specific fuel consumption Auxiliary Power consumption and Station Heat rate etc considered in the order dated 30.7.2008 have been retained for the purpose of calculation of the revised fixed charges.

72. The petitioner shall claim the difference in respect of the tariff determined by order dated 24.12.2008 and the tariff determined by this order, from the beneficiaries in three equal monthly installments.

73. 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.

74. 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.

75. Petition No.142/2009 stands disposed of in terms of the above.

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

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

Sd/-  
**(R.KRISHNAMOORTHY)**  
MEMBER

Sd/-  
**(DR.PRAMOD DEO)**  
CHAIRPERSON