

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram**

1. Dr. Pramod Deo, Chairperson
2. Shri. S. Jayaraman, Member
3. Shri. V.S.Verma, Member

**Petition No. 53/2009**

**In the matter of**

Approval of revised fixed charges after considering the impact of additional capital expenditure incurred during the years 2004-05 and 2005-06 in respect of Tanakpur Hydroelectric Project, (3 x 31.4 MW) for the period 1.4.2004 to 31.3.2009.

**And in the matter of**

NHPC Ltd.

**...Petitioner**

Vs

1. Punjab State Electricity Board, Patiala
2. Haryana Power Generation Corporation Ltd., Panchkula
3. BSES-Yamuna Power Ltd., New Delhi
4. Uttar Pradesh Power Corporation Ltd, Lucknow
5. BSES-Rajdhani Power Ltd., New Delhi
6. Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur
7. North Delhi Power Ltd., Delhi
8. Uttarakhand Power Corporation of Ltd., Dehradun
9. Jaipur Vidyut Vitaran Nigam Ltd., Jaipur
10. Himachal Pradesh State Electricity Board, Shimla
11. Jodhpur Vidyut Vitaran Nigam Ltd., Jodhpur
12. Engineering Deptt. UT Secretariat, Chandigarh
13. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
14. Power Development Deptt. Govt of J&K, Jammu

**...Respondents**

**The following were present**

1. Shri. Prashant Kaul, NHPC
2. Shri S.K.Meena, NHPC

**ORDER  
(DATE OF HEARING: 16.7.2009)**

This petition has been filed by the petitioner, NHPC Ltd, for revision of annual fixed charges after considering the impact of additional capital expenditure

for the years 2004-05 and 2005-06, in respect of Tanakpur Hydroelectric Project, (3 x 31.4 MW) (hereinafter referred to as “the generating station”) for the period from 1.4.2004 to 31.3.2009 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 revised annual fixed charges in respect of Tanakpur HE project after considering the impact of net additional capitalization as per details given in Annexure-I, for the tariff period 1.4.2004 to 31.3.2009.*
- (ii) allow the servicing of the capital expenditure from the year the same is incurred.*
- (iii) allow the petitioner to approach the Hon’ble Commission for one more time for revision of annual fixed charges after the accounts of FY 2008-09 are finalized.*
- (iv) allow the reimbursement of filing fee of this petition by the respondents.*
- (v) pass any other orders in this regard as the Hon’ble Commission may find appropriate in the circumstances pleaded above”.*

2. The generating station was commissioned during April 1993. The tariff for the generating station for the period from 1.4.2004 to 31.3.2009 was approved by the Commission vide its order dated 9.5.2006 in Petition No.30/2005 and was revised by order dated 5.2.2007 in Review Petition No.68/2006 (in Petition No.30/2005). The annual fixed charges approved by the Commission based on capital cost of Rs.38920.46 lakh (inclusive of FERV) as on 31.3.2004, are given hereunder:

(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>
Depreciation	872.85	872.85	872.85	610.34	610.34
Interest on Loan	176.41	93.05	25.69	0.00	0.00
Return on Equity	1351.20	1351.20	1351.20	1351.20	1351.20
Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	168.94	173.98	179.66	181.88	189.47
O & M Expenses	2164.00	2250.00	2340.00	2434.00	2531.00
<b>TOTAL</b>	<b>4733.40</b>	<b>4741.08</b>	<b>4769.39</b>	<b>4577.41</b>	<b>4682.00</b>

3. Reply to the petition has been filed by the respondent UPPCL.

## **ADDITIONAL CAPITALISATION**

4. Regulation 34 of the 2004 regulations provides for considering the additional capital expenditure for tariff purposes as under:

*“(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 works subject to ceiling specified in regulation 33,*
- (iv) Liabilities to meet award of arbitration or in compliance of the order or decree of a court, and*
- (v) On account of change in law.*

*Provided that original scope of works 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 generating station.*

*(2) Subject to the provision of clause (3) of this regulation, the capital expenditure of the following nature actually incurred after the cut off 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 in compliance of the order or decree of a court;*
- (iii) On account of change in law; and*
- (iv) Any additional works/service which has become necessary for efficient and successful operation of plant but not included in the original capital cost.*

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

### **Note**

*The list of items is illustrative and not exhaustive.*

*(4) Impact of additional capitalisation 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 the 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 36.*

**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 capital 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 36.

**Note 4**

Any expenditure admitted on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified in regulation 36 after writing off the original amount of the replaced assets from the original capital cost."

5. The additional capital expenditure for the years 2004-05 and 2005-06 claimed by the petitioner, after reconciliation with the books of accounts, is as under:

	(Rs. In lakh)	
	<b>2004-05</b>	<b>2005-06</b>
Additional Capitalization as per books of Accounts <b>(A)</b>	<b>72.73</b>	<b>(-) 188.49</b>
<b>Exclusions</b>		
Minor assets -Regulation 34(3)	11.02	19.25
Deletion of minor assets -Regulation 34(3)	(-) 12.52	(-) 0.60
Assets transferred to/deletion from the head "Assets not in use" (Obsolete / Unserviceable assets)	(-) 55.06	(-) 2.85
Assets not in use as on 31.3.2004 (Obsolete / Unserviceable assets) and booked in Net Book Value-WDV	2.84	1.20
Capital Spares as per AS-2	10.64	21.15
Deletion of spares capitalized in financial year 2004-05 & 2005-06 due to consumption	0.00	(-) 10.64
Deletion of capital spares disallowed during the period 2001-04	0.00	(-) 195.70
Total Exclusions <b>(B)</b>	<b>(-) 43.08</b>	<b>(-) 168.19</b>
<b>Additional capital expenditure claimed (C=A-B)</b>	<b>115.81</b>	<b>(-) 20.30</b>

**Exclusion**

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

(a) **Minor assets:** In terms of clause (3) of Regulation 34, the petitioner has excluded the amounts of Rs.11.02 lakh and Rs.19.25 lakh for the years 2004-05 and 2005-06 respectively, against minor assets like furniture and fixtures, photocopy and duplicating machines, telephones and telex

machines, computers, printers, refrigerators, colour TV, air-conditioners, EDP equipments, projectors, etc. The exclusions claimed have been allowed.

(b) **Deletion of minor assets:** The petitioner by way of negative entries in books of accounts amounting to Rs. 12.52 lakh and Rs. 0.60 lakh for the years 2004-05 and 2005-06 respectively has de-capitalised minor assets like furniture and fixtures, computers, calculators, telephones and telex machines and miscellaneous office equipments, apparently on the ground that since capitalization of minor assets were not allowed for the purpose of tariff, de-capitalisation of minor assets should also be excluded. The Commission has taken a consistent view that assets which have been capitalized and are no longer in service have to be de-capitalised for the purpose of tariff. In the present case, capitalization of minor assets which were disallowed in terms of the 2004 regulations are now sought to be de-capitalised by the petitioner for the purpose of tariff. Accordingly, the de-capitalisation under this head is not allowed for the purpose of tariff.

(c) **Assets transferred to /deleted from the head “Assets not in use”:** The petitioner has excluded negative entries amounting to Rs.55.06 lakh for the year 2004-05. The assets like pumps, cars, jeeps, air compressors, compactors etc, had already been deleted from the total assets by the Commission in order dated 3.2.2006 in Petition No. 76/2005, pertaining to additional capitalization for the period 2001-04. As such, the exclusion is allowed.

The petitioner has excluded negative entries amounting Rs.2.85 lakh for the year 2005-06. This amount represents the gross value of the surplus assets transferred to the head "assets not in use" on the ground of obsolete /unserviceable assets. As exclusion of negative entry result in addition to the capital cost in respect of assets not in use, exclusion under this head is not allowed.

(d) **Assets not in use:** The petitioner has de-capitalised an amount of Rs. 2.84 lakh and Rs.1.20 lakh for the period 2004-05 and 2005-06 respectively, towards old/unserviceable items like compressors, compactors, cars, pumps, and other surplus assets, which were not in use as on 31.3.2004. The same is in order and hence exclusion is allowed.

(e) **Capital spares as per AS-2:** Since capitalization of spares over and above initial spares procured upto the cut-off date are not allowed for the purpose of tariff, the petitioner has excluded amounts of Rs.10.64 lakh and Rs.21.15 lakh respectively, for the years 2004-05 and 2005-06. The exclusions under this head are allowed.

(f) **Deletion of capital spares not allowed:** The petitioner by negative entries has de-capitalised an amount of Rs.10.64 lakh for the year 2005-06 in respect of main generating equipments like battery charger, battery bank etc, deducted by the Commission from the books of accounts during the period 2004-05 and consumed by the petitioner during 2005-06. The exclusion of capital spares under this head is allowed.

(g) **Deletion of assets replaced by new assets capitalized during the period 2001-04:** The petitioner by negative entries had de-capitalised an amount of Rs. 195.70 lakh in respect of main generating equipments, for the period 2005-06, under this head. The Commission while considering the additional capitalization for the period 2001-04 in respect of the generating station in Petition No.76/2005 had disallowed capitalization of spares amounting to Rs 195.70 lakh (Rs.153.05 lakh in 2002-03 and Rs.42.65 lakh in 2003-04). As the assets had already been de-capitalised during the period 2001-04, exclusion under this head is in order and allowed.

7. The Commission during the hearing on 14.5.2009 directed the petitioner to furnish the detailed categorization for each asset under different clauses of Regulation 34 of the 2004 regulations for which capitalization had been claimed, with proper justification. The petitioner by its affidavit dated 17.6.2009 had submitted details of capitalization of items under different clauses of Regulation 34 of the 2004 regulations. The year-wise and category-wise break-up of the additional expenditure claimed by petitioner is as under:

	(Rs.in lakh)	
	<b>2004-05</b>	<b>2005-06</b>
Deferred liabilities relating to works / services within the original scope of work (Regulation 34 (2) (i))	22.04	0.00
Liabilities to meet award of arbitration or in compliance of order or decree of the court (Regulation 34 (2) (ii))	11.66	0.00
Works/services which have become necessary for efficient and successful operation of station. (Regulation 34 (2) (iv))	70.45	35.70
Expenditure on replacement of old assets (Regulation 34, Note 2)	11.66	12.76
Total addition	115.81	48.46
Total deletion on account of de-capitalisation	0.00	(-) 68.75
Additional capitalisation claimed	<b>115.81</b>	<b>(-) 20.30</b>

8. After examining the asset-wise details and justification for additional capitalisation/ de-capitalisation claimed by the petitioner, under various categories and by applying prudence check, the admissibility of additional capitalisation is discussed in the subsequent paragraphs.

**Deferred liabilities relating to works / services within the original scope of work - (Regulation 34 (2) (i))**

9. The petitioner has claimed an amount of Rs.22.04 lakh during the year 2004-05 under this category. The expenditure pertains to adjustment of Rs. 22.04 lakh, on 7.8.2003 by the Defence Estate Officer, Bareilly, against the amount Rs.98.92 lakh already deposited with MES for 20 hectares of land for construction of power channel. Since only 11 hectares of land was transferred to the petitioner, an amount of Rs. 69.60 lakh was refunded to the petitioner after considering the capitalization of Rs 7.28 lakh, towards the cost of land. Thus, the balance amount of Rs.22.04 lakh, adjusted towards cost of assets and trees on land, has been claimed by the petitioner and capitalization of the same is allowed.

**Liabilities to meet award of arbitration or in compliance of order or decree of the court-(Regulation 34 (2) (ii))**

10. The petitioner has claimed an amount of Rs.11.66 lakh during the year 2004-05, under this category in respect of an Arbitration award relating to barrage work. As the expenditure pertains to payments made in compliance with the orders /judgment of the court, the said amount is allowed to be capitalized.

**Works/services which have become necessary for efficient and successful operation of station- (Regulation 34(2) (iv))**

11. The petitioner has claimed amounts of Rs.70.45 lakh and Rs.35.70 lakh during the year 2004-05 and 2005-06 respectively, under this category. Based on the prudence check, amounts of Rs. 66.81 lakh and Rs. 30.56 lakh for the years



2004-05 and 2005-06 respectively, have been allowed on works like construction of school building, sub-station transformers, purchase of portable transformer oil conditioning machine, fire tenders, network interface card, computers, calculators, electrical equipment, MMS software, close circuit TV, heavy duty drill machine, portable energy meter, installation of street lights along power channel, high-mast flood lights, extension ladder, fire extinguisher etc, which are considered necessary for the efficient and successful operation of the plant. Some of the minor assets like computers and accessories along with assets declared as surplus, have been disallowed.

**Expenditure on replacement of old assets (Regulation 34 Note 2)**

12. The petitioner has claimed amounts of Rs.11.66 lakh and Rs.12.76 lakh during the year 2004-05 and 2005-06 respectively, under this category. Based on prudence check, an amount of Rs.11.66 lakh for purchase of beacon pump and bus for school duty, for the year 2004-05 and Rs 8.96 lakh for purchase of motor cycle/scooter, telephones and telex machines etc, for the year 2005-06, have been allowed to be capitalized. Other expenditure on assets like computers and other minor assets have not been capitalized under clause (3) of Regulation 34. In addition to the capitalization under the above categories, the petitioner has de-capitalised an amount of Rs.68.75 lakh in respect of assets like air coolers, road roller, cars, dozers, trucks and other auxiliary and ancillary items, during the years 2005-06, which is allowed for the purpose of tariff. No amount has been de-capitalised for the year 2004-05.

13. The petitioner had also replaced some of the assets during the year 2005-06, but had reduced the gross value of the replaced assets during the years 2006-07 and 2008-09 as under:

(Rs in lakh)

Asset	Value of replacement	Gross value reduced	Year of reduction
Motor Cycle/ Scooter	0.80	0.10	2006-07
Telephone, Telex machine	8.16	3.23	2008-09
Total	8.96	<b>3.33</b>	

14. The gross value of the above said assets amounting to Rs 3.33 lakh reduced during the years 2006-07 and 2008-09 have been considered as assumed deletions for the year 2005-06, for the purpose of tariff.

15. Based on the above discussions, the additional capital expenditure allowed (without excluding un-discharged liabilities) is as under:

(Rs in lakh)

	2004-05	2005-06
Deferred liabilities relating to works / services within the original scope of work (Regulation 34 (2) (i))	22.04	0.00
Liabilities to meet award of arbitration or in compliance of order or decree of the court (Regulation 34 (2) (ii))	11.66	0.00
Works/services which have become necessary for efficient and successful operation of station. (Regulation 34 (2) (iv))	66.81	30.56
Expenditure on replacement of old assets (Regulation 34, Note 2)	11.66	8.96
<b>Total Addition (P)</b>	<b>112.18</b>	<b>39.52</b>
Deletion	0.00	68.75
Assumed deletion	0.00	3.33
<b>Total Deletion (Q)</b>	<b>0.00</b>	<b>72.08</b>
Additional capitalization allowed before adjustment for exclusions not allowed <b>R= (P)-(Q)</b>	<b>112.18</b>	<b>(-) 32.56</b>
<b>Exclusion not allowed for the purpose of tariff</b>		
Exclusion on minor assets (Regulation 34 (3))	(-) 11.02	(-) 19.25
Exclusion on account of deletion of minor assets (Regulation 34 (3))	0.00	0.00
Assets not in use	2.84	1.20
Exclusion of assets transferred to head "Assets not in use" (Obsolete / Unserviceable Assets) (Y)	(-) 55.06	0.00
Capital Spares as per AS-2	<b>10.64</b>	<b>21.15</b>
Deletion of spares capitalized in financial year 2004-05 & 2005-06 due to consumption	0.00	(-) 10.64
Deletion of capital spares disallowed during the period 2001-04	0.00	(-) 195.70

Total Exclusion	(-) 30.56	(-) 164.75
Exclusion not allowed <b>(S)</b>	<b>(-) 12.52</b>	<b>(-) 3.44</b>
Additional capital expenditure allowed for the purpose of tariff before adjustments on account of un-discharged liabilities <b>(R+S)</b>	<b>99.66</b>	<b>(-) 36.00</b>

16. The petitioner vide its affidavit dated 17.6.2009 has submitted the following asset-wise position of un-discharged liabilities included in its claim for additional capital expenditure:

(Rs in lakh)

Name of Asset	Un-discharged Liabilities					
	Claimed		Discharged			
	2004-05	2005-06	2005-06	2006-07	2007-08	2008-09
Beacon pump	0.24	0.00	0.00	0.24	0.00	0.00
Winding machine	0.03	0.00	0.03	0.00	0.00	0.00
Winch machine	0.06	0.00	0.06	0.00	0.00	0.00
High mast flood light -20 mtrs.	0.00	0.54	0.00	0.54	0.00	0.00
High mast flood light- 18 mtrs.	0.00	0.49	0.00	0.49	0.00	0.00
ISDN capable digital EPBAX system	0.00	0.82	0.00	0.00	0.82	0.00
	<b>0.33</b>	<b>1.85</b>	<b>0.09</b>	<b>1.27</b>	<b>0.82</b>	<b>0.00</b>

17. Accordingly, the above amounts have been deducted during the year in which the liabilities have been charged and adjusted during the year in which the liabilities had been discharged.

18. In view of the above, additional capital expenditure allowed for the purpose of tariff, after excluding the un-discharged liabilities is as under:

(Rs in lakh)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
Additional capital expenditure allowed prior to adjustment on account of un-discharged liabilities	99.66	(-) 36.00	0.00	0.00	0.00
Un-discharged liabilities	0.33	1.85	0.00	0.00	0.00
Liabilities discharged	0.00	0.09	1.27	0.82	0.00
Additional capital expenditure allowed	<b>99.33</b>	<b>(-) 37.77</b>	<b>1.27</b>	<b>0.82</b>	<b>0.00</b>

## Capital cost

19. As already noted, the Commission had admitted capital cost of Rs.38920.46 lakh (inclusive of FERV) as on 31.3.2004 for determining tariff for the period 2004-09.

20. Taking into account the capital cost of the generating station as on 1.4.2004 and the additional capital expenditure approved as per para 18 above, the capital cost for the period 2004-09 is worked out as under:

(Rs. in lakh)

	Upto 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Opening Capital cost as on 1 <sup>st</sup> April of the financial year	38920.46	38920.46	39019.79	38982.02	38983.29	38984.11
Additional capital expenditure for the financial year	0.00	99.33	(-) 37.77	1.27	0.82	0.00
Capital cost as on 31 <sup>st</sup> March of the financial year	38920.46	<b>39019.79</b>	<b>38982.02</b>	<b>38983.29</b>	<b>38984.11</b>	<b>38984.11</b>

## Debt-Equity Ratio

21. Regulation 36 of the 2004 Regulations provides as under:

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

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

*Provided further that in case of the existing generating stations where additional capitalisation has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 34, equity in the additional capitalization to be considered shall be,-*

*30% of the additional capital expenditure admitted by the Commission, or equity approved by the competent authority in the financial package, for additional capitalization, or 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.*

*(2) In case of the generating stations for which investment approval was accorded prior to 1.4.2004 and which are likely to be declared under commercial operation during the period 1.4.2004 to 31.3.2009, debt and equity in the ratio of 70:30 shall be considered:*

*Provided that where equity actually employed to finance the project is less than 30%, the actual debt and equity shall be considered for determination of tariff:*

*Provided further that the Commission may in appropriate cases consider equity higher than 30% for determination of tariff, where the generating company is able to establish to the satisfaction of the Commission that deployment of equity higher than 30% was in the interest of general public”.*

*(3) In case of the generating stations for which investment approval is accorded on or after 1.4.2004, debt and equity in the ratio of 70:30 shall be considered for determination of tariff:*

*Provided that where equity actually employed is more than 30%, equity in excess of 30% shall be treated as notional loan;*

*Provided further that where deployment of equity is less than 30%, the actual debt and equity shall be considered for determination of tariff.*

*(4) The debt and equity amount arrived at in accordance with above clause (1), (2) or (3), as the case may be, shall be used for calculation of interest on loan, return on equity, advance against depreciation and foreign exchange rate variation.”*

22. The petitioner has stated that the additional capital expenditure has been financed through its internal accruals/resources. Debt-equity ratio of 70:30 has been considered for additional capitalization in terms of sub-clause (a) of clause (1) of Regulation 36 of the 2004 regulations. Accordingly, additional notional equity for the generating station on account of capitalization approved, works out as under:

(Rs. in lakh)

	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>
Notional Equity	29.80	(-) 11.33	0.38	0.25

### **Return on Equity**

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

(Rs in lakh)

<b>Return on Equity</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Opening Equity	9651.40	9681.20	9669.87	9670.25	9670.50
Addition due to additional capital expenditure	29.80	(-)11.33	0.38	0.25	0.00
Closing Equity	9681.20	9669.87	9670.25	9670.50	9670.50
Average Equity	9666.30	9675.54	9670.06	9670.38	9670.50
Return on Equity	<b>1353.28</b>	<b>1354.58</b>	<b>1353.81</b>	<b>1353.85</b>	<b>1353.87</b>

## Interest on Loan

24. As no fresh loans have been added to the actual loans, the weighted average rate of interest, as worked out in order dated 9.5.2006 in Petition No. 30/2005, has been considered.

25. Interest on loan has been computed as under:

Interest on Loan	(Rs in lakh)					
	Upto 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross loan as per last order	28474.57	-	-	-	-	-
Addition due to Additional capitalisation	794.00	-	-	-	-	-
Addition due to FERV	0.48	-	-	-	-	-
Gross Normative Loan	29269.05	29269.05	29338.59	29312.15	29313.04	29313.61
Cumulative repayment upto previous year		26985.40	27859.36	28734.05	29313.04	29313.61
Net loan-opening		2283.65	1479.22	578.10	0.00	0.00
Addition due to additional capitalisation		69.53	(-) 26.44	0.89	0.57	0.00
Repayment during the year		873.96	874.69	578.99	0.57	0.00
Net loan-closing		1479.22	578.10	0.00	0.00	0.00
Average loan		1881.44	1028.66	289.05	0.00	0.00
Weighted Average Rate of Interest on loan		9.5500%	9.5500%	9.5500%	9.5500%	9.5500%
Interest		<b>179.68</b>	<b>98.24</b>	<b>27.60</b>	<b>0.00</b>	<b>0.00</b>

## Depreciation

26. For calculating depreciation, the cumulative depreciation of 14646.81 lakh recovered upto 31.3.2004 and the weighted average rate of depreciation of 2.24% as per order dated 9.5.2006 in Petition No. 30/2005 has been considered.

27. The Commission has approved de-capitalization of assets worth Rs 12.52 lakh and Rs 75.53 lakh during the years 2004-05 and 2005-06 respectively. The amount of cumulative depreciation allowed in tariff against the de-capitalised assets has been calculated on pro-rata basis and the same has been cumulatively adjusted from the cumulative depreciation of the year 2005-06.

28. Accordingly, depreciation of the generating station has been worked out as under:

(Rs in lakh)

<b>Depreciation</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Gross Block as on 31.3.2004	38920.46	39019.79	38982.02	38983.29	38984.11
Additional capital expenditure during 2004-09	99.33	(-) 37.77	1.27	0.82	0.00
Closing gross block	39019.79	38982.02	38983.29	38984.11	38984.11
Average gross block	38970.12	39000.90	38982.65	38983.70	38984.11
Rate of Depreciation	2.24%	2.24%	2.24%	2.24%	2.24%
Depreciable Value	35073.11	35100.81	35084.39	35085.33	35085.70
Balance Useful life of the asset	31.7	30.7	29.7	28.7	27.7
Remaining Depreciable Value	20426.30	19580.04	18688.92	17852.65	17230.98
<b>Depreciation</b>	<b>873.96</b>	<b>874.65</b>	<b>874.24</b>	<b>622.04</b>	<b>622.06</b>

### **Advance Against Depreciation**

29. Advance Against Depreciation as considered in order dated 9.5.2006 has been re-calculated after considering the additional capital expenditure. The Advance Against Depreciation has been worked as under:

(Rs in lakh)

<b>Advance against Depreciation</b>	<b>Upto 31.3.2004</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
1/10th of Gross Loan(s)	0.10	2926.91	2933.86	2931.21	2931.30	2931.36
Repayment of the Loan		873.96	874.69	578.99	0.57	0.00
Minimum of the above		873.96	874.69	578.99	0.57	0.00
Depreciation during the year		873.96	874.65	874.24	622.04	622.06
(A) Difference		0.00	0.04	-295.26	-621.47	-622.06
Cumulative Repayment of the Loan		27859.36	28734.05	29313.04	29313.61	29313.61
Cumulative Depreciation/ Advance against Depreciation		15520.77	16395.42	17269.70	17854.72	18476.78
(B) Difference		12338.59	12338.63	12043.33	11458.89	10836.83
Advance against Depreciation Minimum of (A) and (B)		<b>0.00</b>	<b>0.04</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

### **O&M Expenses**

30. O&M expenses as allowed in the order dated 5.2.2007 in Review Petition No.68/2006 have been considered.

## Interest on Working Capital

31. For the purpose of calculation of working capital, the operating parameters including the price of fuel components as considered in the order dated 9.5.2006 have been kept unchanged. The “receivables” component of the working capital in the order dated 5.2.2007 has been revised for the reason of revision of return on equity, interest on loan, etc.

32. The SBI PLR of 10.25% as on 1.4.2004 has been considered as the rate of interest on working capital during the tariff period as considered in order dated 9.5.2006. The necessary details in support of calculation of interest on working capital are as under:

	(Rs in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	678.98	719.72	762.91	808.68	857.20
O & M expenses	180.33	187.50	195.00	202.83	210.92
Receivables	790.00	791.94	795.90	765.34	782.77
Total	1,649.31	1,699.17	1,753.81	1,776.85	1,850.89
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	169.05	174.16	179.77	182.13	189.72

## ANNUAL FIXED CHARGES

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

	(Rs in lakh)				
Annual Fixed Charges	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	873.96	874.65	874.24	622.04	622.06
Interest on Loan	179.68	98.24	27.60	0.00	0.00
Return on Equity	1353.28	1354.58	1353.81	1353.85	1353.87
Advance against Depreciation	0.00	0.04	0.00	0.00	0.00
Interest on Working Capital	169.05	174.16	179.77	182.13	189.72
O & M Expenses	2164.00	2250.00	2340.00	2434.00	2531.00
Total	4739.98	4751.67	4775.42	4592.02	4696.64

34. The reimbursement of the filing fee is not being allowed in view of the Commission’s general order dated 11.9.2008 in Petition No.129/2005.



35. The petitioner shall claim the difference between the fixed charges approved vide order dated 5.2.2007 and those approved now, from the beneficiaries in three equal monthly installments.

36. Petition No.53/2009 stands disposed of in terms of the above.

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

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

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

New Delhi dated the 17<sup>th</sup> September, 2009