

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram**

1. Dr. Pramod Deo, Chairperson
2. Shri R.Krishnamoorthy, Member
3. Shri S.Jayaraman, Member

**Petition No. 97/2009**

**In the matter of**

Petition under section 62 and 79(1) (a) of the Electricity Act, 2003 read with Chapter-V of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for determination of impact on Annual Fixed Charges on account of additional capital expenditure during the years 2004–05 and 2005–06 in respect of Chamera-I HE Project.

**And in the matter of**

National Hydroelectric Power Corpn. Ltd., Faridabad.

**...Petitioner**

Vs

1. Punjab State Electricity Board, Patiala
2. Haryana Power Generation Corporation Ltd., Chandigarh
3. BSES-Rajdhani Power Ltd, New Delhi
4. BSES-Yamuna Power Ltd, New Delhi
5. North Delhi Power Ltd, Delhi
6. Uttar Pradesh Power Corporation Ltd., Lucknow
7. Himachal Pradesh State Electricity Board, Shimla
8. Rajasthan Rajya Vidyut Prasaran Nigam Ltd. (RRVPNL), Jaipur
9. Uttranchal Power Corporation Ltd., Dehradun
10. Jaipur Vidyut Vitran Nigam Ltd. (JJVNL)
11. Jodhpur Vidyut Vitran Nigam Ltd. (JDVVNL), Jodhpur
12. Engineering Deptt., Chandigarh
13. Ajmer Vidyut Vitran Nigam Ltd. (AVVNL), Ajmer
14. Power Development Department, Jammu (J&K)

**...Respondents**

**The following were present**

1. Sh. Prashant Kaul, NHPC

## ORDER

(DATE OF HEARING: 20.8.2009)

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 Chamera-I Hydroelectric Project, (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”).

2. The generating station was commissioned in May,1994. 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.39/2005 and was revised by order dated 5.2.2007 in Review Petition No.64/2006 in Petition No. 39/2005. The revised annual fixed charges approved by the Commission based on capital cost of Rs.202011.44 lakh (inclusive of FERV and additional capitalization) as on 31.3.2004, are 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>
1	Depreciation	4918.00	3591.61	3591.61	3591.61	3591.61
2	Interest on Loan	2.22	0.00	0.00	0.00	0.00
3	Return on Equity	8588.24	8588.24	8588.24	8588.24	8588.24
4	Advance Against Depreciation	0.00	0.00	0.00	0.00	0.00
5	Interest on Working Capital	736.52	740.43	768.94	799.03	830.79
6	O & M Expenses	5934.00	6171.00	6418.00	6675.00	6942.00
	<b>TOTAL</b>	<b>20178.98</b>	<b>19091.28</b>	<b>19366.79</b>	<b>19653.88</b>	<b>19952.65</b>

3. Reply to the petition has been filed by 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-convector, 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)

		2004-05	2005-06
<b>A.</b>	<b>Additional Capitalization as per books of Account</b>	<b>97.41</b>	<b>517.80</b>
<b>B.</b>	<b>Exclusions</b>		
<b>(i)</b>	Exclusion (Regulation 34 (3))	87.05	122.13
<b>(ii)</b>	Deletion (Regulation 34 (3))	-13.78	-9.50
<b>(iii)</b>	FERV	0.00	0.00
<b>(iv)</b>	Assets not in use ending 31 <sup>st</sup> March (Obsolete / Unserviceable Assets)	0.00	0.00
<b>(v)</b>	Assets transferred to head “Assets not in use” (Obsolete / Unserviceable Assets)	0.00	0.00
<b>(vi)</b>	Capital Spares as per AS-2	0.00	6.79
<b>(vii)</b>	Deletion against above capital spares capitalized in 2004-05 and 2005-06 due to consumption	0.00	0.00
<b>(viii)</b>	Deletion against the capital spares already deducted by the Commission during the period 2001-04 for tariff purpose	0.00	-209.83
<b>(ix)</b>	Assets declared surplus and deducted as on 1.4.2004 by the Commission now deleted	-287.97	-1.38
<b>(x)</b>	Deletion of assets which were replaced by new assets capitalized during 2001-04, but NHPC declared in Add Cap petition that gross value of the old assets will be reduced in the year 2004-05 & 2005-06	0.00	0.00
	<b>Total Exclusion (B)</b>	<b>-214.71</b>	<b>-91.79</b>
<b>C.</b>	<b>Additional capital expenditure claimed for the purpose of tariff (C=A-B)</b>	<b>312.11</b>	<b>609.58</b>

## **Exclusions**

6. In the first instance, we consider hereunder, 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.87.05 lakh and Rs.122.13 lakh for the years 2004-05 and 2005-06 respectively, against minor assets like furniture and fixtures, communication equipments, air-conditioners, water coolers, almirahs, fans, etc. The exclusions claimed have been allowed. Further, under same provision, the petitioner has excluded the negative entries amounting to (-)Rs.13.78 lakh and (-)Rs.9.50 for 2004-05 and 2005-06 respectively, appearing in books corresponding to de-capitalization of minor assets, apparently on the ground that since capitalization of minor assets is not being allowed for the purpose of tariff, de-capitalization of minor assets shall also be excluded for the purpose of tariff. It is clarified that capitalization of minor assets has been disallowed for the first time during 2004-09 period and as such it cannot be held that the minor assets being de-capitalized are the ones which were not allowed to be considered for the purpose of tariff. The Commission, while dealing with the additional capital expenditure petition of NTPC has held that assets which are no longer in service cannot be allowed to earn tariff and have to be de-capitalized for the purpose of tariff. Accordingly, the exclusion of negative entries has not been allowed for the purpose of tariff.

(b) **FERV exclusion:** Nil values for exclusion of FERV have been claimed by the petitioner.

(c) **Assets not in use:** Nil values for exclusion of “Assets not in use ending 31<sup>st</sup> March” as well as exclusion of assets transferred to head “Assets not in use” have been claimed by the petitioner.

(d) **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 an amount of Rs.6.79 Lakh for the year 2005-06. The exclusions under this head are allowed.

(e) **Exclusion of deletion against capital spares capitalized :** Nil values for exclusion of deletion against “capital spares capitalized” have been claimed by the petitioner.

(f) **Exclusion of deletion against capital spares already deducted by the Commission:** The petitioner has excluded negative entries amounting to (-)Rs.209.83 lakh for the year 2005-06. The Commission in its order dated 27.4.2006 in Petition No. 86/2005 regarding additional capital expenditure for the period 2001-04, had disallowed the capitalization of spares appearing in the books amounting to Rs.854.73 lakh (Rs.852.58 lakh in 2002-03 and Rs.2.15 lakh in 2003-04). But these assets continued to exist in the gross block of the project. These assets have been deducted in 2005-06 in the books. To avoid double deduction, this deduction is being shown under “exclusion” for tariff purpose. Therefore, the exclusion has been allowed.

(g) **Exclusion of Assets declared surplus and deducted as on 1.4.2004 by the Commission:** The Petitioner has excluded negative entries amounting to (-)Rs.287.97 lakh and (-)Rs.1.38 lakh for the year 2004-05 and 2005-06 respectively. The Commission, in the order dated 27.4.2006 in Petition No. 86/2005 regarding additional capital expenditure during 2001-

04, had reduced the gross value of "Assets not in use" as on 31.3.2004 amounting to Rs.289.4 lakh from capital cost for the purpose of tariff. But these assets continued in the gross block of the project. These assets have been deducted in 2004-05 and 2005-06 in the books. In order to avoid double deduction, this deduction is being shown under "exclusion" for tariff purpose. Therefore, the exclusion has been allowed.

**Exclusion of deletion of replaced assets against which replacement were capitalized during 2001-04, but declared that these would be reduced in 2004-05 and 2005-06:** Nil values for exclusion, under this head, have been claimed by the petitioner.

7. The Commission during the hearing on 7.7.2009 directed the petitioner to furnish the following information

- i) *"Investment approval in support of the additional capital expenditure incurred during 2004-05 and 2005-06;*
- ii) *Certificate to the effect that additional capital expenditure claimed has actually been paid for and it does not include any un-discharged liability;*
- iii) *In case additional capitalization includes any un-discharged liability, the details thereof as on 1.4.2004, 1.4.2005 and 1.4.2006;*
- iv) *Details of corresponding de-capitalization along with the amount capitalized in respect of replaced assets, with proper linkages, date on which the replaced assets were put in service and taken out of service and the cumulative depreciation recovered in tariff on these assets ;*
- v) *Date on which the deleted assets and assets not in use were put in service and taken out of service and the cumulative depreciation recovered on these assets;"*

8. The petitioner by its affidavit dated 31.7.2009 submitted the above information. The year-wise and category-wise break-up of the additional expenditure claimed by petitioner is as under:

(Rs. in lakh)

<b>S.No.</b>	<b>Capitalization Code</b>	<b>2004-05</b>	<b>2005-06</b>
<b>A</b>	<b>Addition</b>	<b>Claimed</b>	<b>Claimed</b>
(i)	Covered under Regulation 34 (1)	0.00	0.00
(ii)	Covered under Regulation 34 (2) (ii)	76.45	9.05
(iii)	Covered under Regulation 34 (2) (iv)	364.72	607.29
(iv)	Covered under Regulation 34 (2) & Note 2)	38.72	14.00
(v)	Not covered under above categories	0.00	1.43
	<b>Total Addition</b>	<b>479.89</b>	<b>631.78</b>
<b>B</b>	<b>Deletion claimed on account of de-capitalization</b>	<b>-167.78</b>	<b>-22.19</b>
<b>C</b>	<b>Additional Capitalization to be claimed (C=A+B)</b>	<b>312.11</b>	<b>609.58</b>

9. 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 capitalization is discussed in the hereunder:

- (a) **Claim covered under Regulation 34(1):** The petitioner has not claimed any amount against items covered under. Regulation 34(1)
- (b) **Claim covered under Regulation 34(2) (ii):** The petitioner has claimed Rs.76.45 lakh and Rs.9.05 lakh during 2004-05 and 2005-06 respectively against the items covered under Regulation 34(2) (ii). After applying prudence check, an amount of Rs.76.45 lakh and Rs.9.05 lakh for the year 2004-05 and 2005-06 respectively have been allowed to be capitalized under this head.
- (c) **Claim covered under Regulation 34(2) (iv):** The petitioner has claimed Rs. 364.72 lakh and Rs.607.29 lakh during 2004-05 and 2005-06 respectively against the items covered under Regulation 34(2) (iv). The



amount claimed by the petitioner in 2004-05 and 2005-06 includes replaced assets amounting Rs.45.75 lakh and Rs.23.42 lakh respectively for which the petitioner has furnished value of the original assets replaced by these assets. These assets are dealt under para 12 under separate head. Further the amount covered under this head also includes replaced assets amounting Rs.43.91 lakh and Rs.0.36 lakh against 2004-05 and 2005-06 respectively. As the petitioner has not furnished value of the original assets replaced by these assets, we are not considering these amounts for the purpose of capitalization. On scrutiny, it is also observed that the claim for 2004-05 also includes assets amounting to Rs.22.85 lakh which were previously declared surplus and deducted from the capital cost. As these assets have now been taken back by the petitioner for use, it has been considered for the purpose of tariff. Thus, these assets have been allowed and the cumulative depreciation recovered against those assets has been adjusted in tariff calculations. In view of above analysis and after applying prudence check, an amount of Rs.265.78 lakh and Rs.559.49 lakh for the year 2004-05 and 2005-06 respectively, have been allowed to be capitalized under this head.

- (d) **Claim covered under Regulation 34(2) Note 2:** The petitioner has claimed Rs.38.72 lakh and Rs.14.00 lakh during 2004-05 and 2005-06 respectively under this category. Further, as explained at par 11, the claim of amounting Rs.45.75 lakh and Rs.23.42 lakh for 2004-05 and 2005-06 respectively, under regulation 34(2)(iv) are being considered under this head as the assets are of the nature of replaced assets. These assets are

allowed to be capitalized under this head and the gross value of the original assets, i.e. replaced assets, has been deducted. In view of above and after applying prudence check, Rs.71.49 lakh and Rs.36.37 lakh for the year 2004-05 and 2005-06 respectively have been allowed.

**(e) Claim not covered under above categories:**

- (i) The petitioner has claimed Rs.1.43 lakh for the year 2005-06 against the items which are not covered elsewhere. After examining the detailed justification for these items claimed by the petitioner that the assets were transferred from Dulhasti during construction but were not capitalized at that time and by applying prudence check, Rs.1.43 lakh for the year 2005-06 has been allowed to be capitalized under this head.
- (ii) In addition to the capitalization under the above categories, the petitioner has de-capitalized Rs.167.78 lakh and Rs 22.19 lakh respectively. After examining the details available on record these have allowed to be de-capitalized.
- (iii) During scrutiny of the details submitted by the petitioner, it is observed that for some of assets replacement is allowed during 2004-05 and 2005-06 but gross value of these are proposed to be reduced beyond 2005-06 in the books of accounts. These are tabulated as below:

(Rs. In Lakh)

<b>Asset</b>	<b>Value of Replacement</b>	<b>Gross Value Reduced</b>	<b>Year of replacement</b>	<b>Year proposed for reduction</b>
Motor Boat (1 No.)	6.27	3.28	2004-05	2006-07
<b>Total</b>	<b>6.27</b>	<b>3.28</b>	<b>2004-05</b>	
Supply, Erection, Commissioning of 33 kv/vcb at gandhiar	13.35	2.18	2005-06	2008-09
L.T. Air Circuit Breaker 3 Pcs	6.17	3.70	2005-06	In future
L.T. Air Circuit Breaker 3 Pcs	3.90	2.34	2005-06	In future
<b>Total</b>	<b>23.42</b>	<b>8.22</b>	<b>2005-06</b>	

(iv) Thus, for the purpose of tariff, gross value of assets, amounting to Rs. 3.28 Lakh and Rs.8.22 Lakh, proposed to be reduced beyond 2005-06 has been considered as assumed deletion for 2004-05 and 2005-06 respectively, for the years in which the assets are replaced.

10. Based on the above discussion, the additional capital expenditure claimed by the petitioner and allowed (before adjusting un-discharged liabilities) for the year 2004-05 and 2005-06 is as under:

(Rs. in lakh)

A.	Capitalization Code	2004-05		2005-06	
		Claimed	Allowed	Claimed	Allowed
(i)	Covered under Regulation 34 (1)	0.00	0.00	0.00	0.00
(ii)	Covered under Regulation 34 (2) (ii)	76.45	76.45	9.05	9.05
(iii)	Covered under Regulation 34 (2) (iv))	364.72	265.78	607.29	559.49
(iv)	Covered under Regulation 34 (2) and Note 2)	38.72	71.49	14.00	36.37
(v)	Not covered under above categories	0.00	0.00	1.43	1.43
	<b>Sub-Total ( Addition) ((i) to (v))</b>	<b>479.89</b>	<b>413.72</b>	<b>631.78</b>	<b>606.34</b>
B.	(a) Deletion Claimed	-167.78	-167.78	-22.19	-22.19
	(b) Deletion assumed	0.00	-3.28	0.00	-8.22
	<b>Total Deletion ((a)+(b))</b>	<b>-167.78</b>	<b>-171.06</b>	<b>-22.19</b>	<b>-30.41</b>
C.	<b>Additional Capitalization allowed before adjustment for exclusions not allowed(C= A+B)</b>	<b>312.11</b>	<b>242.66</b>	<b>609.58</b>	<b>575.93</b>
D.	<b>Exclusions :</b>				
(i)	Covered under Regulation 34 (3)	87.05	87.05	122.13	122.13
(ii)	Deletion Covered under Regulation 34 (3)	-13.78	0.00	-9.50	0.00
(iii)	FERV	0.00	0.00	0.00	0.00
(iv)	Assets not in use ending 31 <sup>st</sup> March (Obsolete / Unserviceable Assets)	0.00	0.00	0.00	0.00
(v)	Assets transferred to head "Assets not in use" (Obsolete / Unserviceable Assets)	0.00	0.00	0.00	0.00
(vi)	Capital Spares as per AS-2	0.00	0.00	6.79	6.79
(vii)	Deletion against above capital spares capitalized in 2004-05 and 2005-06 due to Consumption	0.00	0.00	0.00	0.00
(viii)	Deletion against the capital spares already deducted by the Commission during the period 2001-04 for tariff purpose	0.00	0.00	-209.83	-209.83
(ix)	Assets declared surplus and deducted as on 1.4.2004 by the Commission now deleted	-287.97	-287.97	-1.38	-1.38
(x)	Deletion of assets which were replaced by new assets capitalized during 2001-04, but NHPC declared in Add Cap petition that gross value of the old assets will be reduced in the year 2004-05 and 2005-06	0.00	0.00	0.00	0.00
	<b>Sub-Total ( Exclusion) ((i) to (x))</b>	<b>-214.71</b>	<b>-200.93</b>	<b>-91.79</b>	<b>-82.29</b>
E.	<b>Exclusions not allowed</b>		<b>-13.78</b>		<b>-9.50</b>
F.	<b>Additional capital expenditure allowed (C+E)</b>		<b>228.88</b>		<b>566.43</b>

## UN-DISCHARGED LIABILITIES

11. The petitioner vide its affidavit dated 31.7.2009 has submitted the asset-wise position of un-discharged liabilities included in its claim for additional capital expenditure. These are summarised in the table as below:

(Rs. In lakh)

Sl. No.	Un-discharged Liabilities					
	Claimed		Discharged			
	2004-05	2005-06	2005-06	2006-07	2007-08	2008-09
1.	11.49		8.61	2.08	0.81	0.00
2.		46.69	0.00	42.78	2.80	0.00
<b>TOTAL</b>	<b>11.49</b>	<b>46.69</b>	<b>8.61</b>	<b>44.86</b>	<b>3.60</b>	<b>0.00</b>

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

13. 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)

	2004-05	2005-06	2006-07	2007-08	2008-09
Additional Capitalisation Recommended (before adjustment on account of undischarged liabilities)	<b>228.88</b>	<b>566.43</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Undischarged Liabilities in FY	11.49	46.69	0.00	0.00	0.00
Liabilities discharged in FY	0.00	8.61	0.00	0.00	0.00
<b>Additional Capitalisation recommended for the purpose of tariff</b>	<b>217.39</b>	<b>528.35</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Amount discharged during 2006-07, 2007-08 and 2008-09 would be considered while dealing with the additional capitalization claim of the respective years.

## **CAPITAL COST**

14. As already noted, the Commission had admitted a capital cost of Rs.202011.44 lakh (inclusive of FERV and additional capitalization) as on 31.3.2004 for determining tariff for the period 2004-09.

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

(Rs. in Lakh)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
Opening Capital cost as on 1 <sup>st</sup> April of the financial year	202011.44	202228.83	202757.18	202757.18	202757.18
Additional capital expenditure for the financial year	217.39	528.35	0.00	0.00	0.00
Capital cost as on 31 <sup>st</sup> March of the financial year	202228.83	202757.18	202757.18	202757.18	202757.18

## **DEBT-EQUITY RATIO**

16. 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.”

17. 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 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)

	2004-05	2005-06
Additional Notional Equity	65.22	158.51

### **RETURN ON EQUITY**

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

(Rs in Lakh)

Return on Equity	2004-05	2005-06	2006-07	2007-08	2008-09
Opening Equity	61344.59	61409.81	61568.31	61568.31	61568.31
Addition due to additional capital expenditure	65.22	158.51	0.00	0.00	0.00
Closing Equity	61409.81	61568.31	61568.31	61568.31	61568.31
Average Equity	61377.20	61489.06	61568.31	61568.31	61568.31
Return on Equity	8592.81	8608.47	8619.56	8619.56	8619.56

## **INTEREST ON LOAN**

19. As no fresh loans have been added to the actual loans, the weighted average rate of interest, as worked out in order dated 5.2.2007 in review Petition No. 64/2006 in Petition No. 39/2005, has been considered.

20. Interest on loan has been computed as under:

(Rs in Lakh)

Interest on Loan	Upto 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Normative Loan	140666.84	140666.84	140819.02	141188.86	141188.86	141188.86
Cumulative repayment upto previous year		140620.27	140819.02	141188.86	141188.86	141188.86
Net loan-opening		46.58	0.00	0.00	0.00	0.00
Addition due to additional capitalization		152.17	369.85	0.00	0.00	0.00
Repayment during the year		198.75	369.85	0.00	0.00	0.00
Net loan-closing		0.00	0.00	0.00	0.00	0.00
Average loan		23.29	0.00	0.00	0.00	0.00
Weighted Average rate of Interest on loan		9.5500%	9.5500%	9.5500%	0.0000%	0.0000%
Interest		2.22	0.00	0.00	0.00	0.00

## **DEPRECIATION**

21. As per order dated 5.2.2007 in review Petition No. 64/2006 in Petition No. 39/2005, cumulative depreciation recovered up to 31.3.2004 has been considered as Rs.80005.74 lakh for the tariff period 2004-09. As the loan gets repaid during 2005-06, balance recoverable depreciation has been spread over the balance useful life.

22. As mentioned earlier, assets amounting to Rs.184.84 lakh and Rs.39.91 lakh have been de-capitalized during 2004-05 and 2005-06 respectively. Moreover, surplus assets deducted earlier amounting to Rs.22.85 lakh, have been capitalized



during 2004-05. The amount of cumulative depreciation allowed in tariff against those de-capitalized assets and surplus assets taken back with net value (-)Rs.161.99 lakh and (-)Rs.39.91 lakh for 2004-05 and 2005-06 respectively, have been calculated on pro-rata basis. The same has been adjusted from the cumulative depreciation of the year 2004-05 and 2005-06.

23. 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	202011.44	202228.83	202757.18	202757.18	202757.18
Additional capital expenditure during 2004-09	217.39	528.35	0.00	0.00	0.00
Closing gross block	202228.83	202757.18	202757.18	202757.18	202757.18
Average gross block	202120.13	202493.00	202757.18	202757.18	202757.18
Rate of Depreciation	2.43451%	2.43451%	2.43451%	2.43451%	2.43451%
Depreciable Value	178403.40	178738.98	178976.74	178976.74	178976.74
Balance Useful life of the asset	27.00	26.00	25.00	24.00	23.00
Remaining Depreciable Value	98397.67	93880.58	90524.95	86903.96	83282.96
Depreciation	<b>4920.64</b>	<b>3610.79</b>	<b>3621.00</b>	<b>3621.00</b>	<b>3621.00</b>

### **ADVANCE AGAINST DEPRECIATION**

24. Advance Against Depreciation 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>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)	14066.68	14081.90	14118.89	14118.89	14118.89
Repayment of the Loan	198.75	369.85	0.00	0.00	0.00
Minimum of the above	198.75	369.85	0.00	0.00	0.00
Depreciation during the year	4920.64	3610.79	3621.00	3621.00	3621.00
(A) Difference	-4721.89	-3240.95	-3621.00	-3621.00	-3621.00
Cumulative Repayment of the Loan	140819.02	141188.86	141188.86	141188.86	141188.86
Cumulative Depreciation/ Advance against Depreciation	84926.38	88469.20	92072.79	95693.78	99314.78
(B) Difference	55892.64	52719.66	49116.08	45495.08	41874.08
Advance against Depreciation Minimum of (A) and (B)	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

### **O&M EXPENSES**

25. O&M expenses as allowed in the order dated 5.2.2007 in review Petition No. 64/2006 in Petition No. 39/2005, have been considered.

### **INTEREST ON WORKING CAPITAL**

26. For the purpose of calculation of working capital, the operating parameters as considered in the order dated 5.2.2007 in review Petition No. 64/2006 in Petition No. 39/2005, have been kept unchanged. However, the “receivables” component of the working capital in the above order dated 5.2.2007, would get modified for the reason of revision of return on equity, interest on loan, etc.

27. 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 the order dated 5.2.2007 in review Petition No. 64/2006 in Petition No. 39/2005. Necessary details in support of calculation of interest on working capital are as under:

(Rs in Lakh)

	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Maintenance Spares	3327.87	3527.54	3739.19	3963.54	4201.36
O & M expenses	494.50	514.25	534.83	556.25	578.50
Receivables	3364.39	3188.56	3238.09	3285.94	3335.74
Total	7186.75	7230.35	7512.12	7805.74	8115.59
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	<b>736.64</b>	<b>741.11</b>	<b>769.99</b>	<b>800.09</b>	<b>831.85</b>

### **ANNUAL FIXED CHARGES**

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

(Rs in Lakh)

<b>Annual Fixed Charges</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Depreciation	4920.64	3610.79	3621.00	3621.00	3621.00
Interest on Loan	2.22	0.00	0.00	0.00	0.00
Return on Equity	8592.81	8608.47	8619.56	8619.56	8619.56
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	736.64	741.11	769.99	800.09	831.85
O & M Expenses	5934.00	6171.00	6418.00	6675.00	6942.00
<b>Total</b>	<b>20186.32</b>	<b>19131.37</b>	<b>19428.55</b>	<b>19715.65</b>	<b>20014.41</b>

29. 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.

30. The petitioner shall be reimbursed the difference between the fixed charges approved vide order dated 5.2.2007 in review Petition No. 64/2006 in Petition No. 39/2005 and those approved now, by the beneficiaries in three equal monthly installments.

31. Petition No.97/2009 stands disposed of in terms of the above.

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

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

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

New Delhi dated the 21<sup>st</sup> December, 2009