

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 197/2009**

**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: 12.11.2009**

**Date of Order: 5.1.2010**

**In the matter of**

Approval of revised fixed charges after considering the impact of additional capital expenditure incurred during the years 2006-07, 2007-08 and 2008-09 in respect of Uri HE Project, 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. BSES-Rajdhani Power Ltd., New Delhi
5. North Delhi Power Ltd., Delhi
6. Uttar Pradesh Power Corporation Ltd, Lucknow
7. Jaipur Vidyut Vitaran Nigam Ltd., Jaipur
8. Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur
9. Uttarakhand Power Corporation of Ltd., Dehradun
10. Jodhpur Vidyut Vitaran Nigam Ltd., Jodhpur
11. Himachal Pradesh State Electricity Board, Shimla
12. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
13. Engineering Deptt. UT Secretariat, Chandigarh
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
3. Shri M.S.Babu, NHPC

## ORDER

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 2006-07, 2007-08 and 2008-09, in respect of Uri Hydroelectric Project, (4x120 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 prayer:

- "(i) Approve the revised annual fixed charges in respect of Uri power station, after considering the impact of net additional capitalization as per the details given in Annexure-I, for the tariff period 1.4.2004 to 31.3.2009*
- (ii) Allow the servicing of the expenditure from the year the same is incurred.*
- (iii) Allow the reimbursement of filing fee of this petition by the respondents.*
- (iv) Pass any other order in this regard as the Hon'ble Commission may find appropriate in the circumstances pleaded above".*

2. The tariff for the generating station for the period from 1.4.2004 to 31.3.2009 was approved by the Commission vide order dated 9.5.2006 in Petition No.47/2005, based on capital cost of Rs. 342103.51 lakh (inclusive of FERV), as on 31.3.2004. Subsequently, the Commission vide its order dated 25.06.2009 in Petition No. 24/2009 revised the annual fixed charges after considering the additional capitalization/de-capitalization for the years 2004-05 and 2005-06 as given under:

(Rs. in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	8726.43	8727.21	8727.46	8727.47	5128.72
Interest on Loan	3808.20	3022.81	1483.53	99.41	0.00
Return on Equity	15218.10	15219.38	15219.80	15219.81	15219.81
Advance Against Depreciation	10562.12	5856.12	14617.70	0.00	0.00
Interest on Working Capital	1267.47	1205.48	1366.36	1125.58	1100.77
O & M Expenses	5109.00	5313.00	5526.00	5747.00	5977.00
<b>TOTAL</b>	<b>44691.32</b>	<b>39344.00</b>	<b>46940.85</b>	<b>30919.26</b>	<b>27426.29</b>

3. None of the respondents has filed reply.

### Additional Capitalization

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 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 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 2006-07, 2007-08 and 2008-09 claimed by the petitioner, after reconciliation with the books of accounts, is as under:

		(Rs. in lakh)		
		2006-07	2007-08	2008-09
1.	<b>Additional Capitalization as per books of Account</b>	(-) 192.74	118.55	950.01
2	<b>EXCLUSIONS (Not to be claimed)</b>			
(a)	<b>ADDITION</b>			
(i)	Capital spares as per AS-2	125.83	4.69	31.99
(ii)	Minor Assets-Regulation 34(3)	13.51	35.82	12.37
(iii)	Assets not in use as on 31 <sup>st</sup> March (Obsolete/Unserviceable Assets) WDV	0.00	0.14	3.71

(iv)	FERV	(-) 182.37	0.00	857.39
	<b>Total Addition under Exclusions [2(a)]</b>	<b>(-) 43.03</b>	<b>40.66</b>	<b>905.46</b>
<b>(b)</b>	<b>DELETIONS</b>			
(i)	Minor Assets-Regulation 34(3)	4.88	3.75	4.25
(ii)	Amount of gross block transferred to Obsolete/ Unserviceable Assets from other Head of Accounts -Regulation 34(3)	0.00	0.00	18.16
(iii)	Assets actually deleted in 2007-08 and declared obsolete in 2008-09 but taken in exclusion as gross block as these assets have been reduced during 2006-07	0.00	0.89	0.29
(iv)	Assets not in use during the year out of assets declared obsolete during 2004-05 and 2005-06	0.00	1.92	0.00
(v)	Assets not in use and declared obsolete/unserviceable assets during the year 2006-07, 2007-08 and 2008-09 (WDV)	0.00	0.14	0.00
(vi)	Capital spares capitalized in the years 2004-05, 2005-06,2006-07, 2007-08 and 2008-09 due to consumption	139.85	21.88	18.09
(vii)	Capital spares already deducted by Commission during the period 2001-004	3.22	0.00	0.00
	<b>Total Deletion under Exclusions [2b (i) to 2b(vii)]</b>	<b>147.95</b>	<b>28.58</b>	<b>40.79</b>
	Net Addition under Exclusions	(-) 190.98	12.08	864.67
	<b>Net Additional capitalization claimed (1 -2)</b>	<b>(-) 1.76</b>	<b>106.48</b>	<b>85.33</b>

6. The difference in the amount of additional capital expenditure as per books of accounts and the claim as above is on account of exclusion of certain positive and negative entries in the books of accounts.

## Exclusions

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

**(a) Capital spares as per AS-2:** Since capitalization of spares over and above initial spares procured after the cut-off date are not allowed for the purpose of tariff, the petitioner has excluded amounts of Rs.125.83 lakh, Rs.4.69 lakh and Rs.31.99 lakh for the years 2006-07, 2007-08 and 2008-09 respectively. The exclusions under this head are allowed.

**(b) Minor assets:** In terms of clause (3) of Regulation 34, the petitioner has excluded amounts of Rs.13.51 lakh, Rs.35.82 lakh and Rs.12.37 lakh for the years 2006-07, 2007-08 and 2008-09 respectively against minor assets like furniture and fixtures, air conditioners, air coolers, printers, refrigerators, television sets, telephones and telex machines, computers, etc. The exclusions claimed have been allowed.

**(c) Assets not in use (obsolete/unserviceable assets):** The petitioner has excluded an amount of Rs.0.14 lakh and Rs.3.71 lakh for the years 2007-08 and 2008-09 respectively, under this head, towards old/unserviceable items like wagon chasis, wireless sets, battery chargers, calculators, exhaust fans, air conditioners, etc, which are not in use. The same is in order and hence exclusion is allowed.

**(d) FERV:** The claim of the petitioner for (-) Rs.182.37 lakh and Rs.857.39 lakh for the years 2006-07 and 2008-09 respectively, is allowed as the petitioner has billed the said amounts directly to the beneficiaries in accordance with the 2004 regulations.

**(e) Deletion of Minor assets:** The petitioner has excluded amounts of Rs.4.88 lakh, Rs.3.75 lakh and Rs.4.25 lakh for the years 2006-07, 2007-08 and 2008-09 respectively, in the books of accounts. These minor assets include furniture and fixtures, printers, computers telephones and other fixed/surplus assets of minor value, which have been excluded apparently for the reason that when capitalization of minor assets was not allowed for the purpose of tariff, de-capitalization of such 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-capitalized for the purpose of tariff. In the present case, capitalization of minor assets which was disallowed in terms of the 2004 regulations are now sought to be de-capitalized by the petitioner for the purpose of tariff. Accordingly, de-capitalization under this head is not allowed for the purpose of tariff.

**(f) Amount of Gross Block transferred to obsolete / unserviceable assets from other Head of Accounts:** The petitioner has excluded an amount of Rs.18.16 lakh during the year 2008-09, appearing in books of accounts. These minor assets which include furniture and fixtures, chairs, fan, heaters, printers, computers, battery chargers etc and other fixed/surplus assets of minor value have been excluded 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. Accordingly, this is not being allowed.

**(g) Assets actually deleted in 2007-08 and declared obsolete in 2008-09:** The petitioner has excluded an amount of Rs.0.89 lakh and Rs.0.29 lakh for the years 2007-08 and 2008-09 respectively, under this head. The amount of Rs.0.89 lakh relate to assets deleted in the year 2007-08 and the amount of Rs.0.29 lakh relate to assets declared obsolete in the year 2008-09. The petitioner has capitalized new assets against these old assets in the year 2006-07. Accordingly, during the year 2006-07, the gross value of these assets has been considered as assumed deletion.

**(h) Assets not in use during the year out of assets declared obsolete during 2004-05 and 2005-06:** The petitioner has excluded an amount of Rs.1.92 lakh during 2007-08 under this head, which include assets like jeeps, car, water tanker etc. As these assets were declared obsolete/unserviceable during 2004-05, the exclusion is allowed.

**(i) Deletion against assets not in use declared obsolete/unserviceable assets during the year 2007-08 (WDV):** The petitioner has excluded an amount of Rs.0.14 lakh during the year 2007-08 under this head. The exclusion is justified and hence allowed.

**(j) Deletion against the Capital spares due to consumption:** The petitioner by negative entries has de-capitalized amounts of Rs.139.85 lakh, Rs.21.88 lakh and Rs.18.09 lakh during the years 2006-07, 2007-08 and 2008-09 respectively, on consumption of capital spares disallowed/excluded by the Commission. The exclusion is allowed.

**(k) Deletion against capital spare already deducted during the period 2001-04:** The petitioner by negative entry has de-capitalized an amount of Rs.3.22 lakh during the year 2006-07, on consumption of capital spares, disallowed by the Commission during 2001-04. The exclusion is allowed.

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



(Rs. in lakh)

Sl. No.	Additional Capitalization	2006-07	2007-08	2008-09
1(a)	<b>Addition</b>			
(i)	Liabilities to meet award of arbitration or in compliance of the order or decree of a court- <b>Regulation 34 (2)(ii)</b>	1.34	0.00	10.98
(ii)	Additional works/service which has become necessary for efficient and successful operation of plant but not included in the original capital cost - <b>Regulation 34 (2)(iv)</b>	34.56	64.37	43.10
(iii)	Expenditure on replacement of old assets- <b>Regulation 34(2), Note 2</b>	7.02	44.50	41.57
	<b>Sub-Total</b>	<b>42.93</b>	<b>108.87</b>	<b>95.65</b>
(b)	<b>Deletion/Deduction</b>			
(i)	Deletion	44.68	2.25	0.77
(ii)	Assets transferred to head "Assets not in use" from other Head of Accounts	0.00	0.14	9.54
	<b>Sub-Total</b>	<b>44.68</b>	<b>2.39</b>	<b>10.32</b>
	<b>Additional capitalization [1(a) - (b)]</b>	<b>(-) 1.76</b>	<b>106.48</b>	<b>85.33</b>

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

**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 amount of Rs.1.34 lakh and Rs.10.98 lakh during 2006-07 and 2008-09 respectively under this category. As the expenditure pertains to payments made for acquisition of land as assessed by the Collector, Land Acquisition, pursuant to the order of the Court, the capitalization of the amount is allowed.

**Additional 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.34.56 lakh, Rs.64.37 lakh and Rs.43.10 lakh during the years 2006-07, 2007-08 and 2008-09 respectively. The expenditure for the year 2006-07 amounting to Rs.10.80 lakh in respect of assets like optimizer CDs, photocopy machine etc., which are of the nature of minor assets. Hence, capitalization is not allowed. The expenditure for the year 2007-08 amounting to Rs.4.33 lakh towards items like squirrel cage star/delta induction motors are of the nature of replacement, and hence not considered under this head. As the gross value of the old assets has also not been furnished by the petitioner, these items are not considered in Note 2 under Regulation 34(2). Also, expenditures of Rs. Rs.0.64 lakh towards inverter, Rs.0.14 lakh for retaining ring plier and Rs.0.16 lakh for 'aluminum ladder' for the year 2007-08 are of the nature of minor assets and hence not allowed to be capitalized. The claim for an amount of Rs.4.86 lakh for UPS DC System, Rs.4.21 lakh for computer, Rs.0.20 lakh for table, Rs.0.56 lakh for digital cameras, Rs.0.93 lakh for TV and Rs.0.80 lakh for furnitures, for the year 2008-09 are in the nature of minor assets and hence not allowed to be capitalized. In view of above discussions, and after applying prudence check, amounts of Rs.23.76 lakh, Rs.59.09 lakh and Rs.31.54 lakh for the years 2006-07, 2007-08 and 2008-09, have been allowed to be capitalized.

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

12. The petitioner has claimed amounts of Rs.7.02 lakh, Rs.44.50 lakh and Rs.41.57 lakh during the years 2006-07, 2007-08 and 2008-09 respectively, under this head. The expenditure for Rs.2.93 lakh for the year 2006-07 which include xerox digital photocopier, tools and tackles like portable drill machines etc. are in the nature of

minor assets and hence not allowed to be capitalized. The expenditure for Rs.1.12 lakh for the year 2007-08 in respect of 'aluminum ladder' is not allowed, being a minor asset. In view of above discussion, and after applying prudence check, an amount of Rs.4.09 lakh, Rs.43.38 lakh and Rs.41.57 lakh during the years 2006-07, 2007-08 and 2008-09 respectively has been allowed.

13. In addition to the capitalization under above categories, the petitioner has de-capitalized amounts of Rs.44.68 lakh, Rs.2.25 lakh and Rs.0.77 lakh during the years 2006-07, 2007-08 and 2008-09 respectively and the same is allowed after prudence check.

14. The petitioner has de-capitalized amounts of Rs.0.14 lakh and Rs.9.54 lakh during the years 2007-08 and 2008-09 respectively on account of assets transferred to head "Assets not in use" from gross block of other Head of Accounts. After applying prudence check, the amounts are allowed.

15. The petitioner has capitalized some new assets in the year 2006-07 against some old assets which are to be reduced in the books of accounts of subsequent years. The petitioner has reduced the gross value of the replaced assets as tabulated hereunder:

(Rs.in lakh)

Asset	Gross Value of New Replaced assets	Gross Value of old assets replaced	Year of replacement
Pumps	0.90	0.89	2006-07
Pumps	0.25	0.29	2006-07
<b>Total</b>	<b>1.15</b>	<b>1.18</b>	

16. In view of above, the gross value of old assets replaced, amounting to Rs.1.18 lakh for the year 2006-07 is considered as assumed deletion for the purpose of tariff.

17. Based on the above discussions, the additional capital expenditure allowed (excluding un-discharged liabilities) is as under:

(Rs. in lakh)				
Sl. No	Particulars	2006-07	2007-08	2008-09
(a)	<b>Addition</b>			
i)	Liabilities to meet award of arbitration or in compliance of the order or decree of a court- <b>Regulation 34 (2)(ii)</b>	1.34	0.00	10.98
ii)	Additional works/service which has become necessary for efficient and successful operation of plant but not included in the original capital cost - <b>Regulation 34 (2)(iv)</b>	23.76	59.09	31.54
iii)	Expenditure on replacement of old assets- <b>Regulation 34(2), Note 2</b>	4.09	43.38	41.57
	<b>Sub-Total</b>	<b>29.20</b>	<b>102.47</b>	<b>84.09</b>
(b)	<b>Deletion/Deduction</b>			
i)	Deletion	44.68	2.25	0.77
ii)	Assets transferred to head "Assets not in use" from other Head of Accounts	0.00	0.14	9.54
iii)	<b>Assumed Deletion</b> [Assets actually deleted in 2007-08 and declared obsolete in 2008-09 but replacement against these assets considered during 2006-07.]	<b>1.18</b>	<b>0.00</b>	<b>0.00</b>
	<b>Sub-Total</b>	<b>45.87</b>	<b>2.39</b>	<b>10.32</b>
	<b>NET Additional capitalisation [1(a) – 1(b)]</b>	<b>(-) 16.67</b>	<b>100.08</b>	<b>73.77</b>
<b>2</b>	<b>Exclusion (Not claimed)</b>			
(a)	<b>Addition</b>			
i)	Capital Spares as per AS-2	125.83	4.69	31.99
ii)	Regulation 34(3)	13.51	35.82	12.37
iii)	Assets not in use ending 31 <sup>st</sup> March (Obsolete/Unserviceable Assets) WDV	0.00	0.14	3.71
iv)	FERV	(-) 182.37	0.00	857.39
	<b>Total Addition [2(a)]</b>	<b>(-) 43.03</b>	<b>40.66</b>	<b>905.46</b>
(b)	<b>Deletion</b>			
(i)	Minor Assets-Regulation 34(3)	0.00	0.00	0.00
(ii)	Amount of gross block transferred to Obsolete/ Unserviceable Assets from other Head of Accounts - Regulation 34(3)	0.00	0.00	0.00
(iii)	Assets actually deleted in 2007-08 and declared obsolete in 2008-09 but taken in exclusion as gross block as these assets have been reduced during 2006-07	0.00	0.89	0.29

(iv)	Assets not in use during the year out of assets declared obsolete during 2004-05 and 2005-06	0.00	1.92	0.00
(v)	Assets not in use and declared obsolete/unserviceable assets during the year 2006-07, 2007-08 and 2008-09 (WDV)	0.00	0.14	0.00
(vi)	Capital spares capitalized in the years 2004-05, 2005-06, 2006-07, 2007-08 and 2008-09 due to consumption	139.85	21.88	18.09
(vii)	Capital spares already deducted by Commission during the period 2001-004	3.22	0.00	0.00
	<b>Total deletion [2b(i) to 2b(vii)]</b>	<b>143.07</b>	<b>24.83</b>	<b>18.39</b>
	Net Addition under exclusion	(-) 186.10	15.82	887.08
	Additional Capitalization as per Books of Accounts (1 +2)	(-) 202.77	115.91	960.85
<b>3</b>	<b>Exclusions not allowed</b>	(-) 4.88	(-) 3.75	(-) 22.41
<b>4</b>	<b>Additional capital expenditure allowed (1 +3)</b>	<b>(-) 21.55</b>	<b>96.33</b>	<b>51.37</b>

#### Un-discharged liabilities

18. The petitioner vide its affidavit dated 31.8.2009 has submitted the details of un-discharged liabilities in its claim of additional capital expenditure, as under:

(Rs. in lakh)				
	Un-discharged amount	Discharged		
		2006-07	2007-08	2008-09
<b>2007-08</b>	0.06	0.00	0.00	0.06
<b>2008-09</b>	30.31	0.00	0.00	0.00
<b>Total</b>	<b>30.37</b>	<b>0.00</b>	<b>0.00</b>	<b>0.06</b>

19. 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 have been discharged.

20. In view of the above, additional capital expenditure allowed for the purpose of tariff, after considering the un-discharged liabilities and liabilities discharged are as under:

(Rs. in lakh)			
	2006-07	2007-08	2008-09
Additional Capitalization allowed	(-) 21.55	96.33	51.37
Less: Un-discharged liabilities in the financial year	0.00	0.06	30.31
Add: Liabilities discharged out of un-discharged liabilities as per order dated 25.06.2009 in Petition No.24/2009	0.15	0.00	0.00
Add: liabilities discharged in the financial year	0.00	0.00	0.06
<b>Additional Capitalization considered for the purpose of tariff</b>	<b>(-) 21.40</b>	<b>96.27</b>	<b>21.12</b>

### Capital cost

21. As stated above, the Commission in its order dated 25.6.2009 in Petition No. 24/2009 has considered a capital cost of Rs. 342164.47 lakh as on 31.3.2006, for the purpose of tariff. This has been considered for determination of capital cost as on 1.4.2006.

22. Taking into consideration the capital cost of the generating station as on 1.4.2006 and the additional capital expenditure approved as per para 20 above, the capital cost is worked out as under:

(Rs. in lakh)			
Year	2006-07	2007-08	2008-09
Opening capital cost as on 1 <sup>st</sup> April of the financial year	342164.47	342143.08	342239.35
Additional capitalization allowed	(-) 21.40	96.27	21.12
Capital cost as on 31 <sup>st</sup> March of the financial year	<b>342143.08</b>	<b>342239.35</b>	<b>342260.46</b>

### Debt-Equity Ratio

23. 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.”*

24. The petitioner has stated that the additional capital expenditure has been financed through 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)

	2006-07	2007-08	2008-09
Additional Notional equity	(-) 6.42	28.88	6.33

## Return on Equity

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

	(Rs in lakh)		
<b>Return on Equity</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Equity	108712.87	108706.45	108735.33
Addition due to Additional Capitalization	(-) 6.42	28.88	6.33
Closing Equity	108706.45	108735.33	108741.67
Average Equity	108709.66	108720.89	108738.50
Return on Equity	15219.35	15220.92	15223.39

## Interest on Loan

26. The petitioner has not considered any fresh loan for additional capitalization for the years 2006-07, 2007-08 and 2008-09. Hence the actual weighted average rate of interest worked out in order dated 25.6.2009 in Petition No. 24/2009, has been considered. Based on the same the Interest on loan has been computed as under:

	(Rs in lakh)		
Interest on Loan	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Gross Normative Loan	233451.60	233436.63	233504.02
Cumulative repayment up to previous year	197220.83	225535.53	233504.02
Net loan-opening	36230.77	7901.10	0.00
Addition due to additional capitalization	(-) 14.98	67.39	14.78
Repayment during the year	28314.70	7968.49	14.78
Net loan-closing	7901.10	0.00	0.00
Average loan	22065.93	3950.55	0.00
Weighted Average rate of Interest on loan	6.7267%	2.5238%	2.5238%
<b>Interest on loan</b>	<b>1484.31</b>	<b>99.70</b>	<b>0.00</b>

## Depreciation

27. For calculating depreciation, the cumulative depreciation of Rs. 147226.12 lakh and the weighted average rate of depreciation of 2.5507% as per the order dated 25.6.2009 in Petition No. 24/2009 has been considered.



28. The Commission has approved de-capitalization of assets worth Rs.50.75 lakh, Rs.6.14 lakh and Rs. 32.72 lakh during the years 2006-07, 2007-08 and 2008-09 respectively from the capital cost. Cumulative Depreciation amounting to Rs. 25.29 lakh, Rs.3.22 lakh and 17.63 lakh have been deducted on pro-rata basis from Cumulative depreciation/AAD as on 31.3.2007, 31.3.2008, 31.0.2009 for determination of tariff. As the loans in respect of generating station have been fully repaid in the year 2007-08, the balance depreciation has been spread over the balance useful of the generating station. Accordingly, depreciation has been worked out as under:

(Rs in lakh)			
<b>Depreciation</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Gross Block as on 31.3.2006	342164.47	342143.08	342239.35
Additional capital expenditure	(-) 21.40	96.27	21.12
Closing gross block	342143.08	342239.35	342260.46
Average gross block	342153.78	342191.21	342249.91
Rate of Depreciation	2.5507%	2.5507%	2.5507%
Depreciable Value	307937.19	307961.00	308013.24
Balance Useful life of the asset	27	26	25
Remaining Depreciable Value	160711.07	137415.02	128742.32
Depreciation	8727.19	8728.14	5127.13

### **Advance against Depreciation**

29. Advance against Depreciation has been calculated after considering the additional capital expenditure which has been worked out as per details given hereunder:

(Rs in lakh)			
<b>Advance against Depreciation</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
1/10th of Gross loan(s)	23345.16	23343.66	23350.40
Repayment of the loan	28314.70	7968.49	14.78
Minimum of the above	23345.16	7968.49	14.78
Depreciation during the year	8727.19	8728.14	5127.13
(A) Difference	14617.97	-759.66	-5112.35
Cumulative repayment of loan	225535.53	233504.02	233518.80
Cumulative Depreciation/ Advance against Depreciation	155953.31	179274.13	184398.05
(B) Difference	69582.22	54229.89	49120.75
Advance against Depreciation Minimum of (A) and (B)	<b>14617.97</b>	<b>0.00</b>	<b>0.00</b>

## O&M Expenses

30. O&M expenses as allowed in the order dated 25.6.2009 in Petition No. 24/2009, have been considered.

## Interest on Working Capital

31. For the purpose of calculation of working capital, the operating parameters as considered in the order dated 25.6.2009 in Petition No. 24/2009 have been kept unchanged. The "receivables" component of the working capital in the order dated 25.6.2009 in Petition No. 24/2009 have 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 25.6.2009 in Petition No. 24/2009. The necessary details in support of calculation of interest on working capital are as under:

(Rs in lakh)

Particulars	2006-07	2007-08	2008-09
Maintenance Spares	5046.35	5349.13	5670.07
O & M expenses	460.50	478.92	498.08
Receivables	7823.53	5153.56	4571.39
Total	13330.38	10981.61	10739.55
Interest	<b>1366.36</b>	<b>1125.61</b>	<b>1100.80</b>

## Annual Fixed Charges

33. The revised annual fixed charges for the period from 1.4.2006 to 31.3.2009 are summarized as under:

(Rs in lakh)

Particulars	2006-07	2007-08	2008-09
Depreciation	8727.19	8728.14	5127.13
Interest on Loan	1484.31	99.70	0.00
Return on Equity	15219.35	15220.92	15223.39
Advance Against Depreciation	14617.97	0.00	0.00
Interest on Working Capital	1366.36	1125.61	1100.80
O & M Expenses	5526.00	5747.00	5977.00
<b>TOTAL</b>	<b>46941.19</b>	<b>30921.38</b>	<b>27428.33</b>

34. The petitioner's prayer for 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 be reimbursed the difference between the fixed charges approved vide order dated 25.6.2009 in Petition No. 24/2009 and those approved now, from the beneficiaries in three equal monthly installments.

36. Petition No.197/2009 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**