

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 190/2009

Coram

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

DATE OF HEARING: 22.7.2010

DATE OF ORDER: 7.9.2010

IN THE MATTER OF

Determination of impact of annual fixed charges on account of additional capital expenditure incurred during the years 2006-07, 2007-08 and 2008-09, in respect of Chamera Hydroelectric Project, Stage-II.

AND IN THE MATTER OF

NHPC Ltd, Faridabad
Vs

..... **Petitioner**

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, Delhi
5. North Delhi Power Ltd, New 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 Department, UT Secretariat, Chandigarh
14. Power Development Department, Govt. of J&K, Srinagar

....**Respondents**

The following were present:

1. Shri Prashant Kaul, NHPC
2. Shri Ansuman Ray, NHPC
3. Shri Surendra Meena, NHPC
4. Shri V.N.Tripathi, NHPC
5. Shri B.C. Chaudhuri, 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 Chamera Hydroelectric Project, Stage-II. (3 x 100 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 Chamera HE Project, Stage-II after considering the impact of additional capitalization for the years 2006-07, 2007-08, and 2008-09 as per the details given in Annexure-I.*
- (ii) Allow the servicing of the expenditure from the year the same is incurred.*
- (iii) Allow the claim of the petitioner as mentioned in para 14*
- (iv) Allow the reimbursement of filing fee of this petition by the respondents.*
- (v) Pass any other order in this regard as the Hon'ble Commission may find appropriate in the circumstances pleaded above".*

2. The generating station comprises of three units which were commissioned on 2.11.2003, 1.1.2004 and 31.3.2004. 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 187/2004, based on capital cost of ₹.195606 lakh (inclusive of FERV) as on 31.3.2004. Subsequently, the Commission by order dated 9.6.2009 in Petition No. 10/2009, revised the annual fixed charges for the generating station after considering the impact of additional capital expenditure incurred during the

years 2004-05 and 2005-06, based on the capital cost of ₹. 198926.70 lakh, as on 1.4.2006, as under:

	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	5464.10	5510.18	5520.01	5520.01	5520.01
Interest on Loan	11477.22	11466.69	10691.32	9471.36	8117.88
Return on Equity	8454.99	8524.72	8539.61	8539.61	8539.61
Advance against Depreciation	0.00	935.70	6720.34	8251.80	8251.80
Interest on Working Capital	721.90	755.28	858.93	881.41	875.91
O & M Expenses	2934.00	3051.00	3173.00	3300.00	3432.00
Total	29052.21	30243.57	35503.22	35964.19	34737.20

3. The respondent No. 6, UPPCL has filed its reply to the petition.

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:

(₹. in lakh)				
Sl.No		2006-07	2007-08	2008-09

(1)	Additional Capitalization as per books of Account	(-) 504.67	266.58	715.91
(2)	Exclusions			
(a)	Additions			
(i)	Minor assets(Regulation 34(3))	90.73	24.55	4.89
(ii)	FERV	(-) 1002.27	0.00	0.00
(iii)	Assets not in use as on 31 st March (obsolete / unserviceable assets)	0.00	5.03	0.30
	Sub-total	(-) 911.54	29.58	5.20
(b)	Deletion			
(i)	Deletion of assets on account of asset transferred to other projects-(Regulation 34(3))	2.47	0.71	0.48
(ii)	Deletion of assets during the year- Regulation 34(3)	0.00	0.00	0.00
(iii)	Deletion of the amount of Gross Block transferred to obsolete / unserviceable assets from other Head of Accounts}-{Regulation 34 (3)}	0.00	0.00	2.40
	Sub-Total (Deletion) (i to iv)	2.47	0.71	2.89
	Net Exclusion(2 (a) – 2 (b))	(-) 914.00	28.86	2.31
(3)	Net Additional Capitalization Claimed [(1)-(2)]	409.33	237.72	713.60

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) **Minor assets:** In terms of clause (3) of Regulation 34, the petitioner has excluded amounts of ₹.90.73 lakh, ₹.24.55 lakh and ₹.4.89 lakh for the years 2006-07, 2007-08 and 2008-09 respectively against minor assets like furniture & fixtures office, computer, printer, EDP equipments, telephone, calculator & other electronic devices, G.H. equipments, air-conditioners, air coolers/ water coolers, other office equipment, television/ music system, miscellaneous assets equipments, refrigerator- other than for office, school equipments,

miscellaneous power plant equipments, interior communication equipments, typewriter, club equipments and other assets etc. The exclusions claimed are in order and allowed.

(b) **FERV**: The claim for exclusion of an amount of (-) ₹. 1002.27 lakh for the years 2006-07 on account of FERV is allowed, as the petitioner has billed the impact of FERV directly to the beneficiaries in accordance with the 2004 regulations.

(c) **Assets not in use**: The petitioner has excluded amounts of ₹.5.03 lakh and ₹. 0.30 lakh for the years 2007-08 and 2008-09 respectively, towards assets like diversion tunnel hoists & trestles, submersible pump, welding machine, air compressor, computer, printers, typewriters, duplicating machines, refrigerator, water cooler, water filter and other assets which were not in use. The same is in order and hence exclusion is allowed.

(d) **Deletion of assets transferred to other project {Regulation 34 (3)}**: The petitioner has excluded amounts of ₹.2.47 lakh, ₹. 0.71 lakh and ₹.0.48 lakh for the years 2007-08 and 2008-09 respectively, in the books of accounts corresponding to de-capitalization of minor assets transferred to other project. We are of the view that assets which were no longer in service are to be de-capitalized for the purpose of tariff. Accordingly, the deletion of exclusion of minor assets has not been allowed for the purpose of tariff.

(e) **Deletion of assets during the year {Regulation 34 (3)}**: The petitioner has excluded only an an amount of ₹.16 for the year 2007-08 appearing in books

corresponding to de-capitalization of minor assets. We are of the view that assets which were no longer in service are to be de-capitalized for the purpose of tariff. Accordingly, the deletion of exclusion of minor assets has not been allowed for the purpose of tariff.

(f) **Deletion of amount of gross block WDV transferred to obsolete / unserviceable assets from other Heads of Accounts:** The petitioner has excluded amount of ₹. 2.40 lakh for the year 2008-09 appearing in books corresponding to de-capitalization of minor assets. We are of the view that assets which were no longer in service are to be de-capitalized for the purpose of tariff. Accordingly, the deletion of exclusion of minor assets has not been allowed for the purpose of tariff.

8. The Commission by its letter dated 3.11.2009 directed the petitioner to furnish certain additional information in respect of the additional capital expenditure and the petitioner by affidavit dated 14.11.2009 has submitted the relevant information. The year-wise and category-wise break-up of the additional expenditure claimed by petitioner are as under:

(₹ in lakh)

Sl. No.	Additional Capitalization	2006-07	2007-08	2008-09
1(a)	Addition			
(i)	Deferred liabilities relating to works/services within the original scope of work Regulation 34 (2)(i)	200.32	0.00	0.00
(ii)	On account of change in law Regulation 34 (2)(iii)	0.00	0.00	65.23

(iii)	Liabilities to meet award of arbitration or in compliance of the order or decree of a court Regulation 34 (1)(iv)	230.74	362.89	645.54
(iv)	Regulation 34(2), Note 2	0.00	0.00	4.79
	Sub-total 1 (a)	431.06	362.89	715.56
1(b)	Deletions			
(i)	Deletion of assets on account of Sale of assets during the year	2.12	0.00	0.00
(ii)	Gross value of assets transferred from natural head to obsolete assets (being obsolete nature) excluding minor assets.	0.00	115.50	1.96
(iii)	Deletion of assets on account of asset transferred to other projects	19.61	9.67	0.00
	Sub-total 1 (b)	21.73	125.17	1.96
	Net Additional capitalization (1(a)-1(b))	409.33	237.72	713.60

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.

Deferred liabilities- Regulation 34(2)(i)

10. The petitioner has claimed an amount of ₹.200.32 lakh during the year 2006-07 under this head in respect of assets which include hydromech works-dam and barrages, main generating equipments, generator setup transformer, EHV switchgear system, DC system/battery system, air-conditioning and ventilation systems, power line carrier communication systems, control metering and protection system, construction of Karian Bharian bridge and other assets. As the claim relates to deferred liabilities relating to works within the original scope of works, the capitalization of the amount is allowed.

On account of change in law: Regulation 34(2)(iii):

11. The petitioner has claimed an amount of ₹.65.23 lakh during the year 2008-09 under this head. This expenditure pertains to the capitalization of protection work to muck disposal site in compliance with the directions of the Ministry of Forests and Environment dated 19.10.2004. In view of this, the expenditure is allowed to be capitalized.

Additional works / service which has become necessary for efficient and successful operation of plant but not included in the original capital cost- Regulation 34 (2) (iv)

12. The petitioner has claimed an amount of ₹.230.74 lakh, ₹.362.89 lakh and ₹.645.54 lakh during 2006-07, 2007-08 and 2008-09 respectively under this regulation. The claim includes assets like stores and godown building, miscellaneous power plant equipment, main generating equipment, EDP equipment, hospital equipment, furniture and fixture, power and control cable, residential building, television/music system and other assets. The claim for the respective years is discussed as under:

2006-07

13. The petitioner has claimed an amount of ₹. 12.47 lakh in respect of asset which include 'power and control cable' and the petitioner has submitted that the said asset is of the nature of replacement, and hence not considered under this head. Also, as the gross value of the old asset has not been furnished by the petitioner, the claim is not allowed in terms of Note 2 under Regulation 34(2). The claim for ₹.22.53 lakh for 'SCADA interlinking equipment' under the head 'miscellaneous power plant equipment', is not allowed as the asset is not related to

the generating station. The claim for ₹.10.72 lakh in respect of assets which includes 'furniture and fixtures' is in the nature of minor assets and hence disallowed. Further, the claim of ₹.0.84 lakh for 'welding set, and ₹. 0.52 lakh for 'aluminum ladders' are in the nature of minor assets like 'tools and tackles' and hence disallowed. In view of this, an amount of ₹.47.08 lakh has been disallowed for the year 2006-07, under this head.

2007-08

14. The claim for 2007-08 includes 'a spare main distributing valve' amounting to ₹.6.99 lakh and the petitioner has submitted that the said asset is in the nature of spares and hence not considered under this head. The claim for ₹.0.87 lakh and ₹.3.57 lakh which includes assets like 'digital earth resistance tester' and 'Hirschmann proffibus/fiber optic converter' under the main head 'miscellaneous power plant equipment', are of the nature of replacement, and hence not considered under this head. As the gross value of the old asset has not been submitted by the petitioner, the same has been disallowed in terms of Note-2 under Regulation 34(2). In addition, assets amounting to ₹.0.23 lakh which include some of the miscellaneous power plant equipments like 'analog gauge, lakh, hydraulic hose amounting to ₹.0.14 lakh, hydralulic hand pump etc amounting to ₹.0.65 lakh and double acting torque etc amounting to ₹.6.49 lakh, are in the nature of minor assets like 'tools and tackles' and hence not allowed. The assets like 'computers' amounting to ₹.0.77 lakh, 'photo copy machine' amounting to ₹.2.78 lakh, 'television/music system' amounting to ₹.1.57 lakh, in the nature of minor assets and hence disallowed. In view of this, an amount of ₹.24.06 lakh has not been allowed.

2008-09

15. The claim for ₹. 1.24 lakh for assets which includes 'furniture and fixture' is not allowed as the petitioner has submitted that these are in the nature of minor assets.

16. Based on the above discussions, an amount of ₹.183.66 lakh, ₹.338.83 lakh and ₹. 644.30 lakh for the years 2006-07, 2007-08 and 2008-09 respectively, has been allowed.

Replacement of old assets- Regulation 34 (2), Note 2:

17. The petitioner has claimed an amount of ₹. 4.79 lakh towards replacement of asset like 'maxflow make pump' under the main head 'miscellaneous power plant equipment', during the year 2008-09. Based on prudence check, the amount of ₹. 4.79 lakh is allowed.

18. In addition to the capitalization under above categories, the petitioner has de-capitalized amounts of ₹.21.73 lakh, ₹.125.17 lakh and ₹.1.96 lakh during the years 2006-07, 2007-08 and 2008-09 respectively and the details are as under:

(a) Deletion of assets on account of sale of assets during the year: The petitioner has de-capitalized assets amounting to ₹.2.12 lakh during the year 2006-07, on account of sale of assets, under this head. The same is in order and allowed.

(b) Deletion of assets on account of asset transferred to obsolete head: The petitioner has de-capitalized assets amounting to ₹.115.50 lakh, ₹.1.96 lakh during the years 2007-08 and 2008-09 respectively, on account of transfer of assets to obsolete head. The same is in order and allowed.

(c) **Deletion of assets on account of assets transferred to other projects:** The petitioner has de-capitalized assets amounting to ₹.19.61 lakh and ₹. 9.67 lakh during the years 2006-07 and 2007-08, under this head. The same is in order and allowed.

19. The petitioner has also replaced asset during the year 2008-09 but the gross value of the old asset replaced has not been reduced during the year 2008-09 is as under:

<i>(₹ in lakh)</i>			
Asset	Value of Replacement	Gross Value	Year of replacement
Maxflow make pump	4.79	2.25	2008-09
TOTAL	4.79	2.25	

The gross value of the old asset amounting to ₹. 2.25 lakh for the year 2008-09 has been considered as 'assumed deletion' for the purpose of tariff.

Replaced Minor assets

20. After careful consideration, we are of the view that the cost of minor assets originally included in the capital cost of the projects and replaced by new assets should not be reduced from the gross block, if the cost of the new assets is not considered on account of implication of the regulations. In other words, the value of the old assets would continue to form part of the gross block and at the same time the cost of new assets would not be taken into account. The generating station should not be debarred from servicing the capital originally deployed on account of procurement of minor assets, if the services of those assets are being rendered by similar assets which do not form part of the gross block.

21. Based on the above discussions, the additional capital expenditure allowed (before adjustment of un-discharged liabilities) is as under:

(₹ in lakh)

Sl.No	Additional Capitalization	2006-07	2007-08	2008-09
1(a)	Addition			
(ii)	Deferred liabilities relating to works/services within the original scope of work- Regulation 34 (2)(i)	200.32	0.00	0.00
(ii)	On account of change in law - Regulation 34 (2)(iii)	0.00	0.00	65.23
(iii)	Liabilities to meet award of arbitration or in compliance of the order or decree of a court- Regulation 34 (1)(iv)	183.66	338.83	644.30
(iv)	Replacement of old assets- Regulation 34(2), Note 2	0.00	0.00	4.79
	Sub-total 1 (a)	383.98	338.83	714.32
(b)	Deletions/Deductions			
(i)	Deletion of assets on account of Sale of assets during the year	2.12	0.00	0.00
(ii)	Gross value of assets transferred from natural head to obsolete assets (being obsolete nature) excluding minor assets.	0.00	115.50	1.96
(iii)	Deletion of assets on account of asset transferred to other projects	19.61	9.67	0.00
(iv)	Assumed deletion	0.00	0.00	2.25
	Sub-total 1 (b)	21.73	125.17	4.21
	Additional Capitalization allowed (1 (a) - 1 (b))	362.25	213.66	710.11
2	Exclusions			
(a)	Addition			
(i)	Minor assets(Regulation 34(3)	90.73	24.55	4.89
(ii)	FERV	(-) 1002.27	0.00	0.00
(iii)	Assets not in use as on 31 st March (obsolete / unserviceable assets)	0.00	5.03	0.30
	Sub-total (i to iv)	(-) 911.54	29.58	5.20
(b)	Deletion			
(i)	Deletion of assets on account of asset transferred to other projects- (Regulation 34(3)	0.00	0.00	0.00
(ii)	Deletion of assets during the year- Regulation 34(3)	0.00	0.00	0.00
(iii)	Deletion of the amount of Gross Block transferred to obsolete / unserviceable assets from other Head of Accounts}-{Regulation 34 (3)	0.00	0.00	0.00

	Sub-total (i to iv)	0.00	0.00	0.00
	Net exclusions (2 (a) – 2 (b))	(-) 911.54	29.58	5.20
3	Exclusions disallowed	(-) 2.47	(-) 0.71	(-) 2.89
4	Additional capital expenditure allowed after adjustment of exclusions disallowed	359.78	212.95	707.22

Un-discharged liabilities

22. Out of undischarged liabilities of ₹.9165.34 lakh as on the date of commercial operation, which is considered as 100% debt at the time of discharge, the petitioner had discharged an amount of ₹.8953.58 lakh up to 31.3.2007. The petitioner has submitted in para 14 of the petition that it has also discharged an additional amount of ₹.4.34 lakh but has not claimed the same in the petition. The petitioner has prayed that the said amount be allowed along with the balance undischarged liabilities, as and when discharged. The prayer of the petitioner is accepted and the claim of the petitioner would be considered in accordance with law.

23. The petitioner vide affidavit dated 27.8.2009 has submitted the details of un-discharged liabilities in its claim for additional capital expenditure, as under:

(₹.in lakh)

Sl. No	Reference No.	Un-discharged liabilities					
		Claimed			Discharged		
		2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
1.	Appendix-I to Annexure-III, Sl.no.(2), Page 18. (Discharged for FY 2004-05)	0.00	0.00	0.00	11.63	0.00	161.45
2.	Appendix-I to Annexure-III, Sl.no.(3), Page 18.	22.23	0.00	0.00	0.00	0.00	0.00
3.	Appendix-I to Annexure-III, Sl.no.(4), Page 18. (Discharged for FY 2006-07)	0.00	0.00	0.00	0.00	21.24	0.99
	Appendix-I to Annexure-III, Sl.no.(5), Page 18.	0.00	12.73	0.00	0.00	0.00	0.00

Appendix-I to Annexure-III, Sl.no.(6), Page 18. (Discharged for FY 2007-08)	0.00	0.00	0.00	0.00	0.00	12.73
Appendix-I to Annexure-III, Sl.no.(7), Page 18.	0.00	0.00	44.95	0.00	0.00	0.00
TOTAL	22.23	12.73	44.95	11.63	21.24	175.17

24. 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.

25. 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:

		(₹.in lakh)		
Sl. No.		2006-07	2007-08	2008-09
(i)	Additional Capitalization allowed (before adjustment of un-discharged liabilities)	359.78	212.95	707.22
(ii)	Undischarged liabilities during the year	22.23	12.73	44.95
(iii)	Liabilities discharged during the year	11.63	21.24	175.17
(v)	Additional capitalization allowed for the purpose of tariff (v)=[(i)-(ii)+(iii)]	349.18	221.45	837.44

Capital Cost

26. As stated above, the Commission in its order dated 9.6.2009 in Petition No. 10/2009 has considered a capital cost of ₹. 198926.70 lakh as on 31.3.2006, (after considering additional capitalization of ₹.2611.75 lakh for the year 2004-05 and ₹.708.95 lakh for the year 2005-06) for the purpose of determination of tariff. This has been considered for determination of capital cost as on 1.4.2006.

27. Taking into consideration the capital cost of the generating station as on 1.4.2006 and the additional capital expenditure approved as per para 25 above, the capital cost is worked out as under:

(₹ in lakh)

Year	2006-07	2007-08	2008-09
Opening capital cost as on 1 st April of the financial year	198926.70	199275.88	199497.33
Additional capitalization allowed	349.18	221.45	837.44
Capital cost as on 31 st March of the financial year	199275.88	199497.33	200334.77

Debt

-Equity Ratio

28. 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 capitalization 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."

29. The petitioner has stated that the additional capital expenditure has been financed through internal 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:

(₹. in lakh)			
	2006-07	2007-08	2008-09
Additional Notional equity	104.75	66.44	251.23

Return on Equity

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

(₹ in lakh)			
Return on Equity	2006-07	2007-08	2008-09
Opening Equity	60997.21	61101.96	61168.40
Addition due to additional capital expenditure	104.75	66.44	251.23
Closing Equity	61101.96	61168.40	61419.63
Average Equity	61049.59	61135.18	61294.02
Return on Equity	8546.94	8558.93	8581.16

Interest on Loan

31. 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 9.6.2009 in Petition No. 10/2009, has been considered. Based on the same the Interest on loan has been computed as under:

(₹ in lakh)

Interest on Loan	2006-07	2007-08	2008-09
Gross Normative Loan	137710.70	137962.50	138117.52
Cumulative repayment up to previous year	13095.96	25336.31	40252.20
Net loan-opening	124614.74	112626.19	97865.31
Addition due to additional capitalization	244.43	155.02	586.21
Addition due to discharge of Un-discharged liabilities as on 31.3.2004	7.37	0.00	0.00
Repayment during the year	12240.35	14915.89	14939.56
Net loan-closing	112626.19	97865.31	83511.96
Average loan	118620.47	105245.75	90688.64
Weighted Average rate of Interest on loan	9.0223%	9.0255%	9.0142%
Interest on loan	10702.35	9498.96	8174.86

Depreciation

32. For calculating depreciation, the cumulative depreciation of ₹.13095.96 lakh recovered up to 31.3.2006 and the weighted average rate of depreciation of 2.77% as per the order dated 9.6.2009 in Petition No. 10/2009 has been considered.

33. The Commission has approved de-capitalization of assets worth ₹.24.20 lakh, ₹.125.88 lakh and ₹.7.10 lakh during the years 2006-07, 2007-08 and 2008-09 respectively from the capital cost. The amount of cumulative depreciation allowed in tariff against the de-capitalized assets has been calculated on pro-rata basis and the same has been cumulatively adjusted from the cumulative depreciation in the year of de-capitalization. Accordingly, depreciation has been worked out as under:

(Rs in lakh)

Depreciation	2006-07	2007-08	2008-09
Gross Block as on 31.3.2006	198926.70	199275.88	199497.34
Additional capital expenditure	349.18	221.45	837.44
Closing gross block	199275.88	199497.34	200334.77
Average gross block	199101.29	199386.61	199916.05
Rate of Depreciation	2.77%	2.77%	2.77%
Depreciable Value	178641.13	178897.92	179374.42
Balance Useful life of the asset	33.00	32.00	31.00
Remaining Depreciable Value	165545.18	153564.69	140269.61

Depreciation	5524.86	5532.77	5547.47
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Advance against Depreciation

34. Advance against Depreciation has been calculated after considering the additional capital expenditure as in order dated 9.6.2009 in Petition No. 10/2009 and has been worked out as per details given hereunder:

(₹ in lakh)			
Advance against Depreciation	2006-07	2007-08	2008-09
1/10th of Gross loan(s)	13771.07	13796.25	13811.75
Repayment of the loan	12240.35	14915.89	14939.56
Minimum of the above	12240.35	13796.25	13811.75
Depreciation during the year	5524.86	5532.77	5547.47
(A) Difference	6715.50	8263.48	8264.29
Cumulative repayment of loan	25336.31	40252.20	55191.76
Cumulative Depreciation/ Advance against Depreciation	18620.81	30866.01	44652.27
(B) Difference	6715.50	9386.20	10539.49
Advance against Depreciation Minimum of (A) and (B)	6715.50	8263.48	8264.29

O&M Expenses

35. O&M expenses as allowed in the order dated 9.6.2009 in Petition No. 10/2009, have been considered.

Interest on Working Capital

36. For the purpose of calculation of working capital, the operating parameters as considered in the order dated 9.6.2009 in Petition No. 10/2009 have been kept unchanged. The "receivables" component of the working capital in the order dated

9.6.2009 in Petition No. 10/2009 have been revised for the reason of revision of return on equity, interest on loan, etc.

37. 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 9.6.2009 in Petition No. 10/2009. 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	2198.19	2330.08	2469.89
O & M expenses	264.42	275.00	286.00
Receivables	5920.32	6006.13	5813.01
Total	8382.92	8611.21	8568.90
Interest	859.25	882.65	878.31

Annual Fixed Charges

38. 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	5524.86	5532.77	5547.47
Interest on Loan	10702.35	9498.96	8174.86
Return on Equity	8546.94	8558.93	8581.16
Advance Against Depreciation	6715.50	8263.48	8264.29
Interest on Working Capital	859.25	882.65	878.31
O & M Expenses	3173.00	3300.00	3432.00
TOTAL	35521.89	36036.78	34878.09

39. 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.

40. The petitioner shall be reimbursed the difference between the fixed charges approved vide order dated 9.6.2009 in Petition No. 10/2009 and those approved now, from the beneficiaries in three equal monthly installments.

41. Petition No.190/2009 stands disposed of in terms of the above.

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

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

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