

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 154/2009

Coram

- 1. Shri R.Krishnamoorthy, Member**
- 2. Shri S.Jayaraman, Member**
- 3. Shri V.S.Verma, Member**

DATE OF HEARING: 24.9.2009

DATE OF ORDER: 7.1.2010

In the matter of

Determination of impact of annual fixed charges on account of additional capitalization/de-capitalization incurred during the years, 2006-07, 2007-08 and 2008-09 in respect of Salal Hydroelectric Project.

And in the matter of

NHPC Ltd.

...Petitioner

Vs

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

...Respondents

The following were present

- (1) Shri M. S. Babu, NHPC
- (2) Shri. Prashant Kaul, NHPC
- (3) Shri S.K.Meena, NHPC
- (4) Shri Anshuman Roy, NHPC
- (5) Ms. Ritu Agarwala, NHPC
- (6) Ms. Reshma Hemarajan, NHPC
- (7) Shri M. M. Mishra, NHPC
- (8) Shri N. K. Chanda, 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 to 2008-09, in respect of Salal Hydroelectric Project, (6 x 115 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").

2. The generating station was commissioned on 1.4.1995. 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.197/2004. The annual fixed charges approved by the Commission based on capital cost of Rs.91436.81 lakh (inclusive of FERV and additional capitalization) as on 31.3.2004, are given hereunder:

(Rs. in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	2123.98	2123.98	1845.14	1845.14	1845.14
Interest on Loan	414.05	94.67	0.00	0.00	0.00
Return on Equity	6787.99	6787.99	6787.99	6787.99	6787.99
Advance Against Depreciation	1471.35	0.00	0.00	0.00	0.00
Interest on Working Capital	518.43	503.38	513.77	513.49	550.11
O & M Expenses	7258.00	7549.00	7851.00	8165.00	8491.00
TOTAL	18573.80	17059.02	16997.89	17329.62	17674.23

3. The petitioner filed Petition No. 87/2009 for revision of tariff based on the additional capital expenditure for the years 2004-05 and 2005-06 and the Commission by its order dated 4.1.2010 approved the additional capital expenditure as under:

(Rs. in lakh)		
Year	2004-05	2005-06
Additional Capitalization allowed (before adjustment on account of undischarged liabilities)	(-) 421.17	86.57
Less: Undischarged Liabilities in financial year	3.03	0.86
Add: Liabilities discharged in financial year	0.00	3.03
Additional Capitalization allowed for the purpose of tariff	(-) 424.20	88.73

4. In the said order dated 4.1.2010, the Commission observed as under:

"20. The above mentioned capital costs shall form the basis for revision of tariff for the respective years.

21. We notice that subsequently, the petitioner has filed Petition No. 154/2009 seeking determination of impact of the additional capital expenditure during the period 2006-07 to 2008-09. It has therefore been decided that computation of revised tariff consequent to additional capital expenditure admitted vide this petition be carried out after taking a view on the additional capital expenditure for the period 2006-07 to 2008-09 through a common order."

5. Accordingly, we proceed to determine the additional capital expenditure for the period 2006-09 in the subsequent paragraphs.

ADDITIONAL CAPITALISATION

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

"(1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission subject to prudence check.

- (i) Deferred liabilities,*
- (ii) Works deferred for execution,*

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

Provided that original scope of works along with estimates of expenditure shall be submitted along with the application for provisional tariff.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of generating station.

(2) Subject to the provision of clause (3) of this regulation, the capital expenditure of the following nature actually incurred after the cut off date may be admitted by the Commission subject to prudence check:

- (i) Deferred liabilities relating to works/services within the original scope of work;*
- (ii) Liabilities to meet award of arbitration or in compliance of the order or decree of a court;*
- (iii) On account of change in law; and*
- (iv) Any additional works/service which has become necessary for efficient and successful operation of plant but not included in the original capital cost.*

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

Note

The list of items is illustrative and not exhaustive.

(4) Impact of additional capitalisation in tariff revision may be considered by the Commission twice in a tariff period, including revision of tariff after the cut off date.

Note 1

Any expenditure admitted on account of committed liabilities within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 36.

Note 2

Any expenditure on replacement of old assets shall be considered after writing off the gross value of the original assets from the original capital cost, except such items as are listed in Clause (3) of this regulation.

Note 3

Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the normative debt-equity ratio specified in regulation 36.

Note 4

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

7. None of the respondents have filed replies.

8. The additional capital expenditure for the years 2006-07, 2007-08 and 2008-09 claimed by the petitioner in Petition No. 154/2009, after reconciliation with the books of accounts, is as under:

		(Rs. In lakh)		
		2006-07	2007-08	2008-09
A.	Additional Capitalization as per books of accounts	-361.21	237.01	1641.59
B.	Exclusions			
a.	Additions:			
(i)	Capital Spares capitalized as per AS-2 but to be claimed in O&M Exp. on there consumption basis	5.73	0.00	0.00
(ii)	Regulation 34 (3))	12.47	7.52	23.90
(iii)	(a)Asset wrongly declared as obsolete in the year 2006-07 and reinstated in the year 2007-08	12.95	29.29	0.00
	(b)Asset wrongly declared as obsolete in the year 2004-05 and reinstated in the year 2008-09	0.00	0.00	7.21
(iv)	Assets (WDV) transferred from natural head to obsolete assets (413001) (being obsolete in nature) excluding assets falling under category "Minor assets"	8.01	0.00	2.94
(v)	Assets (WDV) falling under Regulation 34(3) transferred from natural head to obsolete assets (being obsolete in nature)	0.06	0.00	0.00
(vi)	Assets (Gross Value) reinstated and transferred to other units / projects	0.00	0.00	13.98
(vii)	Assets (Gross Value) transferred from surplus to obsolete assets	0.00	0.00	0.19
(viii)	Assets reinstated in the year 2007-08 deducted earlier in the year 2006-07	0.00	119.29	0.00
(ix)	Capital Spares – GPM de-capitalized in previous years now capitalized / reinstated (As per Corporate Office circular no. A/CS-147	0.00	0.00	1337.17
	Total addition (B)(a)	39.22	156.11	1385.39
b.	Deletion:			
(i)	(a)Asset wrongly declared as obsolete in the year 2006-07 and reinstated in the year 2007-08	29.29	12.95	0.00

	(b)Asset wrongly declared as obsolete in the year 2004-05 and reinstated in the year 2008-09	0.00	0.00	6.65
(ii)	Assets falling under Regulation 34(3) transferred from natural head to obsolete assets (being obsolete in nature)	1.35	0.00	0.00
(iii)	Assets (Gross Value) reinstated and transferred to other units / projects	0.00	0.00	13.98
(iv)	Assets (Gross Value) transferred from surplus to obsolete assets	0.00	0.00	0.19
(v)	Deduction of assets of Sawlakot Project clubbed earlier with Salal Power Station as on 1.4.2004 as per decision of CO and not claimed under additional Capitalization	0.00	0.00	10.55
(vi)	Surplus assets not in use on 1.4.2004 and disallowed by the Commission as additional capitalization vide order dated 1.2.2006 in Petition No.85/2005 and disposed off during the year	3.11	3.36	0.00
(vii)	De-capitalization of spares earlier capitalized (their consumption to be claimed under O&M expenses)	28.45	0.00	0.00
(viii)	Deletion of assets covered under Regulation 34(3)	2.28	4.70	2.02
(ix)	Assets deducted in the year 2006-07 but reinstated in the year 2007-08	119.29	0.00	0.00
(x)	Assets in active use (out of assets of Gross Value Rs.176.70 lakh declared surplus / not in use as on 1.4.2004)	0.00	2.65	0.00
(xi)	Total of assets sold /transferred during the year out of those declared obsolete/surplus, excluding those assets which have been disallowed by Commission amounting to Rs.176.70 lakh.	2.25	3.44	1.21
(xii)	Value of old assets (Replaced during 2004-05 & 2005-06)	0.45	18.85	3.32
(xiii)	Value of assets which were replaced during 2001-04 and deducted by the Commission	1.04	0.00	0.00
	Total deletion (B)(b)	187.52	45.94	37.93
C.	NET ADDITION/DELETION [(B)(a)-(B)(b)]	-148.30	110.17	1347.46
D.	Additional capital expenditure claimed for the purpose of tariff D=A-C	-212.92	126.84	294.13

EXCLUSIONS

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

(a) **Exclusion of Capital spares capitalized but to be claimed in O&M**

expenses: The petitioner has excluded Rs.5.73 lakh for 2006-07 corresponding to capital spares capitalized but to be claimed in O&M expenses on their consumption basis. This has been allowed.

(b) **Exclusion of assets under Regulation 34(3):** Regulation 34(3) of the 2004 regulations, does not allow capitalization of minor assets. The petitioner therefore has excluded amounts of Rs.12.47 lakh, Rs.7.52 lakh and Rs.23.90 lakh incurred on procurement of minor assets for the years 2006-07, 2007-08 and 2008-09 respectively for the purpose of tariff. These have been allowed.

(c) **Exclusion of assets wrongly declared as obsolete in the year 2006-07 and reinstated in the year 2007-08:** The petitioner has excluded amount of Rs.12.95 lakh and Rs.29.29 lakh, for 2006-07 and 2007-08 respectively, under this head. As mentioned by the petitioner that the assets wrongly declared as obsolete in the year 2006-07 have been reinstated in the year 2007-08. Accordingly, written down value of the assets booked under obsolete account has been considered under exclusion and allowed. However, the assets have been considered as 'not in use' in the year of declaration as obsolete and considered as 'in use' in the year of taking back. Accordingly, the claim for the gross value of the assets as exclusion under addition in the respective years has been allowed. As such, based on prudence check, the claim of Rs.12.95 lakh for 2006-07 has been allowed whereas an amount of Rs.29.29 lakh for 2007-08 has not been allowed.

(d) **Exclusion of assets wrongly declared as obsolete in the year 2004-05 and reinstated in the year 2008-09:** The petitioner has excluded amount of Rs.7.21 lakh for 2008-09, under this head. These assets were already considered as 'assets not in use' during 2004-05. These are now in the nature of 'assets taken

back to service'. Hence, the gross value of the assets claimed as exclusion under addition has not been considered. But the 'written down value' (WDV) of the assets claimed as exclusion under deletion have been allowed. As such, based on prudence check, the claim of Rs.7.21 lakh for 2008-09 has not been allowed.

(e) Exclusion of Assets (WDV) transferred from natural head to obsolete assets {excluding assets falling under Regulation 34(3)}: The petitioner has excluded amount of Rs.8.01 lakh and Rs.2.94 lakh for 2006-07 and 2008-09 respectively, under this head. This has been allowed.

(f) Exclusion of assets (WDV) falling under Regulation 34(3) transferred from natural head to obsolete assets: The petitioner has excluded amount of Rs.0.06 lakh, for 2006-07, under this head. This has been allowed.

(g) Exclusion of assets (Gross Value) reinstated and transferred to other units: The petitioner has excluded Rs.13.98 lakh, for 2008-09, under this head. This has been allowed.

(h) Exclusion of assets (Gross Value) transferred from surplus to obsolete assets: The petitioner has excluded Rs.0.19 lakh, for the year 2008-09, under this head. This has been allowed.

(i) Exclusion of Assets reinstated in the year 2007-08, deducted earlier in the year 2006-07: The petitioner has excluded amount of Rs.119.29 lakh, for 2007-08, under this head. This has not been allowed.

(j) **Exclusion of Capital spares–GPM de-capitalized in previous years now capitalized / reinstated:** The petitioner has excluded Rs.1337.17 lakh, for the year 2008-09, under this head. This has been allowed.

(k) **Deletion of exclusion of assets wrongly declared as obsolete in the year 2006-07 reinstated in the year 2007-08:** The petitioner has excluded amount of (-)Rs.29.29 lakh and (-)Rs.12.95 lakh for 2006-07 and 2007-08 respectively for assets wrongly declared as obsolete in the year 2006-07 and reinstated in the year 2007-08. The petitioner has mentioned that the assets wrongly declared as obsolete in the year 2006-07 have been reinstated in the year 2007-08. Accordingly, the written down value of the assets booked under obsolete account has been considered under exclusion and hence allowed as exclusion. However, the assets have been considered as 'not in use' in the year of declaration as obsolete and considered as 'in use' in the year of taking back. Accordingly, the gross values of the assets under deletion / addition in the respective years have not been allowed as exclusion. As such, based on prudence check, the claim of Rs.29.29 lakh for 2006-07 has not been allowed whereas Rs.12.95 lakh for 2007-08 has been allowed.

(l) **Deletion of exclusion of assets wrongly declared as obsolete in the year 2004-05 reinstated in the year 2008-09:** The petitioner has excluded amount of (-) Rs.6.65 lakh for 2008-09 for assets wrongly declared as obsolete in the year 2004-05 reinstated in the year 2008-09. These assets were already considered as 'assets not in use' during 2004-05. These are now in the nature of 'assets taken back to service'. Hence, the gross value of the assets claimed as exclusion under addition has not been considered, and added to the capital

cost for the purpose of tariff. However, the 'written down value' of the assets claimed as exclusion under deletion has been considered. As such, based on prudence check, the claim of (-) Rs 6.65 lakh for 2008-09 has been allowed.

(m) Deletion of exclusion of assets falling under Regulation 34(3) transferred from natural head to obsolete assets: The petitioner has excluded amount of (-) Rs.1.35 lakh, for 2006-07, 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 may be mentioned here 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 capitalized for the purpose of tariff. The Commission while dealing with the additional capitalization 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.

(n) Deletion of exclusion of assets (Gross value) reinstated and transferred to other units: The petitioner has excluded amount of (-) Rs.13.98 lakh, for 2008-09, under this head. This has been allowed.

(o) Deletion of exclusion of assets (Gross value) transferred from surplus to obsolete assets: The petitioner has excluded amount of (-) Rs.0.19 lakh, for 2008-09, under this head. This has been allowed.

(p) Deletion of exclusion of assets of Sawlakot Project clubbed earlier with Salal Power Station as on 1.4.2004 and not claimed under additional capitalization:

The petitioner has excluded amount of (-) Rs.10.55 lakh, for the 2008-09, under this head. This asset was not claimed by the petitioner under Additional capital expenditure. This has been allowed.

(q) Deletion of exclusion of surplus assets not in use on 1.4.2004 and disposed of during the year:

The petitioner has excluded amount of (-) Rs.3.11 lakh for the year 2006-07 and (-) Rs.3.36 lakh for the year 2007-08. The Commission, vide order dated 1.2.2006 in Petition No. 85/2005 pertaining to additional capital expenditure for the period 2001-04, had reduced the gross value of "assets not in use" as on 31.3.2004 amounting to Rs. 176.70 lakh from the capital cost for the purpose of tariff. These assets have been deducted in the books during 2006-07 and 2007-08. To avoid double deduction, this deduction is being shown under "exclusion" for tariff purpose. This has been allowed.

(r) Deletion of exclusion of de-capitalization of spares, earlier capitalized, to be claimed under O&M expenses:

The petitioner has excluded amount of (-) Rs.28.45 lakh for 2006-07. The Commission, vide order dated 1.2.2006 in Petition No. 85/2005 pertaining to additional capital expenditure for the period 2001-04, had disallowed the capitalization of spares appearing in the books amounting to Rs.2204.02 lakh (Rs.740.81 lakh in 2002-03 and Rs.1463.21 lakh in 2003-04). However, these assets continued in the gross block of the generating station. These assets have been deducted in the books in 2006-07. To avoid double

deduction, this deduction is being shown under "exclusion" for tariff purpose. This has been allowed.

(s) **Deletion of exclusion under Regulation 34 (3):** The petitioner has excluded the amounts of (-) Rs.2.28 lakh, (-) Rs.4.70 lakh and (-) Rs.2.02 lakh for 2006-07, 2007-08 and 2008-09 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. 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.

(t) **Deletion of exclusion of assets deducted in 2006-07 but reinstated in 2007-08:** The petitioner has excluded amount of (-) Rs.119.29 lakh for 2006-07 for assets deducted in the year 2006-07 but reinstated in the year 2007-08. Based on the prudence check, (-) Rs.119.29 lakh for the year 2006-07 has not been allowed.

(u) **Deletion of exclusion of assets in active use (out of assets of Gross Value Rs.176.70 lakh declared surplus / not in use as on 1.4.2004):** The petitioner has excluded an amount of (-) Rs.2.65 lakh, for 2007-08, under this head. The Commission vide order dated 1.2.2006 in Petition No.85/2005 pertaining to additional capital expenditure for the period 2001-04, had reduced the gross

value of "Assets not in use" as on 31.3.2004 amounting to Rs.176.70 lakh from capital cost for the purpose of tariff. These assets have been put to active use and the value booked in the surplus account, has now been adjusted in the books in 2007-08. This has been allowed.

(v) Deletion of exclusion of assets sold / transferred during the year out of those declared obsolete / surplus excluding those assets which have been disallowed by the Commission amounting to Rs.176.70 lakh: The petitioner has excluded amounts of (-) Rs.2.25 lakh, (-) Rs.3.44 lakh and (-) Rs.1.21 lakh for the years 2006-07, 2007-08 and 2008-09 respectively, under this head. This has been allowed.

(w) Deletion of exclusion of value of old assets replaced during 2004-05 and 2005-06: The petitioner has excluded amounts of (-) Rs.0.45 lakh, (-) Rs.18.85 lakh and (-) Rs.3.32 lakh for years 2006-07, 2007-08 and 2008-09 respectively, under this head. The gross value of the old assets has been reduced in the year of replacement. Such old assets have been disposed off during the years 2006-07, 2007-08 and 2008-09 and deducted in the books of accounts. To avoid double deduction, this deduction is being shown under "exclusion" for tariff purpose. This has been allowed.

(x) Deletion of exclusion of assets which were replaced during 2001-04 and deducted by the Commission: The petitioner has excluded an amount of (-) Rs.1.04 lakh for the year 2006-07. The Commission vide order dated 1.2.2006 in Petition No.85/2005 pertaining to additional capital expenditure for the period 2001-04, had allowed the capitalization of replaced assets after reducing the gross value of original assets in the same year. The petitioner has reduced the

gross value of original assets in 2006-07. To avoid double deduction, this deduction is being shown under "exclusion" for tariff purpose. This has been allowed.

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

(Rs in lakh)

	Capitalization Code / Year	2006-07	2007-08	2008-09
A	Addition claimed			
(i)	Regulation 34 (2) (iv)	6.42	117.72	99.50
(ii)	(a) Regulation 34 (2) Note 2	52.99	12.75	236.05
	(b) Regulation 34 (2) Note 2	0.00	53.02	0.00
	Total Addition	59.66	183.49	335.55
B	Deletion claimed			
(i)	Assets deducted on replacement of new assets covered under Regulation 34 (2) (iv)	(-) 62.38	(-) 22.14	0.00
(ii)	Deduction of assets without any replacement during the FY.	(-) 181.36	(-) 34.51	(-) 6.57
(iii)	Assets (Gross Value) transferred from natural head to obsolete assets.	(-)28.83	0.00	(-) 34.85
	Deletion claimed(total)	(-) 272.58	(-) 56.64	(-) 41.42
C	Additional capitalization to be claimed (C=A+B)	(-) 212.92	126.84	294.13

11. 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.

12. **Liabilities to meet award of arbitration or in compliance of the order or decree of a court – {Regulation 34(2) (ii)}**: The petitioner has claimed Rs.0.24 lakh for 2006-07 and the same is allowed after prudence check.

13. **Works/services which have become necessary for efficient and successful operation of station – {Regulation 34(2) (iv)}**: The petitioner has claimed amounts of Rs.6.42 lakh, Rs.117.72 lakh and Rs.99.50 lakh for the period 2006-09 respectively under this category. Amount of Rs.117.72 lakh for the year 2007-08 includes minor assets, like tools and tackles amounting to Rs.1.31 lakh, which has not been allowed. Amount of Rs.99.50 lakh for the year 2008-09 includes minor assets, like printer amounting to Rs.1.84 lakh, which has not been allowed. It also includes a 'Rotar data monitoring system', amounting to Rs.87.45 lakh, which has been installed for the first time as a pilot scheme. As this equipment does not provide any immediate benefit to the beneficiaries, the same has not been allowed. However, after successful completion of this pilot scheme, the petitioner is at liberty to approach the Commission for considering this asset as additional expenditure. As such, based on the prudence check, amounts of Rs.6.42 lakh, Rs.116.41 lakh and Rs.10.20 lakh for the period 2006-09 respectively have been allowed.

14. **Expenditure on replacement of old assets {Regulation 34 Note 2}**: The petitioner has claimed Rs.52.99 lakh, Rs.65.77 lakh and Rs.236.05 lakh during the years 2006-07, 2007-08 and 2008-09 respectively under this category. The claim for 2007-08 includes Rs.53.02 lakh on account of assets taken back. Based on the prudence check, an amount of Rs.52.99 lakh, Rs.65.77 lakh and Rs.236.05 lakh during 2006-07, 2007-08 and 2008-09 respectively, have been allowed.

Deleted assets

15. In addition to the capitalization under above categories, the petitioner has de-capitalized an amount of (-) Rs.272.58 lakh, (-) Rs.56.64 lakh and (-) Rs.41.42 lakh during 2006-07, 2007-08 and 2008-09 respectively. On scrutiny it is found that some replaced assets, gross value of the original asset, was deducted during the subsequent years in the books of accounts. These assets are as tabulated below:

(Rs. in lakh)

Asset	Value of Replacement	Gross Value Reduced	Year of replacement	Year proposed for reduction
Pumps	10.95	3.32	2007-08	Written off during 2008-09
	Total	3.32	2007-08	
Cranes	155.32	23.62	2008-09	In future
Trailers	57.20	5.03	2008-09	In future
PLCC panel (SSB carrier)	12.58	11.32	2008-09	In future
	Total	39.97	2008-09	

16. The gross value of assets, amounting to Rs.3.32 lakh and Rs.39.97 lakh proposed to be reduced / reduced beyond the year in which the assets are replaced have been considered as assumed deletion during the year in which the assets are replaced viz. 2007-08 and 2008-09, respectively. The adjusted deletion is as under:

(Rs. in lakh)

	2006-07	2007-08	2008-09
Deletion Claimed	272.58	56.64	41.42
Add: Assumed Deletion	-	3.32	39.97
Less: Adjustment	-	-	-
	272.58	59.97	81.39

17. The gross value of the asset replaced has been deducted from the total gross block of the project during capitalization the new asset. Accordingly, amounts of Rs.272.58 lakh, Rs.59.97 lakh and Rs.81.39 lakh for the years 2006-07 to 2008-09 respectively, has been allowed as deletion.

Additional capital expenditure allowed (without excluding un-discharged liabilities)

18. Based on the above discussions, the additional capital expenditure claimed and allowed (without excluding un-discharged liabilities) for the years 2006-07 to 2008-09 is as under:

(Rs in lakh)

	Capitalization	2006-07	2007-08	2008-09
A.	Addition			
(i)	Category B (iv) (Regulation 34 (2) (iv))	6.42	116.41	10.20
(ii)	(a) Regulation 34 (2) & Note 2	52.99	12.75	236.05
	(b) Regulation 34 (2) & Note 2	0.00	53.02	0.00
	Total Addition	59.66	182.17	246.25
B.	Deletion claimed			
(i)	Assets deducted on replacement of new assets covered under Regulation 34 (2) & Note 2	(-) 62.38	(-) 22.14	0.00
(ii)	Deduction of assets without any replacement during the year	(-) 181.36	(-) 34.51	(-) 6.57
(iii)	Assets (Gross alue) transferred from natural head to obsolete assets.	(-)28.83	0.00	-34.85
	Deletion Claimed (Total)	(-) 272.58	(-) 56.64	(-) 41.42
	Assumed Deletion		(-) 3.32	(-) 39.97
	Total Deletion	(-) 272.58	(-) 59.97	(-) 81.39
C.	Additional capital expenditure allowed before adjustment of exclusion disallowed [C=A+B]	(-) 212.92	122.21	164.87
D.	Exclusions			
a.	Additions:			
(i)	Capital Spares capitalized as per AS-2 but to be claimed in O&M expenses on consumption basis	5.73	0.00	0.00
(ii)	Regulation 34 (3)	12.47	7.52	23.90
(iii)	(a)Asset wrongly declared as obsolete in the year 2006-07 and reinstated in the year 2007-08	12.95	0.00	0.00
	(b)Asset wrongly declared as obsolete in the year 2004-05 and reinstated in the year 2008-09	0.00	0.00	0.00
(iv)	Assets (WDV) transferred from natural head to obsolete assets (413001) (being obsolete in nature) excluding assets falling under Regulation 34 (2) & Note 2	8.01	0.00	2.94

(v)	Assets (WDV) falling under category "C" transferred from natural head to obsolete assets (413001) (being obsolete in nature)	0.06	0.00	0.00
(vi)	Assets (Gross Value) reinstated and transferred to other units / projects	0.00	0.00	13.98
(vii)	Assets (Gross Value) transferred from surplus to obsolete assets	0.00	0.00	0.19
(viii)	Assets reinstated in the year 2007-08 deducted earlier in the year 2006-07	0.00	0.00	0.00
(ix)	Capital Spares – GPM de capitalized in previous years now capitalized / reinstated (As per Corporate Office circular no. A/CS-147)	0.00	0.00	1337.17
	Total Addition (D)(a)	39.22	7.52	1378.18
b.	Deletion:			
(i)	(a)Asset wrongly declared as obsolete in the year 2006-07 and reinstated in the year 2007-08	0.00	12.95	0.00
	(b)Asset wrongly declared as obsolete in the year 2004-05 and reinstated in the year 2008-09	0.00	0.00	6.65
(ii)	Assets falling under Regulation 34(3) transferred from natural head to obsolete assets (413001) (being obsolete in nature)	0.00	0.00	0.00
(iii)	Assets (Gross Value) reinstated and transferred to other units / projects	0.00	0.00	13.98
(iv)	Assets (Gross Value) transferred from surplus to obsolete assets	0.00	0.00	0.19
(v)	Deduction of assets of Sawlakot Project clubbed earlier with Salal Power Station as on 1.4.2004 as per decision of CO and not claimed under additional Capitalization	0.00	0.00	10.55
(vi)	Surplus Assets not in use on 1.4.2004 and disallowed by Commission as additional capitalization vide order dated 1.2.2006 in P.No.85/2005 and disposed off during the year	3.11	3.36	0.00
(vii)	De-capitalization of Spares earlier capitalized (their consumption to be claimed under O&M expenses)	28.45	0.00	0.00
(viii)	Deletion of assets covered under Category 'C' (Regulation 34(3))	0.00	0.00	0.00
(ix)	Assets deducted in the year 2006-07 but reinstated in the year 2007-08	0.00	0.00	0.00
(x)	Assets in active use (out of assets of Gross Value Rs.176.70 lakh declared surplus / not in use as on 1.4.2004)	0.00	2.65	0.00
(xi)	Total of assets sold / Transferred during the year out of those	2.25	3.44	1.21

	declared obsolete / surplus Excluding those assets which have been disallowed by CERC amounting to Rs.176.70 lakh.			
(xii)	Value of old assets (Replaced during 2004-05 & 2005-06)	0.45	18.85	3.32
(xiii)	Value of assets which were replaced during 2001-04 & deducted by CERC	1.04	0.00	0.00
	Total Deletion (D)(b)	35.30	41.24	35.90
E.	NET EXCLUSION [(D)(a)-(D)(b)]	3.92	(-) 33.72	1342.28
F.	Exclusion disallowed	(-) 152.22	143.89	5.19
G.	Additional capital expenditure allowable before adjustment of Un- discharged liability [C+F]	(-) 365.14	266.09	170.05

Un-discharged liabilities:

19. The petitioner vide affidavit dated 18.8.2009 has submitted un-discharged liabilities amounting to Rs. 13.15 lakh during 2007-08 and Rs. 0.69 lakh during 2008-09. Accordingly the above amounts have been deducted from the claim.

20. In view of the above, additional capital expenditure for the period 2006-09 allowed for the purpose of tariff, after excluding un-discharged liabilities is as under:

(Rs in lakh)

Year	2006-07	2007-08	2008-09
Additional Capitalization Recommended (before adjustment on account of undischarged liabilities)	(-) 365.14	266.09	170.05
Less: Undischarged Liabilities in the financial year	0.00	13.15	0.69
Add: Liabilities discharged in the financial year	0.86	0.00	0.00
Additional Capitalization allowed for the purpose of tariff	(-) 364.27	252.94	169.36

Capital cost

21. As already stated, the Commission had admitted capital cost of Rs.91436.81 lakh (inclusive of FERV and additional capitalization) as on 31.3.2004 for determining tariff for the period 2004-09.

22. Taking into account the capital cost of the generating station as on 1.4.2004 and the additional capital expenditure approved by order dated 4.1.2010 in Petition No. 87/2009 and in this petition, as stated in paras 3 and 20 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 st April of the financial year	91436.81	91012.61	91101.35	90737.07	90990.01
Additional Capitalization recommended for the purpose of tariff	(-) 424.20	88.73	(-) 364.27	252.94	169.36
Capital Cost as on 31 March of the financial year	91012.61	91101.35	90737.07	90990.01	91159.37

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

(Rs. in lakh)					
Year	2004-05	2005-06	2006-07	2007-08	2008-09
Additional Notional Equity	(-) 127.26	26.62	(-) 109.28	75.88	50.81

Return on Equity

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

(Rs in lakh)					
Year	2004-05	2005-06	2006-07	2007-08	2008-09
Opening Equity	48485.63	48358.37	48384.99	48275.71	48351.59
Additional Equity during 2004-09	(-) 127.26	26.62	(-) 109.28	75.88	50.81
Closing Equity	48358.37	48384.99	48275.71	48351.59	48402.40
Average Equity	48422.00	48371.68	48330.35	48313.65	48376.99
Return on Equity	6779.08	6772.04	6766.25	6763.91	6772.78

Interest on Loan

26. As no fresh loans have been added to the actual loans, the weighted average rate of interest, as worked out in order dated 9.5.2006 in Petition No.197/2004, has been considered. Interest on loan has been worked out as mentioned below:

(a) As worked out in order dated 9.5.2006 in Petition No.197/2004, the balance net opening loan for the year 2004-05 works out to Rs. 42951.18 lakh.

(b) From the year 2004-05 to 2008-09, capitalization and de-capitalization of assets have been considered and segregated into normative loan and equity in the ratio of 70: 30. Accordingly, the normative loan of (-) Rs 296.94 lakh, Rs 62.11 lakh , (-) Rs. 254.99 lakh, Rs. 177.06 lakh and Rs. 118.55 lakh for 2004-05 to 2008-09 respectively have been considered.

27. Interest on loan has been computed as under:

	(Rs in lakh)				
Year	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Normative Loan	42951.18	42654.24	42716.36	42461.36	42638.42
Cumulative Repayment up to Previous Year	37373.26	40968.60	42716.36	42716.36	42893.42
Net Loan-Opening	5577.92	1685.64	0.00	0.00	0.00
Additional Loan due to additional capitalization (2004-09)	(-) 296.94	62.11	(-) 254.99	177.06	118.55
Repayment during the year	3595.34	1747.76	0.00	177.06	118.55
Net Loan-Closing	1685.64	0.00	0.00	0.00	0.00
Average Loan	3631.78	842.82	0.00	0.00	0.00
Weighted Average Rate of Interest on Loan	10.95%	9.55%	9.55%	0.00%	0.00%
Interest	397.78	80.49	0.00	0.00	0.00

Depreciation

28. For calculating depreciation, the cumulative depreciation of Rs.30332.77 lakh recovered up to 31.3.2004 and the weighted average rate of depreciation of 2.34% as per order dated 9.5.2006 in Petition No. 197/2004 have been considered.

29. For the year 2004-05 and 2005-06, depreciation has been calculated by applying the weighted average rate of depreciation of 2.34%. As the net opening loan as on 1.4.2006 is 'zero', for the year 2006-07, 2007-08 and 2008-09 depreciation have been calculated by spreading the balance recoverable depreciation over the balance useful life.

30. The Commission has approved net de-capitalization of assets worth Rs.541.45 lakh, Rs.74.80 lakh, Rs.424.80 lakh, and Rs.76.20 lakh during 2004-05, 2005-06, 2006-07 and 2008-09 respectively and net re-capitalization of assets worth Rs.83.93 lakh for the year 2007-08. The amount of cumulative depreciation allowed in tariff against the net de-capitalized assets has been calculated on pro-rata basis and the same has been cumulatively adjusted against the cumulative depreciation recovered up to the respective year.

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

(Rs in lakh)					
Year	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Block (For the purpose of Depreciation)	90600.71	90432.98	90295.21	90239.54	90450.69
Rate of Depreciation	2.34%	2.34%	2.34%	2.34%	2.34%
Depreciable Value	81067.06	80916.11	80792.11	80742.01	80932.05
Balance Useful life of the asset	27	26	25	24	23
Remaining Depreciable Value	50734.30	47188.65	44978.96	43268.42	41580.95
Depreciation	2119.02	2115.10	1835.88	1841.21	1848.04

Advance Against Depreciation

32. Advance Against Depreciation has been re-calculated after considering the additional capital expenditure. Revised details of Advance Against Depreciation are as under:

(Rs in lakh)					
Advance against Depreciation	2004-05	2005-06	2006-07	2007-08	2008-09
1/10th of Gross Loan(s)	4295.12	4265.42	4271.64	4246.14	4263.84
Repayment of the Loan	3595.34	1747.76	0.00	177.06	118.55
Minimum of the above	3595.34	1747.76	0.00	177.06	118.55
Depreciation during the year	2119.02	2115.10	1835.88	1841.21	1848.04

(A) Difference	1476.31	(-) 367.34	(-) 1835.88	(-) 1664.15	(-) 1729.49
Cumulative Repayment of the Loan	40968.60	42716.36	42716.36	42893.42	43011.97
Cumulative Depreciation/ Advance against Depreciation	32451.79	35842.55	37649.03	39314.80	41199.14
(B) Difference	8516.81	6873.80	5067.33	3578.62	1812.83
Advance against Depreciation Minimum of (A) and (B)	1476.31	0.00	0.00	0.00	0.00

O&M Expenses

33. O&M expenses as allowed in the order dated 9.5.2006 in Petition No. 197/2004 have been considered.

Interest on Working Capital

34. For the purpose of calculation of working capital, the operating parameters as considered in the order dated 9.5.2006 in Petition No. 197/2004 have been kept unchanged. The "receivables" component of the working capital in the above said order has been revised for the reason of revision of return on equity, interest on loan, etc.

35. The SBI PLR of 10.25% as on 1.4.2004 has been considered as the rate of interest on working capital during the tariff period as considered in order dated 9.5.2006 in Petition No. 197/2004 has been considered. The necessary details in support of calculation of interest on working capital are as under:

(Rs in lakh)					
Year	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	1357.34	1438.78	1525.11	1616.62	1713.62
O & M expenses	604.83	629.08	654.25	680.42	707.58
Receivables	3091.36	2836.55	2827.73	2883.52	2943.62
Total	5053.54	4904.42	5007.09	5180.56	5364.82
Rate of interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest on working capital	517.99	502.70	513.23	531.01	549.89

ANNUAL FIXED CHARGES

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

(Rs in lakh)

Annual Fixed Charges	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	2119.02	2115.10	1835.88	1841.21	1848.04
Interest on Loan	397.78	80.49	0.00	0.00	0.00
Return on Equity	6779.08	6772.04	6766.25	6763.91	6772.78
Advance against Depreciation	1476.31	0.00	0.00	0.00	0.00
Interest on Working Capital	517.99	502.70	513.23	531.01	549.89
O & M Expenses	7258.00	7549.00	7851.00	8165.00	8491.00
Total	18548.19	17019.33	16966.35	17301.13	17661.72

37. The prayer of the petitioner 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.

38. The petitioner shall reimburse the difference between the fixed charges approved vide order dated 9.5.2006 in Petition No. 197/2004 and those approved now, to the beneficiaries in three equal monthly installments.

39. Petition No. 154/2009 stands disposed of in terms of the above.

Sd/-
(V.S.VERMA)
MEMBER

Sd/-
(S. JAYARAMAN)
MEMBER

Sd/-
(R.KRISHNAMOORTHY)
MEMBER