# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Coram

- 1. Dr. Pramod Deo, Chairperson
- 2. Shri R.Krishnamoorthy, Member
- 3. Shri V.S.Verma, Member

**Petition No. 87/2009** 

#### In the matter of

Determination of impact of annual fixed charges on account of additional capitalization/de-capitalization incurred during the years 2004-05 and 2005-06, 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) Ms. Niti Singh, NHPC

# ORDER (DATE OF HEARING: 8.9.2009)

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

years 2004-05 and 2005-06 in respect of 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 1st April 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
1	Depreciation	2123.98	2123.98	1845.14	1845.14	1845.14
2	Interest on Loan	414.05	94.67	0.00	0.00	0.00
3	Return on Equity	6787.99	6787.99	6787.99	6787.99	6787.99
4	Advance Against Depreciation	1471.35	0.00	0.00	0.00	0.00
5	Interest on Working Capital	518.43	503.38	513.77	513.49	550.11
6	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. None of the respondents have filed replies.

### **ADDITIONAL CAPITALISATION**

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

- "(1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission subject to prudence check.
- (i) Deferred liabilities,
- (ii) Works deferred for execution,
- (iii) Procurement of initial capital spares in the original scope of works subject to ceiling specified in regulation 33,
- (iv) Liabilities to meet award of arbitration or in compliance of the order or decree of a court, and
- (v) On account of change in law.

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

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

- (2) Subject to the provision of clause (3) of this regulation, the capital expenditure of the following nature actually incurred after the cut off date may be admitted by the Commission subject to prudence check:
- (i) Deferred liabilities relating to works/services within the original scope of work;
- (ii) Liabilities to meet award of arbitration or in compliance of the order or decree of a court;
- (iii) On account of change in law; and
- (iv) Any additional works/service which has become necessary for efficient and successful operation of plant but not included in the original capital cost.
- (3) Any expenditure incurred on acquiring minor items/assets like tools and tackles, personal computers, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, T.V, washing machine, heat-convectors, mattresses, carpets, etc brought after the cut off date shall not be considered for additional capitalization for determination of tariff with effect from 1.4.2004.

#### Note

The list of items is illustrative and not exhaustive.

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

#### Note 1

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

#### Note 2

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

#### Note 3

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

#### Note 4

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

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

(Rs. In lakh)

		2004-05	2005-06
Α.	Additional Capitalization as per books of Account	-274.18	-1875.83
В.	Exclusions	27 4.10	1070.00
a.	Additions:		
(i)	Capital Spares capitalized as per AS-2 but to be claimed in O&M Expenses on their consumption basis	0.00	52.90
(ii)	Regulation 34 (3)	106.16	10.88
(iii)	Internal adjustment of assets from one head of account to another	33.58	24.46
	Total addition (B)(a)	139.74	88.23
b.	Deletion:		
(i)	Internal adjustment of assets from one head of account to another	-159.63	-24.46
(ii)	Surplus assets not in use on 1.4 2004 and disposed of during the year	-8.10	-0.01
(iii)	Surplus assets not in use pertaining to 2004-05 and 2005-06 and disposed of during the year (Gross Value)	0.00	0.00
(iv)	De-capitalization of spares earlier capitalized on their consumption to be claimed under O&M expenses	0.00	-2025.47
(v)	Value of assets which were replaced during 2001-04 and deducted by the Commission in its order while allowing additional capitalization	-10.10	-0.66
(vi)	Deletion of assets which is cover under Regulation 34 (3)	-52.74	-19.81
	Total deletion (B)(b)	-230.58	-2070.40
C.	NET ADDITION/DELETION [(B)(a)+(B)(b)]	-90.85	-1982.17
D.	Net Additional Capitalization Claimed [A-C]	-183.33	106.34

### **EXCLUSIONS**

6. 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 an amount of Rs.52.90 lakh for 2005-06 corresponding to capital spares capitalized but to be claimed in O&M expenses on their consumption basis. This has been allowed.
- (b) Exclusion under category C {Regulation 34(3)}: Regulation 34(3) of the 2004 regulations, does not allow capitalization of minor assets. Petitioner therefore has excluded for the purpose of tariff, amount of Rs.106.16 lakh and Rs.10.88 lakh incurred on procurement of minor assets during 2004-05 and 2005-06 respectively. This is allowed.
- (c) Exclusion of Internal adjustment of assets from one Head of account to another: The petitioner has excluded amount of Rs.33.58 lakh and Rs.24.46 lakh for the years 2004-05 and 2005-06 respectively for internal adjustment of assets from one Head of Account to another. This is allowed.
- (d) Deletion of exclusion of Internal Adjustment of assets from one Head of account: The petitioner has excluded amount of (-) Rs.159.63 lakh and (-) Rs.24.46 lakh for 2004-05 and 2005-06 respectively for internal adjustment of assets from one Head of Account to another. On prudence check, it is found that the claim for 2004-05 includes assets amounting to (-) Rs.123.19 lakh on account of transfer to 'obsolete / unserviceable asset'. These assets are no longer in use. As such, value of these assets has not been allowed for exclusion. Further two assets viz. 60 T SCEMMEL Trailer and 12,5 T Mobile Crane TIL Make (Aeneas Tracks) under sl.no.188 and 189 of the claim for 2004-05, amounting to (-) Rs.23.96 lakh claimed under change of head as

against asset under Sl. No. 155 and 156 for the same year are booked to same head of account. The petitioner was requested to clarify the matter. But no written clarification was received. As such, these have not been allowed. Accordingly, based on prudence check, amount of (-) Rs.12.49 lakh and (-) Rs.24.46 lakh for 2004-05 and 2005-06 respectively have been allowed.

- (e) Deletion of exclusion of surplus assets not in use on 1.4.2004 and disposed of during the year: Petitioner has excluded amount of (-) Rs.8.10 lakh for the year 2004-05 and (-) Rs.0.01 lakh for the year 2005-06. The Commission vide order dated 1.2.2006, in Petition No. 85/2005 regarding Additional capital expenditure during 2001-04, had reduced the gross value of "assets not in use" as on 31.3.2004 amounting to Rs. 176.70 lakh from capital cost for the purpose of tariff. These assets have been deducted in 2004-05 and 2005-06 in the books. To avoid double deduction, this deduction is being shown under "exclusion" for tariff purpose. These exclusions have been allowed.
- (f) Deletion of Exclusion of Surplus Assets not in use pertaining to 2004-05 and 2005-06 and disposed of during the year: The petitioner claimed nil value under this head of exclusion.
- (g) Deletion of Exclusion of de-capitalization of spares, earlier capitalized, to be claimed under O&M expenses: Petitioner has excluded amount of (-) Rs.2025.47 lakh for 2005-06. The Commission, vide order dated 1.2.2006 in Petition No. 85/2005 regarding Additional capital expenditure during 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). But these assets continued in the gross block of the project. These assets have been deducted in 2005-06 in the books. To avoid double deduction, this deduction is being shown under "exclusion" for tariff purpose. These exclusions have been allowed.

- (h) Deletion of exclusion of assets which were replaced during 2001-04 and deducted by the Commission in its order: Petitioner has excluded (-) Rs.10.10 lakh and (-) Rs.0.66 for 2004-05 and 2005-06 respectively. The Commission vide order dated 1.2.2006 in Petition No.85/2005 regarding Additional capital expenditure during 2001-04, had allowed the capitalization of replaced assets after reducing the gross value of original assets in the same year. Petitioner has also reduced that gross value of original assets in 2004-05 and 2005-06. To avoid double deduction, this deduction is being shown under "exclusion" for tariff purpose. As such, the exclusion has been allowed.
- (i) Deletion of Exclusion of assets under Regulation 34 (3): Petitioner has excluded the amount of (-) Rs.52.74 lakh and (-) Rs.19.81 for the years 2004-05 and 2005-06 respectively, appearing in books corresponding to decapitalization of minor assets, apparently on the ground that since capitalization of minor assets is not being allowed for the purpose of tariff, decapitalization 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 capital expenditure petition of NTPC has held that assets which are no longer in service cannot be allowed to earn tariff and have to be de-capitalized for the purpose of tariff. Accordingly, the exclusion of negative entries has not been allowed.

7. 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)

S. No.	Capitalization Code / Year	2004-05	2005-06
Α	Addition claimed		
(i)	Regulation 34 (1)	0.00	0.00
(ii)	(Regulation 34 (2) (i)	0.00	0.00
(iii)	Regulation 34 (2) (ii)	0.00	90.12
(iv)	Regulation 34 (2) (iii)	1.71	0.00
(v)	Regulation 34 (2) (iv)	108.90	31.98
(vi)	(a) Regulation 34 (2) & Note 2	30.78	39.27
	(b) Regulation 34 (2) & Note 2	0.00	0.00
	Total Addition	141.39	161.37
В	Deletion claimed		
(i)	Rectification on a/c of payment of interest as per orders of court on land compensation to be charged under O&M expenses	0.00	-16.35
(ii)	Assets deducted on replacement of new assets covered under Regulation 34 (2) (iv)	-4.12	-13.37
(iii)	Deduction of assets without any replacement during the FY.	-320.61	-25.30
(iv)	Assets (Gross Value) transferred from natural head to obsolete assets.	0.00	0.00
	Deletion Claimed(Total)	-324.73	-55.02
С	Additional Capitalization to be claimed (C=A+B)	-183.33	106.34

- 8. After examining the asset-wise details and justification for additional capitalisation/ de-capitalisation claimed by the petitioner, under various categories and by applying prudence check, the admissibility of additional capitalization is discussed in the subsequent paragraphs.
- 9. 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.90.12 lakhs for 2005-06. The same is allowed after prudence check.
- 10. On account of change in law {Regulation 34(2) (iii)}:The petitioner has claimed Rs.1.71 lakhs for the FY 2004-05. The same is allowed after prudence check.
- 11. Works/services which have become necessary for efficient and successful operation of station {Regulation 34(2) (iv)}: The petitioner has claimed an amount of Rs.108.90 lakh and Rs.31.98 lakhs, for the years 2004-05 and 2005-06 respectively under this category. Amount of Rs.108.90 Lakhs for the year 2004-05 includes replaced assets amounting Rs.21.12 Lakhs, which has not been allowed under this head. Moreover, as the gross value of the original assets i.e. replaced assets is not given this was not be considered under Regulation 34(2) & Note (2) also. Accordingly, based on the prudence check, Rs.87.78 lakh for 2004-05 and Rs.31.98 lakh for 2005-06 have been allowed.
- 12. Expenditure on replacement of cold assets {Regulation 34 Note 2}: The petitioner has claimed an amount of Rs.30.78 lakh and Rs.39.27 lakh, during 2004-05 and 2005-06 respectively under this category. *Amount of Rs.30.27 lakh for 2004-*

05 includes replaced value of 3 no. DG Sets amounting to Rs.10.00 lakh and the claim for 2007-08 includes an amount of Rs.53.02 lakh on account of assets taken back. Based on the prudence check, an amount of Rs.30.78 lakh, Rs.39.27 lakh, during 2004-05 and 2005-06 respectively, have been allowed.

#### **Deleted assets**

13. In addition to the capitalization under the above categories, the petitioner has de-capitalized an amount of (-)Rs.324.73 lakh and (-)Rs.55.02 lakh, during 2004-05 and 2005-06respectively. On scrutiny it is found that in respect of the following replaced assets gross value of the original asset, was deducted during a subsequent years in the books of accounts.:

(Rs. In Lakhs)

Asset	Value of Replace ment	Gross Value Reduced	Year of replacem ent	Year proposed for reduction	Reference
Cooling Tower	0.61	0.20	2004-05	Written off during 2007-08	Part (A), Sl. No. 27, Annexure-iii, page-25
Transformer Kiosks	1.82	0.29	2004-05	2005-06	Part (A), Sl. No. 28, Annexure-iii, page-26
Synthesizer	0.34	0.19	2004-05	2005-06	Part (A), Sl. No. 32&33, Annexure-iii, page-26
PLCC Panels	9.96	16.15	2004-05	Written off during 2007-08	Part (A), Sl. No. 35, Annexure-iii, page-26
Total for 2004-0	5	16.83			
Air Compressor Total for 2005-0	7.05 <b>6</b>	0.45 <b>0.45</b>	2005-06 2005-06	Written off during 2006-07	Part (A), Sl. No. 14, Annexure-iv, page-58

Gross value of assets, amounting to Rs.16.83 lakh and Rs.0.45 lakh proposed to be reduced / reduced beyond the year in which the assets are replaced have been considered as assumed deletion for the 2004-05 and 2005-06 respectively i.e. during the year in which the assets are replaced. Accordingly, the adjusted deletion is as below:

(Rs. In lakh)

		2004 -05	2005-06
Deletion Claimed		324.73	55.02
Add: Assumed	Deletion	16.83	0.45
Less: Adjustment		-	0.48
		341.56	54.99

As a matter of principle, the gross value of the asset replaced shall be deducted from the total gross block of the project while capitalising the new asset. Accordingly, Rs.341.56 lakh and Rs.54.99 lakh for the years 2004-05 and 2005-06 respectively, have been allowed as deletion.

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

14. Based on the above discussion, the additional capital expenditure claimed and allowed (without excluding un-discharged liabilities) for the year 2004-05 and 2005-06 is as under:

(Rs in lakh)

	Capitalization Code	2004	1-05	2005-06	
A.	Addition	Claimed	Allowed	Claimed	Allowed
(i)	Regulation 34 (1))	0.00	0.00	0.00	0.00
(ii)	Regulation 34 (2) (i)	0.00	0.00	0.00	0.00
(iii)	Regulation 34 (2) (ii)	0.00	0.00	90.12	90.12
(iv)	Regulation 34 (2) (iii)	1.71	1.71	0.00	0.00
(v)	Regulation 34 (2) (iv)	108.90	87.78	31.98	31.98
(vi)	(a) Regulation 34 (2) & Note 2	30.78	30.78	39.27	39.27
	(b) Regulation 34 (2) & Note 2	0.00	0.00	0.00	0.00
	Total Addition	141.39	120.27	161.37	161.37
B.	Deletion claimed				
(i)	Rectification on a/c of payment of interest as per orders of court on land compensation to be charged under O&M expenses	0.00	0.00	-16.35	-16.35
(ii)	Assets deducted on replacement of new assets covered under Regulation 34 (2) & Note 2	-4.12	-4.12	-13.37	-12.88
(iii)	Deduction of assets without any replacement during the FY.	-320.61	- 320.61	-25.30	-25.30
(iv)	Assets (Gross Value) transferred from natural head to obsolete	0.00	0.00	0.00	0.00

	assets.				
	Deletion Claimed(Total)	-324.73	-324.73	-55.02	-54.54
	Assumed Deletion		-16.83		-0.45
	Total Deletion	-324.73	-341.56	-55.02	-54.99
C.	ACE allowed before adjustment of Exclusion Disallowed [C=A+B]	-183.33	-221.28	106.34	106.38
D.	Exclusions				
a.	Additions:				
(i)	Capital Spares capitalized as per AS-2 but to be claimed in O&M Exp. on there consumption basis	0.00	0.00	52.90	52.90
(ii)	Regulation 34 (3)	106.16	106.16	10.88	10.88
(iii)	Internal adjustment of Assets from one HOA to another HOA	33.58	33.58	24.46	24.46
	Total Addition (B)(a)	139.74	139.74	88.23	88.23
b.	Deletion:				
(i)	Internal adjustment of Assets from one HAO to another HAO	-159.63	-12.49	-24.46	-24.46
(ii)	Surplus Assets not in use on 01.04 2004 and disposed of during the year	-8.10	-8.10	-0.01	-0.01
(iii)	Surplus Assets not in use pertaining to 2004-05 & 2005-06 & disposed of during the year (Gross Value)	0.00	0.00	0.00	0.00
(iv)	De-capitalization of Spares earlier capitalized on their consumption to be claimed under O&M expenses	0.00	0.00	-2025.47	-2025.47
(v)	Value of assets which were replaced during 2001-04 & deducted by CERC in its order while allowing additional capitalization	-10.10	-10.10	-0.66	-0.66
(vi)	Deletion of assets which is cover under Regulation 34 (3)	-52.74	0.00	-19.81	0.00
	Total Deletion (B)(b)	-230.58	-30.70	-2070.40	-2050.59
E.	Net Exclusion [(D)(a)+(D)(b)]	-90.85	109.04	-1982.17	-1962.36
F.	Exclusion Disallowed		-199.89		-19.81
G.	ACE Allowable before adjustment of Un-discharged liability [C+F)		-421.17		86.57

## Un-discharged liabilities:

15. The petitioner vide affidavit dt.18.8.2009 has intimated that Rs. 3.03 lakh claimed for the year 2004-05 was actually discharged in 2005-06 and Rs. 0.86 lakh claimed in 2005-06 was discharged in 2006-07.

- 16. Accordingly, the above amounts have been deducted during the year in which the liabilities have been charged and adjusted during the year in which the liabilities had been discharged.
- 17. In view of the above, additional capital expenditure allowed for the purpose of tariff, after excluding the un-discharged liabilities is as under:

Rs. In lakh

Year	2004-05	2005-06
Additional Capitalisation Recommended		
(before adjustment on account of		
undischarged liabilities)	-421.17	86.57
Less: Undischarged Liabilities in FY	3.03	0.86
Add: Liabilities discharged in FY		3.03
Additional Capitalisation recommended		
for the purpose of tariff	-424.20	88.73

### **Capital cost**

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

(Rs. in lakh)

Year	2004-05	2005-06
Opening Capital Cost as on 1 <sup>st</sup> April of the year	91436.81	91012.61
Additional Capitalization recommended for the purpose of tariff	-424.20	88.73
Capital Cost as on 31 March of the year	91012.61	91101.35

- 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.
- 22. Petition No.87/2009 stands disposed of in terms of the above.

Sd/- Sd/- Sd/- (V.S.VERMA) (R.KRISHNAMOORTHY) (DR.PRAMOD DEO)
MEMBER MEMBER CHAIRPERSON

New Delhi, dated the 4<sup>th</sup> January, 2010