

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram

1. **Shri Bhanu Bhushan, Member**
2. **Shri R. Krishnamoorthy, Member**

Petition No. 158/2004

In the matter of

Approval of generation tariff of Bairasiul Hydroelectric Project for the period
1.4.2004 to 31.3.2009

And in the matter of

National Hydroelectric Power Corporation Ltd.

----**Petitioner**

Vs

1. Punjab State Electricity Board, Patiala
2. Delhi Transco Ltd, New Delhi
3. BSES Rajdhani Power Ltd, New Delhi
4. BSES Yamuna Power Ltd, New Delhi
5. North Delhi Power Ltd, Delhi
6. Haryana Vidyut Prasaran Nigam Ltd, Panchkula
7. Himachal Pradesh State Electricity Board, Shimla

...**Respondents**

ORDER

This petition has been filed by the petitioner, National Hydroelectric Power Corporation Ltd, (NHPC) a generating company owned or controlled by the Central Government, for approval of tariff in respect of Bairasiul Hydroelectric Project (3 x 66 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. After perusal of pleadings and hearing the parties, the Commission, vide its order dated 9.5.2006 allowed the following Annual fixed charges for the generating station for the period from 1.4.2004 to 31.3.2009

(Rs. in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	455.89	476.62	476.62	476.62	476.62
Interest on Loan	171.65	0.00	0.00	0.00	0.00
Return on Equity	1089.90	1089.90	1089.90	1089.90	1089.90
Advance Against Depreciation	576.84	0.00	0.00	0.00	0.00
Interest on Working Capital	172.11	165.82	172.50	179.52	186.88
O & M Expenses	3008.00	3128.00	3253.00	3383.00	3618.00
TOTAL	5474.40	4860.34	4992.02	5129.04	5271.41

3. Further, the Commission, vide its above order had also allowed additional capitalization during the period 1.4.2001 to 31.3.2004. Impact of the additional capitalization allowed by the Commission vide the above order is as under:

(Rs. in lakh)

CALCULATION OF IMPACT OF ADDITIONAL CAPITALISATION DURING THE YEAR 2001-04					
		2001-02	2002-03	2003-04	Total
Additional Capitalisation		98.07	50.60	113.20	261.88
Financing of Additional Capitalisation					
Notional Loan		98.07	50.60	113.20	261.88
Notional Equity		0.00	0.00	0.00	0.00
Total		98.07	50.60	113.20	261.88
Effective Additional Capitalisation					
Opening Loan Balance		0.00	98.07	148.67	
Addition of Loan		98.07	50.60	113.20	261.88
Repayment of Loan		0.00	0.00	0.00	0.00
Closing Loan Balance		98.07	148.67	261.88	
Effective Loan			98.07	148.67	
Weighted Average Rate of Interest on Loan		12.48%	12.48%	12.48%	
Effective Equity		-	0.00	0.00	
Interest on Loan		-	12.24	18.55	30.79
Return on Equity	16%	-	0.00	0.00	0.00
Impact of Additional Capitalisation		-	12.24	18.55	30.79

4. Aggrieved by the methodology considered by the Commission in the above order as regards allocation of additional capital amount into debt and equity, the petitioner filed Appeal No. 143 of 2006 before the Appellate Tribunal for Electricity (hereinafter referred to as the "Appellate Tribunal"):

5. The Appellate Tribunal vide its judgment dated 5.2.2008, has decided as under:

“We have heard the Commission's representative as also the representatives of the other respondents before us. Having considered the whole matter we allow the appeal and set aside the impugned order and remand the matter to the CERC for reconsideration of appellant's claim

1. with regard to the apportionment of the additional capitalization(including de-capitalization and FERV) for the period of 1.04.2001 to 31.03.2004 in the same debt equity ratio of 56.43 : 43.57 as admitted in the previous tariff period and
2. with regard to the adoption of the new debt equity ratio, the calculations of gross loan, return on equity and interest on loan. “

6. Accordingly, we reconsider the claim of the petitioner through this order.

7. As decided by the Appellate Tribunal in its judgement dated 4.10.2006 in Appeal No. 135 of 2005 (Tamil Nadu Electricity Board Vs Power Grid Corporation of India Limited and others) FERV has been adjusted against loan only. Further, the additional capitalization and de-capitalisation have been apportioned between debt and equity in the ratio of 56.43: 43.57.

8. The capital cost of Rs.18112.37 lakh as on 1.4.2004 as considered in the calculation in the order dated 9.5.2006 has been adopted as the base.

RETURN ON QUITTY

9. With the revised debt-equity ratio, equity base has been computed as Rs.7892.22 lakh. Return on equity @ 14% of the revised equity base has been calculated as Rs. 1104.91 lakh per annum.

INTEREST ON LOAN

10. Interest on loan re-calculated based on the above referred judgement of the Appellate Tribunal is as under:

(Rs. in lakh)						
Interest on Loan	Upto 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross loan –opening as per order dated 1.11.2002	10081.00					
Addition due to Additional Capitalisation	138.85					
Addition due to FERV	0.30					
Gross Normative Loan	10220.15	10220.15	10220.15	10220.15	10220.15	10220.15
Cumulative Repayment upto Previous Year		7581.00	10220.15	10220.15	10220.15	10220.15
Net Loan-Opening		2639.15	0.00	0.00	0.00	0.00
Repayment during the year		2639.15	0.00	0.00	0.00	0.00
Net Loan-Closing		0.00	0.00	0.00	0.00	0.00
Average Net Loan		1319.57	0.00	0.00	0.00	0.00
Weighted Average Rate of Interest on Loan		12.5000%	0.0000%	0.0000%	0.0000%	0.0000%
Interest on loan		164.95	0.00	0.00	0.00	0.00

DEPRECIATION

11. Consequent to revision of repayment of loan during 2004-05, and its resultant impact on Advance Against Depreciation during that year, the depreciable value has increased necessitating recomputation of depreciation.

Revised amount of depreciation allowed as a consequence is as under

(Rs. in lakh)							
Details of Depreciation		Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
As per order dated 1.11.2002		17866.00					
Addition during 2001-04 due to Additional Capitalisation		246.07					
Addition during 2001-04 due to FERV		0.30					
Gross Block as on 31.3.2004		18112.37	18112.37	18112.37	18112.37	18112.37	18112.37
Rate of Depreciation	2.5170%						
Depreciable Value	90%		16167.73	16167.73	16167.73	16167.73	16167.73
Balance Useful life of the asset	17.10		17	16	15	14	13
Remaining Depreciable Value			8706.35	7684.33	7207.05	6729.76	6252.47
Depreciation			455.89	477.29	477.29	477.29	477.29

ADVANCE AGAINST DEPRECIATION

12. Consequent to revision of interest on loan component, Advance Against Depreciation allowed is revised as under:

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
1/10 th of Gross Loan(s)	1022.01	1022.01	1022.01	1022.01	1022.01
Repayment of the Loan	2639.15	0.00	0.00	0.00	0.00
Minimum of the above	1022.01	0.00	0.00	0.00	0.00
Depreciation during the year	455.89	477.29	477.29	477.29	477.29
(A) Difference	566.12	-477.29	-477.29	-477.29	-477.29
Cumulative Repayment of the Loan	10220.15	10220.15	10220.15	10220.15	10220.15
Cumulative Depreciation/ Advance against Depreciation	7917.28	8960.69	9437.98	9915.26	10392.55
(B) Difference	2302.86	1259.46	782.17	304.88	-172.41
Advance against Depreciation Minimum of (A) and (B)	566.12	0.00	0.00	0.00	0.00

O&M EXPENSES

13. As O&M expenses do not depend upon the capital cost or debt equity ration, there is no change in this component of the Annual Fixed charges. Accordingly, the following O&M Expenses allowed vide the Commission's order dated 9.5.2006 is allowed in these calculations also:

(Rs. in lakh)

Year	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses	3008	3128	3253	3383	3518

INTEREST ON WORKING CAPITAL

14. Revised calculation of Interest on working capital is as under:

(Rs. in lakh)

	2004-2005	2005-2006	2006-07	2007-2008	2008-09
Spares	516.06	547.03	579.85	614.64	651.52
O & M expenses	250.67	260.67	271.08	281.92	293.17
Receivables	911.99	812.72	834.66	857.50	881.23
Total Working Capital	1,678.72	1,620.41	1,685.59	1,754.05	1,825.91
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest on Working Capital	172.07	166.09	172.77	179.79	187.16

ANNUAL FIXED CHARGES

15. The revised annual fixed charges for the period 1.4.2004 to 31.3.2009 allowed in this order are summed up as below:

(Rs. in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	455.89	477.29	477.29	477.29	477.29
Interest on Loan	164.95	0.00	0.00	0.00	0.00
Return on Equity	1104.91	1104.91	1104.91	1104.91	1104.91
Advance Against Depreciation	566.12	0.00	0.00	0.00	0.00
Interest on Working Capital	172.07	166.09	172.77	179.79	187.16
O & M Expenses	3008.00	3128.00	3253.00	3383.00	3518.00
TOTAL	5471.94	4876.29	5007.97	5144.99	5287.35

16. Other terms and conditions specified in the Commission's order dated 9.5.2006 shall remain unaltered.

17. The petitioner shall recover the balance amount in three equal monthly installments.

Sd/-
(R KRISHNAMOORTHY)
MEMBER

Sd/-
(BHANU BHUSHAN)
MEMBER

New Delhi dated 26th March, 2008