

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 214/2009

Coram:

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

DATE OF HEARING: 18.2.2010

DATE OF ORDER: 15.6.2010

In the matter of

Approval of two-part tariff for Kopili Hydroelectric Project, Stage-II (25 MW) for the period from 26.7.2004 to 31.3.2009 after inclusion of actual additional capital expenditure and application of actual interest rates incurred on the syndicated loan for the period 1.4.2006 to 31.3.2009.

And in the matter of

North Eastern Electric Power Corporation Ltd, Shillong
Vs

..... **Petitioner**

1. Assam State Electricity Board, Guwahati
2. Meghalaya State Electricity Board, Shillong
3. Department of Power, Govt. of Tripura, Agartala
4. Power and Electricity Department, Govt. of Mizoram, Aizawl
5. Electricity Deptt, Govt. of Manipur, Imphal
6. Department of Power, Govt. of Arunachal Pradesh, Itanagar
7. Department of Power, Govt. of Nagaland, Kohima
8. North Eastern Regional Electricity Board, Shillong
9. North Eastern Regional Load Despatch Centre, Shillong

.....**Respondents**

The following were present:

1. Shri P. K. Borah, NEEPCO
2. Shri Rana Bose, NEEPCO
3. Shri A.K.Jain, NERPC

ORDER

The petitioner has filed this petition for revision of tariff in respect of Kopili Hydroelectric Project (25 MW) (hereinafter referred to as "the generating station") for the period from 26.7.2004 to 31.3.2009, after inclusion of actual additional

capital expenditure and application of actual interest rates incurred on the syndicated loan for the period 1.4.2006 to 31.3.2009, in accordance with the provisions of 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 prayers:

- (a) Allow the capital expenditure of Rs 451.52 lakh for calculation of AFC;
- (b) Allow the additional capital expenditure capitalized during the period 1.4.2006 to 31.3.2009;
- (c) Allow the actual interest rates incurred on the syndicated loan during the period 1.4.2006 to 31.3.2009;
- (d) Allow the petitioner to recover from the beneficiaries the relevant components of annual fixed charges arising from such additional capital expenditure and application of actual interest rates incurred on the syndicated loan;
- (e) Allow reimbursement of filing fee by the beneficiaries to the petitioner; and
- (f) Pass any such order or orders as the Hon'ble Commission may deem just and proper in the circumstances of the case.

2. The date of commercial operation of the generating station is 26.7.2004. The tariff for the generating station for the period from 26.7.2004 to 31.3.2009 along with additional capitalization during the years 2004-05 and 2005-06, was determined by the Commission vide its order dated 1.1.2008 in Petition No.70/2006, based on the capital cost of Rs. 7927.54 lakh, as on 1.4.2004. The annual fixed charges approved by the Commission by order dated 1.1.2008 is as under:

Particulars	(Rs in lakh)				
	26.7.2004 to 31.3.2005	2005-06	2006-07	2007-08	2008-09
Depreciation	139.38	208.60	210.73	210.73	210.73
Interest on Loan	251.03	337.35	301.67	261.45	221.22
Return on Equity	224.76	336.39	339.83	339.83	339.83
Advance Against Depreciation	403.93	346.32	355.65	355.65	355.65
Interest on Working capital	23.55	32.90	33.17	33.13	33.14
O & M Expenses	79.42	119.60	124.39	129.36	134.54
TOTAL	1122.08	1381.17	1365.44	1330.15	1295.11

3. Reply to the petition has been filed by the respondent No.1, i.e. ASEB.

Additional capitalization

4. Clause (2) of Regulation 34 of the 2004 regulations provides for considering the additional capital expenditure for tariff as under:

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

- (i) Deferred liabilities relating to works/services with in the original scope of work;*
- (ii) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;*
- (iii) On account of change in law;*
- (iv) Any additional works/services which have become necessary for efficient and successful operation of the generating station, but not included in the original project cost; and*
- (v) Deferred works relating to ash pond or ash handling system in the original scope of work.*

5. The petitioner has claimed additional capital expenditure for the years 2006-07, 2007-08 and 2008-09 as under:

(Rs in lakh)

Particulars	2006-07	2007-08	2008-09
Additional capital expenditure	36.27	12.42	7.46

6. The petitioner vide affidavit dated 18.9.2009, has submitted a certificate from the chartered accountant certifying that the books of accounts of the petitioner have been verified and the additional capital expenditure/ transfer of assets has been accounted for by the petitioner in respect of the generating station. The additional capital expenditure as per books vis-à-vis the additional capital expenditure claimed by the petitioner is as under:

(Rs. in lakh)

Year	2006-07	2007-08	2008-09
Closing balance as per Book of Accounts	8363.06	8375.48	8382.93
Less: Opening balance as per Books of Accounts	8326.79	8363.06	8375.48
Additional capitalization claimed	36.27	12.42	7.45

7. The year-wise and category-wise break-up of the additional capital expenditure claimed by petitioner is as under:

(Rs. in lakh)

Capitalization	2006-07	2007-08	2008-09
Deferred liabilities relating to works/services within the original scope of work- Regulation 34(2)(i)	11.05	12.22	0.00
Additional works/services necessary for efficient and successful operation of the generating station, but not included in the original project cost- Regulation 34(2)(iv)	37.83	0.45	14.23
Sub-Total (Addition)	48.88	12.67	14.23
Deletion	(-)12.61	(-) 0.25	(-) 6.78
Total additional capital expenditure claimed	36.27	12.42	7.46

8. After applying prudence check on the asset-wise details and justification of additional capitalization claimed by the petitioner, the admissibility of additional capitalization is discussed in the succeeding paragraphs

Deferred liabilities relating to works/services within the original scope of work-Regulation 34 (2)(i)

9. The petitioner has claimed expenditure of Rs.11.05 lakh and Rs.12.22 lakh during the years 2006-07 and 2007-08 respectively, under this head, in respect of assets like outdoor electrification, steel liner and penstock, turbine and generator components.

As regards the claim of Rs.11.55 lakh for the year 2007-08 towards "steel liner and penstock", the petitioner has submitted that the amount pertains to scrap relating

to execution of the work "construction of steel liner and penstock" and the value of the scrap was based on the weighted average rate of store ledger price. It has been submitted that the value of the scrap is within the admissible limit and should be included in the total value of works. However, the value of scrap has been wrongly credited to works during the year 2004-05, thereby reducing the capital expenditure. The petitioner has clarified that the above error has been rectified by debiting the expenditure to the appropriate head of account. As the scrap materials are normally sold at the end of construction period, a part of the cost would be recovered. Assuming that scraps could be sold at a price equal to 50% of the weighted average rate of store ledger price, an amount of Rs.5.77 lakh (50% of the claimed amount of Rs.11.55 lakh) has been considered to have been realized by selling the scraps. Accordingly, only the balance amount of Rs.5.77 lakh towards the value of scrap has been allowed to be capitalized.

Additional works/services necessary for efficient and successful operation of the generating station, but not included in the original project cost- Regulation 18(2)(iv):

10. The petitioner has claimed amounts of Rs.37.83 lakh, Rs.0.45 lakh and Rs.14.23 lakh during the years 2006-07, 2007-08 and 2008-09 respectively under this head, in respect of assets like diversion of road, permanent non-residential building, plant and machinery (generating station), special tools and plants, communication equipments, pavement of power station approach road, transformers, relays and some other assets. The claim of the petitioner year-wise, is discussed as under:

2006-07

11. The petitioner has claimed an expenditure of Rs 37.83 lakh during the year. Out of this, an amount of Rs.20.94 lakh is in respect of assets like air-conditioners, term card spares, ECG spare, fire fighting system, control and instrumentation spares, control relay and turbine spare etc. under the main head, as plant and machinery for the generating station. Since expenditure on air-conditioner is in the nature of minor assets and rest of the assets in the nature of spares, the capitalization of Rs 20.94 lakh, in respect of these assets is not allowed.

2007-08

12. The petitioner has claimed Rs 0.45 lakh for assets like oil BDV test kit, insulator tester etc, under the head "special tools and plants" as balance payment of the year 2006-07. Hence, the said expenditure is allowed.

2008-09

13. The petitioner has claimed an amount of Rs 14.23 lakh during the year. Out of this, the claim for an expenditure of Rs 1.21 lakh for assets like relays etc is in the nature of the spares. Hence, the expenditure is not allowed.

14. Based on prudence check, amounts of Rs.16.89 lakh, Rs.0.45 lakh and Rs.13.02 lakh for the year 2006-07, 2007-08 and 2008-09 respectively, has been allowed.

Deletion

15. In addition to the above, the petitioner has de-capitalized amounts of Rs.12.61 lakh, Rs.0.25 lakh and Rs.6.78 lakh during the years 2006-07, 2007-08 and 2008-09 respectively, in respect of assets like power house building and switchgear including cable connection. The de-capitalization is in order and hence allowed.

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

(Rs in lakh)			
Capitalization	2006-07	2007-08	2008-09
Deferred liabilities relating to works/services within the original scope of work- Regulation 34(2)(i)	11.05	6.45	0.00
Additional works/services necessary for efficient and successful operation of the generating station, but not included in the original project cost- Regulation 34(2)(iv)	16.89	0.45	13.02
Sub-Total (Addition)	27.94	6.90	13.02
Deletion	(-) 12.61	(-) 0.25	(-) 6.78
Total additional capital expenditure allowed	15.33	6.65	6.25

Un-discharged liabilities

17. The petitioner vide affidavits dated 18.9.2009 and 27.11.2009 has submitted details of the un-discharged liabilities in its claim as under:

(Rs. in lakh)				
Sl.No	Particulars	2006-07	2007-08	2008-09
1	Un-discharged liabilities-opening	59.05	83.84	15.49
2	Add: Additional un-discharged liabilities during the year	24.79	0.00	0.00
3	Less: Un-discharged liabilities discharged during the year	0.00	68.35	2.31
4	Un-discharged liabilities- closing	83.84	15.49	13.18

18. Out of the claim for additional capital expenditure for Rs.36.27 lakh for 2006-07 which include additional undischarged liability of 24.79 lakh, only an amount Rs.15.33 lakh has been allowed. This additional un-discharged liability of Rs.24.79 lakh has been restricted to the proportion of the total amount of Rs.15.33 lakh allowed during the year 2006-07. As such, an amount of Rs.10.48 lakh has only been considered as un-discharged liabilities for the year 2006-07. Due to pro-rata restriction of un-discharged liability during the year 2006-07, the un-discharged

liability as on 31.3.2008 amounts to Rs.1.18 lakh, instead of Rs.15.49 lakh claimed. Consequently, the discharge of un-discharged liabilities during the year 2008-09 has been restricted to Rs.1.18 lakh. Accordingly, the un-discharged liabilities considered is as under:

(Rs. in lakh)				
Sl.No	Particulars	2006-07	2007-08	2008-09
1	Un-discharged liability-Opening	59.05	69.53	1.18
2	Add: Additional un-discharged liabilities during the year	10.48	0.00	0.00
3	Less: Un-discharged liability discharged during the year	0.00	68.35	1.18
4	Un-discharged liability-Closing	69.53	1.18	0.00

19. The un-discharged liabilities have been deducted during the year in which the liabilities have been charged and adjusted in the year in which the liabilities have been discharged.

20. Based on the above, the additional capital expenditure allowed, after adjustment of un-discharged liabilities, is under:

(Rs in lakh)				
Sl.No	Particulars	2006-07	2007-08	2008-09
1	Additional capitalization allowed before adjustment of undischarged liabilities	15.33	6.65	6.25
2	Less: Un-discharged liabilities during the year	10.48	0.00	0.00
3	Add: Un-discharged liabilities discharged during the year	0.00	68.35	1.18
4	Additional capitalization allowed after adjustment of undischarged liabilities	4.85	75.00	7.43

Capital Cost

21. The Commission had considered a capital cost of Rs. 8091.15 lakh, as on 31.3.2006, for the purpose of tariff for the period 2004-09, in Petition No. 70/2006. The same is considered as the capital cost as on 1.4.2006.

22. Taking into account the capital cost as on 1.4.2006 and the additional capital expenditure as approved at para 20 above, the capital cost considered for the purpose of tariff is as under:

(Rs. in lakh)

Year	2006-07	2007-08	2008-09
Opening capital cost as on 1 st April of the financial year	33037.19	33065.47	33602.80
Additional Capitalization approved for the purpose of tariff	28.29	537.33	5.06
Capital Cost as on 31 st March of the financial year	33065.47	33602.80	33607.86

Debt-Equity ratio

23. Regulation 36 of the 2004 Regulations provides that:

“(1) In case of the existing project, 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 31.03.2004 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 18, equity in the additional capitalization to be considered shall be:-,

- (a) 30% of the additional capital expenditure admitted by the Commission; or*
- (b) Equity approved by the competent authority in the financial package, for additional capitalization; or*
- (c) Actual equity employed,*

Whichever is the least:

Provided further that in case of additional capital expenditure admitted under the second proviso, the Commission may consider equity of more than 30% if the generating company is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public.

(2) In case of the generating stations for which investment approval was accorded prior to 1.4.2004 and which are likely to be declared under commercial

operation during the period 1.4.2004 to 31.3.2009, debt and equity in the ratio of 70:30 shall be considered:

Provided that where equity actually employed to finance the project is less than 30%, the actual debt and equity shall be considered for determination of tariff:

Provided further that the Commission may in appropriate cases consider equity higher than 30% for determination of tariff, where the generating company is able to establish to the satisfaction of the Commission that deployment of equity higher than 30% was in the interest of general public”.

(3) In case of the generating stations for which investment approval is accorded on or after 1.4.2004, debt and equity in the ratio of 70:30 shall be considered for determination of tariff:

Provided that where equity actually employed is more than 30%, equity in excess of 30% shall be treated as notional loan;

Provided further that where deployment of equity is less than 30%, the actual debt and equity shall be considered for determination of tariff.

(4) The debt and equity amount arrived at in accordance with above clause (1), (2) or (3), as the case may be, shall be used for calculation of interest on loan, return on equity, advance against depreciation and foreign exchange rate variation.”

24. The petitioner has stated that the additional capital expenditure has been financed through internal resources. Debt-equity ratio of 70:30 has been considered for additional capitalization in terms of the above regulations after adjustment of undischarged liability. Accordingly, additional notional equity for the generating station on account of capitalization approved, works out as under:

	(Rs in lakh)		
	2006-07	2007-08	2008-09
Additional Notional equity	4.60	1.99	1.87

Return on Equity

25. Return on equity has been worked out @14% per annum on the normative average equity, as under:

	(Rs in lakh)		
Return on Equity	2006-07	2007-08	2008-09
Opening Balance	2427.35	2428.80	2451.30
Increase/ decrease due to additional	4.60	1.99	1.87

capitalization			
De-capitalization on account of initial spares and capitalized liabilities	3.14	(-) 20.51	(-)0.35
Closing Equity	2428.80	2451.30	2453.53
Average Equity	2428.07	2440.05	2452.41
Rate of Return on Equity	14%	14%	14%
Return on Equity	339.93	341.61	343.34

Interest on loan

26. The petitioner has submitted the statement of actual interest rate incurred on the syndicate loan, carrying floating rate of interest, for the period 2004-09. The petitioner has claimed the simple average interest rates for syndicate loan as 8.967%, 9.119% and 8.813% for the years 2006-07, 2007-08 and 2008-09 respectively. However, as regards syndicate loan, instead of simple interest rate, the weighted average rate of interest of 8.967%, 9.119% and 8.817% for the years 2006-07, 2007-08 and 2008-09 respectively has been considered. The interest on loan has been calculated as in order dated 1.1.2008 in Petition No.70/2006, by applying this weighted average interest rate of syndicate loan for the years 2006-07, 2007-08 and 2008-09. Accordingly, the weighted average rate of interest on total loan has been recalculated as 8.967%, 9.119% and 8.817% for the years 2006-07, 2007-08 and 2008-09 respectively. The revised weighted average rate of interest on total loan has been considered for calculating the interest on loan. Based on the above, the interest on loan has been computed as under:

	(Rs in lakh)		
Interest on Loan	2006-07	2007-08	2008-09
Gross loan-Opening	5663.81	5667.20	5719.70
Cumulative repayments of loans up to previous year	1099.53	1670.07	2241.09
Net loan-Opening	4564.27	3997.13	3478.61
Addition due to Additional capitalization	10.73	4.65	4.37
De-capitalization on account of initial spares and capitalized liabilities	7.33	(-) 47.85	(-) 0.83
Repayment during the year	570.53	571.02	579.77

Net Loan-Closing	3997.13	3478.61	2904.04
Average Loan	4280.70	3737.87	3191.33
Weighted Average Rate of Interest on Loan	8.9670%	9.1186%	8.8173%
Interest	383.85	340.84	281.39

Depreciation

27. As in order dated 1.1.2008 in Petition No.70/2006, the cumulative depreciation recovered up to 31.3.2006 has been considered as Rs 1098.24 lakh.

28. The petitioner has de-capitalized assets amounting to Rs.12.61 lakh, Rs.0.25 lakh and Rs.6.78 lakh during the years 2006-07, 2007-08 and 2008-09 respectively. The amount of cumulative depreciation allowed against the de-capitalized assets has been calculated on pro-rata basis. Depreciation has been worked out as under:

	(Rs in lakh)		
	2006-07	2007-08	2008-09
Opening Gross Block	8091.15	8096.00	8171.00
Addition due to Additional capitalization	15.33	6.65	6.25
De-capitalization on account of initial spares and capitalized liabilities	10.48	(-) 68.35	(-) 1.18
Closing Gross Block	8096.00	8171.00	8178.43
Average Gross Block	8093.58	8133.50	8174.71
Rate of Depreciation	2.6045%	2.6045%	2.6045%
Depreciable Value @ 90%	7284.22	7320.15	7357.24
Remaining Depreciable Value	6110.17	5622.19	5091.46
Depreciation	210.80	211.84	212.91

Advance against depreciation

29. As considered in order dated 1.1.2008 in Petition No.70/2006, Advance against depreciation has been computed as under:

	(Rs in lakh)		
Advance against Depreciation	2006-07	2007-08	2008-09
1/10th of Gross loan(s)	566.38	566.72	571.97
Repayment of the loan	570.53	571.02	579.77
Minimum of the above	566.38	566.72	571.97
Depreciation during the year	210.80	211.84	212.91
(A) Difference	355.58	354.88	359.06
Cumulative Repayment of the loan	1670.07	2241.09	2820.85
Cumulative Depreciation/ Advance	1309.04	1873.87	2441.60

against Depreciation			
(B) Difference	361.03	367.22	379.26
Advance against Depreciation	355.58	354.88	359.06

O&M Expenses

30. O&M Expenses as considered in order dated 1.1.2008 in Petition No.70/2006 have been considered.

Interest on Working Capital

31. For the purpose of calculation of working capital, the operating parameters as considered in the order dated 1.1.2008 in Petition No. 70/2006 have been kept unchanged. The "receivables" component of the working capital in the order dated 1.1.2008 in Petition No. 70/2006 have been revised for the reason of revision of return on equity, interest on loan, etc.

32. The SBI PLR of 10.25% as on 1.4.2004 has been considered as the rate of interest on working capital during the tariff period as considered in order dated 1.1.2008 in Petition No. 70/2006. The necessary details in support of calculation of interest on working capital are as under:

Particulars	(Rs in lakh)		
	2006-07	2007-08	2008-09
Maintenance Spares	85.64	90.78	96.23
O & M expenses	10.37	10.78	11.21
Receivables	241.52	235.51	227.60
Total	337.53	337.07	335.04
Interest	34.60	34.55	34.34

Annual Fixed Charges

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

Particulars	(Rs in lakh)		
	2006-07	2007-08	2008-09
Depreciation	210.80	211.84	212.91

Interest on Loan	383.85	340.84	281.39
Return on Equity	339.93	341.61	343.34
Advance Against Depreciation	355.58	354.88	359.06
Interest on Working Capital	34.60	34.55	34.34
O & M Expenses	124.39	129.36	134.54
TOTAL	1449.15	1413.08	1365.58

34. The petitioner's prayer for reimbursement of the filing fee is not allowed in view of the Commission's general order dated 11.9.2008 in Petition No.129/2005, wherein it was directed that filing fee during the period 2004-09 would not be reimbursed, as the same has been factored in the normalized O&M expenses under the 2004 regulations.

35. The difference between the fixed charges approved vide order dated 1.1.2008 in Petition No. 70/2006 and those approved now, shall be reimbursed to the petitioner by the beneficiaries in three equal monthly installments.

36. Petition No.214/2009 stands disposed of in terms of the above.

Sd/-
(V.S.VERMA)
MEMBER

Sd/-
(S. JAYARAMAN)
MEMBER

Sd/-
(DR.PRAMOD DEO)
CHAIRPERSON