

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 213/2009**

**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: 11.5.2010**

**In the matter of**

Approval of two-part tariff for Assam Gas Based Power Project (291 MW) for the period from 1.4.2004 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, Meghalaya  
Vs

..... **Petitioner**

1. Assam State Electricity Board, Guwahati
2. Meghalaya State Electricity Board, Shillong
3. Department of Power, Govt. of Arunachal Pradesh, Itanagar
4. Power and Electricity Department, Govt. of Manipur, Imphal
5. Power and Electricity Department, Govt. of Mizoram, Aizawl
6. Department of Power, Govt. of Nagaland, Kohima
7. Tripura State Electricity Power Corporation Ltd, Agartala
8. North Eastern Regional Power Committee, 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 Assam Gas Based Power Project (291 MW) (hereinafter referred to as "the generating station") for the period from 1.4.2004 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 additional capital expenditure capitalized during the period 1.4.2006 to 31.3.2009 ;

(b) Allow the actual interest rates incurred on the syndicated loan during the period 1.4.2006 to 31.3.2009;

(c) 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;

(d) Allow reimbursement of filing fee by the beneficiaries to the petitioner; and

(e) Pass any such order or orders as the Hon'ble Commission may deem just and proper in the circumstances of the case.

2. The tariff for the generating station for the period from 1.4.2004 to 31.3.2009 along with additional capitalization/de-capitalization during the years 2004-05 and 2005-06, based on the capital cost of Rs.148100.41 lakh was determined by the Commission vide its order dated 22.2.2008 in Petition No.150/2005. The annual fixed charges approved by the Commission by order dated 22.2.2008 is as under:

(Rs in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	7051	7127	7128	7128	7128
Interest on Loan	3915	3623	3184	2555	1927
Return on Equity	10212	10278	10279	10279	10279
Advance Against Depreciation	0	0	0	0	0
Interest on Working capital	797	803	806	806	805
O & M Expenses	2753	2855	2980	3099	3221
<b>TOTAL</b>	<b>24728</b>	<b>24687</b>	<b>24376</b>	<b>23866</b>	<b>23359</b>

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

### **Additional capitalization**

4. Regulation 18 of the 2004 regulations provides for considering the additional capital expenditure for tariff as under:

*"18. (1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cutoff 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 work, subject to ceiling specified in regulation 17;*
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
- (v) On account of change in law.*

*Provided that original scope of work 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 the generating station.*

*(2) Subject to the provisions of clause (3) of this regulation, the capital expenditure of the following nature actually incurred after cutoff 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 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.*

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

*(4) Impact of additional capitalization in tariff revision may be considered by the Commission twice in a tariff period, including revision of tariff after the cutoff 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 20.*

*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 project 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 20.*

*Note 4*

*Any expenditure admitted by the Commission for determination of tariff on renovation and modernization and life extension shall be serviced on normative debt-equity ratio specified in regulation 20 after writing off the original amount of the replaced assets from the original project cost.*

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

*(Rs in lakh)*

<b>Particulars</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Additional capital expenditure	(-) 10.04	17.38	22.31

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)*

<b>Year</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Closing balance as per Book of Accounts	151430.81	151448.19	151470.50
Less: Opening balance as per Books of Accounts	151440.84	151430.81	151448.19
Additional capitalization claimed	<b>(-) 10.04</b>	<b>17.38</b>	<b>22.31</b>

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

<i>(Rs. in lakh)</i>			
<b>Capitalization</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Deferred liabilities relating to works/services within the original scope of work- <b>Regulation 18(2)(i)</b>	14.95	0.00	0.00
Additional works/services necessary for efficient and successful operation of the generating station, but not included in the original project cost- <b>Regulation 18(2)(iv)</b>	4.83	18.25	29.13
Expenditure on replacement of old assets- <b>Regulation 18(2), Note-2</b>	0.00	0.00	0.00
<b>Sub-Total (1(a)+1(b)+1(c))</b>	<b>19.78</b>	<b>18.25</b>	<b>29.13</b>
Deletion	(-) 29.82	(-) 0.86	(-) 6.82
Total additional capital expenditure claimed	<b>(-) 10.04</b>	<b>17.38</b>	<b>22.31</b>

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 18(2)(i)**

9. The petitioner has claimed *an amount of* Rs.14.95 lakh during the year 2006-07 under this head. The expenditure pertains to capitalization of deferred payment made towards consultancy charges to Central Electricity Authority (CEA) during the project execution for main plant building and civil engineering, cooling tower and make-up water system. As the deferred expenditure pertains to works/services within the original scope of work, the expenditure of Rs 14.95 lakh is 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.4.83 lakh, Rs.18.25 lakh and Rs.29.13 lakh during the years 2006-07, 2007-08 and 2008-09 respectively, under this head. The expenditure pertains to assets like special tools and plants, furniture and fixture, EDP equipment viz printers, UPS, wipro server and computer, communication equipments, audio-visual equipments viz TV, Tata sky DG-Com and RCV-1000 and cassette amplifiers, aqua guard water filters and vacuum cleaner, books and manuals, office equipments, refrigerator, ATM building, pumps or water supply and 2 nos. of school bus etc. The claim for the respective years is examined as under:

**2006-07**

11. The claim for Rs 0.12 lakh in respect of assets like Special Tools and Plants in are in the nature of O & M expenses and not allowed for capitalization. The claim for Rs. 1.10 lakh for assets like furniture and fixtures, Rs. 2.09 lakh for EDP equipments, Rs. 0.24 lakh for communication equipments, Rs 0.21 lakh for audio-visual equipment, Rs. 0.70 lakh for aquaguard water filter, Rs 0.18 lakh for vacuum cleaner, Rs 0.18 lakh for books and manuals, are in the nature of minor assets and hence not allowed to be capitalized.

**2007-08**

12. The claim for Rs. 0.97 lakh for assets like furniture and fixtures, Rs 0.57 lakh for EDP equipments like laptop, Rs.1.00 lakh for office equipments, Rs 0.10 lakh for communication equipments, Rs 0.18 lakh for refrigerator, Rs 9.85 lakh for audio-visual equipments like Tata sky DG-Com and RCV-1000 are in the nature of minor assets and are not allowed to be capitalized.

## **2008-09**

13. The claim for Rs. 3.08 lakh for ATM building has not been allowed as the asset does not contribute to the efficiency of the generating station. The claim for Rs 0.59 lakh for assets like pump and water supply is in the nature of O & M expenses and hence not allowed. Similarly, the claim for Rs 1.23 lakh for furniture and fixtures, Rs 2.36 lakh for EDP equipments like computers, and Rs 1.69 lakh for office equipments and Rs 0.18 lakh for aquaguard are in the nature of minor assets and hence not allowed to be capitalized. However, the claim for Rs.20.00 lakh for the asset "school bus (2 nos)" under this head has not been allowed as it has been considered and allowed in terms of Note 2 under Regulation 18, being an asset in the nature of replacement.

14. Based on the above discussions, amounts of Rs. "nil" for 2006-07 and 2008-09 each and Rs.5.58 lakh for 2007-08, has been allowed.

### **Expenditure on replacement of assets- Regulation 18, Note-2**

15. Though the petitioner has not claimed any amount under this head, the expenditure of Rs 20.00 lakh for 2008-09 towards school bus (2 nos) as being necessary for the efficient operation of the generating station, under Regulation 18 (2)(iv), has been allowed and considered under this head, being an asset in the nature of replacement and after deleting an amount of Rs 4.52 lakh towards the gross value of the old replaced asset.

16. In addition to the capitalization as above, the petitioner has de-capitalized a total amount of Rs.29.82 lakh during 2006-07 in respect of assets like steel materials amounting to Rs. 28.85 lakh, transfer of Laptop (1 no) and Nokia Mobile Handset (1 no) from headquarters, amounting to Rs 0.83 lakh and Rs.0.13 lakh respectively. For the year 2007-08, the petitioner has de-capitalized a total amount of Rs 0.86 lakh in

respect of assets like fax machine amounting to Rs. 0.14 lakh and digital copier amounting to Rs.0.72 lakh. Similarly, for the year 2008-09, a total amount of Rs 6.82 lakh has been de-capitalized in respect of assets like old vehicles (3 nos) amounting to Rs.4.52 lakh and xerox machine amounting to Rs.2.30 lak.hs. The de-capitalization of the amounts for the respective years has been allowed.

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

(Rs in lakh)			
<b>Capitalization</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Deferred liabilities relating to works/services within the original scope of work- <b>Regulation 18(2)(i)</b>	14.95	0.00	0.00
Additional works/services necessary for efficient and successful operation of the generating station, but not included in the original project cost- <b>Regulation 18(2)(iv)</b>	0.00	5.58	0.00
Expenditure on replacement of old assets- <b>Regulation 18(2), Note-2</b>	0.00	0.00	20.00
<b>Sub-Total (1(a)+1(b)+1(c))</b>	14.95	5.58	20.00
Deletion	(-) 29.82	(-) 0.86	(-) 6.82
Total additional capital expenditure claimed	<b>(-) 14.87</b>	<b>4.72</b>	<b>13.18</b>

#### **Un-discharged liabilities**

18. The petitioner vide affidavit dated 22.9.2009 has submitted that there is no un-discharged liabilities in its claim of additional capital expenditure, as on 31.3.2007, 31.3.2008 and 31.3.2009.

#### **Capital Cost**

19. As stated earlier, the Commission had considered the capital cost of Rs.148100.41 lakh, as on 31.3.2006 for the purpose of tariff for the period 2004-09 in Petition No. 150/2005. The same has been considered as the capital cost as on 1.4.2006.



20. Taking into account the capital cost as on 1.4.2006 and the additional capital expenditure as approved at para 17 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 <sup>st</sup> April of the financial year	148100.41	148085.54	148090.26
Additional Capitalization approved for the purpose of tariff	(-) 14.87	4.72	13.18
Capital Cost as on 31 <sup>st</sup> March of the financial year	<b>148085.54</b>	<b>148090.26</b>	<b>148103.44</b>

### Debt-Equity ratio

21. Regulation 20 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.”

22. 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	1	4

### Return on Equity

23. 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	73419	73414	73416
Increase/ decrease due to FERV	0	0	0
Increase/ decrease due to additional capitalization	(-) 4	1	4
Closing Equity	73414	73416	73420
Average Equity	73417	73415	73418
Rate of Return on Equity	14%	14%	14%
<b>Return on Equity</b>	<b>10278</b>	<b>10278</b>	<b>10278</b>

### Interest on loan

24. The petitioner has submitted the statement of actual interest rate incurred on the syndicate loan and the carrying floating rate of interest, for the period 2004-09. The petitioner has claimed 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 the syndicate loan, 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, instead of the simple interest rate. Accordingly, the weighted average rate of interest has been re-calculated as 8.88%, 8.97% and 8.76% for the years 2006-07, 2007-08 and 2008-09 respectively. Based on the above, the Interest on loan has been computed as under:

(Rs in lakh)			
<b>Interest on Loan</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Gross loan-Opening	74682	74671	74675
Cumulative repayments of loans up to previous year	34928	42055	49182
Net loan-Opening	39754	32616	25493
Increase/ decrease due to additional capitalization	(-) 10	3	9
Total	39743	32620	25502
Repayments of loans during the year	7127	7127	7127
Net loan-closing	32616	25493	18374
Average Net loan	36185	29054	21933
Rate of Interest on loan	8.88%	8.97%	8.76%
<b>Interest on loan</b>	<b>3212</b>	<b>2606</b>	<b>1921</b>

### Depreciation

25. Cumulative depreciation recovered up to 31.3.2006 has been considered as Rs.78449 lakh, as per order dated 22.2.2008 in Petition No.150/2005. The petitioner has de-capitalized assets amounting to Rs.29.82 lakh, Rs.0.86 lakh and Rs.6.82 lakh during the years 2006-07, 2007-08 & 2008-09 respectively and 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 Balance	148100	148086	148090
Increase/ decrease due to FERV	0	0	0
Increase/ decrease due to Additional Capitalization	(-) 15	5	13
Closing Balance	148086	148090	148103
Average Capital Cost	148093	148088	148097
Rate of depreciation	4.81%	4.81%	4.81%
Depreciation value 90%	133284	133279	133287
Balance depreciation to be recovered at the beginning of the year	57527	47725	40594
<b>Depreciation</b>	<b>7127</b>	<b>7127</b>	<b>7127</b>

### Advance against depreciation

26. As considered in order dated 22.2.2008 in Petition No.150/2005, Advance against depreciation has been computed as under:

(Rs in lakh)			
<b>Advance against Depreciation</b>	2006-07	2007-08	2008-09
1/10th of Gross Loan(s)	7468	7467	7467
Repayment of the Loan	3910	3910	3910
Minimum of the above	3910	3910	3910
Depreciation during the year	7127	7127	7127
(A) Difference	0	0	0
Cumulative Repayment of the Loan	42055	49182	56309
Cumulative Depreciation/AAD	85559	92686	99808
(B) Difference	0	0	0
<b>Advance against Depreciation</b>	<b>0</b>	<b>0</b>	<b>0</b>

### O&M Expenses

27. O&M Expenses as considered in order dated 22.2.2008 in Petition No.150/2005 have been considered.

### Interest on Working Capital

28. For the purpose of calculation of working capital, the operating parameters as considered in the order dated 22.2.2008 in Petition No. 150/2005 have been kept unchanged. The "receivables" component of the working capital in the order dated

22.2.2008 in Petition No. 150/2005 have been revised for the reason of revision of return on equity, interest on loan, etc.

29. 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 22.2.2008 in Petition No. 150/2005. The necessary details in support of calculation of interest on working capital are as under:

(Rs in lakh)			
<b>Particulars</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Fuel Cost	794	797	794
Maintenance Spares	1168	1238	1313
O & M expenses	248	258	268
Receivables	5656	5579	5481
Total	7867	7872	7856
Rate of interest	10.25%	10.25%	10.25%
<b>Interest on working capital</b>	<b>806</b>	<b>807</b>	<b>805</b>

### **Annual Fixed Charges**

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

(Rs in lakh)			
<b>Particulars</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Depreciation	7127	7127	7127
Interest on Loan	3212	2606	1921
Return on Equity	10278	10278	10278
Advance Against Depreciation	0	0	0
Interest on Working Capital	806	807	805
O & M Expenses	2980	3099	3221
<b>TOTAL</b>	<b>24404</b>	<b>23917</b>	<b>23353</b>

31. 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.

32. The petitioner shall be reimbursed the difference between the fixed charges approved vide order dated 22.2.2008 in Petition No.150/2005 and those approved now, from the beneficiaries in three equal monthly installments.

33. Petition No.213/2009 stands disposed of in terms of the above.

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

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

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