

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

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

Petition No. 86/2006

In the matter of

Determination of transmission tariff for associated transmission system of
Agartala GBPP in North Eastern Region for the period from 1.4.2004 to 1.3.2009.

And in the matter of

Power Grid Corporation of India Ltd., Gurgaon **Petitioner**

Vs

1. Assam State Electricity Board, Guwahati
2. Meghalaya State Electricity Board, Shillong
3. Power and Electricity Department, Govt. of Mizoram, Aizawl
4. Electricity Department Govt. of Manipur, Imphal
5. Department of Power, Government of Arunachal Pradesh, Itanagar
6. Department of Power, Govt. of Nagaland, Kohima
7. Department of Power, Govt. of Tripura, Agartala **.Respondents**

The following were present:

1. Shri P.C.Pankaj, PGCIL
2. Shri U.K. Tyagi, PGCIL
3. Shri T.C.Sharma, PGCIL
4. Shri M.M.Mondal, PGCIL
5. Shri C.Kannan, PGCIL
6. Shri S.S.Raju, PGCIL
7. Shri Umesh Chandra, PGCIL
8. Shri Harmeet Singh, PGCIL
9. Shri B.P.Singh, PGCIL
10. Shri W.Rehman, PGCIL
11. Shri A.K.Das, PGCIL
12. Shri Utpal Sharma, PGCIL
13. Shri Mithilesh Kumar, PGCIL
14. Shri Anup Gan Choudhery, TSECL
15. Shri M.Debberma, TSECL
16. Shri L.Priyokumar, Electricity Deptt., Govt. of Manipur
17. Ms. Seema Sharma, Advocate, consumer
18. Shri Hemanta Sharma, Consumer
19. Shri Rakesh, BSEB
20. Shri K.N. War, MeSEB
21. Shri S.S.Kharmih, MeSEB
22. Shri P.K.Hazarika, ASEB
23. Shri K.Goswami, ASEB
24. Shri H.C.Phukan, ASEB

ORDER
(DATE OF HEARING: 1.8.2007)

The petition has been filed for approval of tariff for the transmission system associated with Agartala GBPP (the transmission system) in North Eastern Region 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”). The petitioner has also prayed for the reimbursement of expenditure from the beneficiaries incurred towards publishing notices in the newspapers and the petition filing fee.

2. The original investment approval for the transmission system was accorded by the Board of Directors of the petitioner company vide its letter dated 15.12.1993 at an estimated cost of Rs.1932 lakh which includes IDC of Rs. 58 lakh. Subsequently, the revised cost estimate-I for the transmission system was approved by Ministry of Power vide its letter dated 23.11.2000 at an estimated cost of Rs. 2217 lakh which included an IDC of Rs. 210 lakh. Thereafter, the revised cost estimate-II for the transmission system was approved by Board of Directors of the petitioner company under its letter dated 31.8.2007 at an estimated cost of Rs. 2643 lakh which included IDC of Rs. 222 lakh. The transmission lines included in the transmission system and the date of commercial operation thereof are as stated below:

S. No.	Name of the transmission line	Date of commercial operation	Line length in Ckt-km (for O & M)
(i)	132 kV D/C Agartala-Agartala transmission line	1.4.1998	16.768
(ii)	132 kV S/C Agartala-Kumarghat transmission line	1.1.2001	104.02
	Total		120.788

3. The petitioner has claimed the transmission charges as under:

(Rs in lakh)

	132 kV D/C Agartala-Agartala transmission line					132 kV S/C Agartala-Kumarghat transmission line				
	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	14.89	14.89	14.89	14.89	14.89	58.33	58.33	58.33	58.33	58.33
Interest on Loan	0.00	0.00	0.00	0.00	0.00	124.71	117.54	109.64	100.92	91.31
Return on Equity	53.27	53.27	53.27	53.27	53.27	30.53	30.53	30.53	30.53	30.53
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	32.50	41.81	52.07	63.39	75.86
Interest on Working Capital	3.75	3.86	3.98	4.11	4.24	9.07	9.35	9.66	9.98	10.32
O & M Expenses	76.78	79.85	83.04	86.37	89.82	72.19	75.08	78.08	81.21	84.46
Total	148.68	151.87	155.18	158.63	162.11	327.33	332.65	338.32	344.36	350.82

4. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:

(Rs. in lakh)

	132 kV D/C Agartala-Agartala transmission line					132 kV S/C Agartala-Kumarghat transmission line				
	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	5.40	5.72	6.06	6.43	6.81	27.90	29.57	31.34	33.22	35.22
O & M expenses	6.40	6.65	6.92	7.20	7.49	6.02	6.26	6.51	6.77	7.04
Receivables	24.78	25.31	25.86	26.44	27.04	54.56	55.44	56.39	57.39	58.47
Total	36.58	37.69	38.85	40.06	41.33	88.47	91.27	94.24	97.38	100.72
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	3.75	3.86	3.98	4.11	4.24	9.07	9.35	9.66	9.98	10.32

5. The reply to the petition has been filed by Tripura State Electricity Corporation Limited and Assam State Electricity Board. Ms. Mallika Sharma Bazbaruah, the consumer has filed her response to the public notice published by the petitioner under section 64 of the Electricity Act, 2003.

6. The tariff is being determined from 1.4.2007 for the reasons recorded in the order dated 16.1.2008 in Petition No. 85/2006.

CAPITAL COST

7. As per clause (1) of Regulation 52 of the 2004 regulations, subject to prudence check, the actual expenditure incurred on completion of the project shall form the basis for determination of final tariff. The final tariff shall be determined based on the admitted capital expenditure actually incurred up to the date of commercial operation

of the transmission system and shall include capitalised initial spares subject to a ceiling norm as 1.5% of original project cost. The regulation is applicable in case of the transmission system declared under commercial operation on or after 1.4.2004. As regards the project commissioned prior to 1.4.2004, clause (2) of Regulation 52 of the 2004 regulations provides that in case of the existing projects, the project cost admitted by the Commission prior to that date, shall form the basis for determination of tariff.

8. The capital expenditure as on the date of commercial operation is stated to be Rs. 380.47 lakh in respect of 132 kV D/C Agartala-Agartala transmission line and Rs. 2307.54 lakh in respect of 132 kV S/C Agartala-Kumarghat transmission line. The petitioner has considered de-capitalization of Rs. 45.90 lakh on works and Rs. 95.46 lakh on account of FERV for the period up to 31.3.2004 in respect of 132 kV S/C Agartala-Kumarghat transmission line. Accordingly, the capital expenditure including de-capitalization considered by the petitioner for tariff purpose is given here under:

(Rs. in lakh)

	Expenditure up to date of commercial operation	Expenditure from date of commercial operation to 31.3.2004	Expenditure up to 31.3.2004	FERV from DOCO to 31.3.2004	Capital cost as on 1.4.2004
132 kV D/C Agartala-Agartala transmission line	380.47	0.00	380.471	0.00	380.47
132 kV S/C Agartala-Kumarghat transmission line	2307.54	(-)45.90	2261.64	(-)95.46	2166.18
	2688.01	(-)45.90	2642.11	(-)95.46	2546.65

9. Tariff for the transmission system during 2001-04 was not determined by the Commission under the terms and conditions specified by it and the UCPTT rate was allowed to continue. Therefore, the capital base for computation of tariff is to be traced from the date of commercial operation.

10. As per the auditor's certificate, de-capitalization of expenditure from the date of commercial to 31.3.2004 is Rs. 43.33 lakh. The petitioner in its affidavit dated 12.3.2007 has stated that difference of Rs. 2.57 lakh is on account of de-capitalization on minor items/assets which has not been considered in its books.

Additional capitalization/De-capitalization

11. In the present case, the petitioner has claimed net de-capitalization of Rs. 45.90 lakh for the period up to 31.3.2004 in respect of 132 kV S/C Agartala-Kumarghat transmission line. The details submitted by the petitioner in support of its claim for additional capital expenditure/de-capitalisation are given hereunder:

Year	Amount (Rs. in lakh)	Head of expenditure
2001-02	13.93	Transmission line = Rs.3.07 lakh (Balance compensation) Transmission line = Rs.10.49 lakh (Final payment) Sub-station = Rs.0.37 lakh [T & P (0.025), fixture (0.06) & EDP (0.06)]
2002-03	(-) 3.43	Transmission line = Rs. (-) 3.43 lakh (After reconciliation/adjustment with Government of Tripura)
2003-04	(-) 56.40	Transmission line (Recovery after reconciliation)
Total	(-) 45.90	

12. The petitioner has submitted that out of total de-capitalization an amount of Rs. 59.83 lakh was effected during 2002-03 and 2003-04, and additional capital expenditure of Rs 13.93 lakh was incurred within the cut off date. As such, net de-capitalization of Rs. 45.90 lakh has been considered against the gross block of Rs 2307.54 lakh as on date of commercial operation i.e. 1.1.2001 and accordingly has been allowed to be capitalized.

Time Over-run

13. As per the original approval, the transmission system was scheduled to be commissioned to match with commissioning of Agartala power project, which was declared under commercial operation on 1.8.1998. As per the revised cost estimate-I, the transmission lines were scheduled to be commissioned by December 2000. The lines were declared under commercial operation on 1.4.1998 and 1.1.2001 respectively. Therefore, there was a time delay in the commissioning of the 132 kV S/C Agartala-Kumarghat transmission line with respect to the original approval though commissioning of Agartala-Agartala transmission line was within the approved schedule. The petitioner has explained reasons for delay. It has been stated that 132 KV S/C Agartala- Kumarghat transmission line which was basically required for providing additional redundancy in the State grid of Tripura, could not be completed as per the original scheduled due to persistent law and order situation in the State. It has been explained that 80 kms out of 104 km of total line-length, lie in the area which has been declared as disturbed area by Tripura Govt. under appropriate law. The work came to a halt following abduction of one Junior Engineer on 11.6.1998 who was released on 9.7.1998. The petitioner requested the State Government for security assistance. With the deployment of a platoon of TSR, the line construction activities were resumed. But again on 29.8.1998, the project in-charge and site in-charge of the contractor were kidnapped and again the site activities came to a stand-still for about one month. Further, in order to cater to the security needs specially that of R.C. Nagar to Chakmaghat zone, CISF was mobilized in April 2000. In spite of such a grim situation of law and order in Tripura State, limited working hours available and limitation of security forces, the transmission line was completed and declared under commercial operation on 1.1.2001 and the work could be completed with the help of TSR and CISF security platoon. Incidentally

commissioning of the transmission line was as per the schedule approved by the Central Government in the revised cost estimate-I

14. In view of above, it has been submitted that delay in completion of the project was beyond the control of the petitioner.

15. We have considered the matter in right earnest. There is satisfactory explanation from the petitioner for the entire delay in completion of the transmission line. It needs to be pointed out that the petitioner does not gain anything by delaying the commissioning of its transmission assets. Therefore, the delay in commissioning of line is considered to be beyond the control of the petitioner.

16. Based on the above, gross block as given below has been considered for the purpose of tariff for both the transmission lines, after allowing additional capitalization/ de- capitalization on woks as claimed by the petitioner:

(Rs. in lakh)

	Expenditure up on date of commercial operation	Additional capital expenditure up to 31.3.2004	Total capital expenditure
132 kV D/C Agartala-Agartala transmission line	380.47	0.00	380.47
132 kV S/C Agartala-Kumarghat transmission line	2307.54	(-)45.90	2261.64
Total	2688.01	(-)45.90	2642.11

Extra Rupee Liability during the years 2001-04:

17. Regulation 1.13 (a) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001 provided as under:

- (a) Extra rupee liability towards interest payment and loan repayment actually incurred, in the relevant year shall be admissible; provided it directly arises out of foreign exchange rate variation and is not attributable to Utility or its suppliers or contractors. Every utility shall

follow the method as per the Accounting Standard-11 (Eleven) as issued by the Institute of Chartered Accountants of India to calculate the impact of exchange rate variation on loan repayment

- (b) Any foreign exchange rate variation to the extent of the dividend paid out on the permissible equity contributed in foreign currency, subject to the ceiling of permissible return shall be admissible. This as and when paid, may be spread over the twelve-month period in arrears

18. Regulation 1.7 of the 2001 further provided that recovery of foreign exchange rate variation would be done directly by the utilities from the beneficiaries without filing a petition before the Commission. In case of any objections by the beneficiaries to the amounts claimed on these counts, they may file an appropriate petition before the Commission.

19. FERV worked out by the petitioner is matching with calculations submitted, and is in accordance with provisions of AS-11, applicable for the period up to 31.3.2004. The petitioner's claim for de-capitalization of Rs.95.46 lakh on account of FERV in respect of 132 kV S/C Agartala Kumarghat transmission line has accordingly been considered for tariff calculations.

TOTAL CAPITAL COST

20. In the light of the foregoing discussion total capital cost as claimed by the petitioner and given in the table in para 8 above has been considered.

DEBT- EQUITY RATIO

21. Clause (1) of Regulation 54 of the 2004 regulations *inter alia* provides that,-

“(1) In case of the existing projects, debt–equity ratio Considered by the Commission for fixation of tariff for the period ending 31.3.2004 shall be considered for determination of tariff with effect from 01.04.2004:

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 projects where additional capitalisation has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 53, equity in the additional capitalisation 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 capitalisation, or
- (c) actual equity employed,

whichever is the least:

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

22. The Note 1 below Regulations 53 lays down that any expenditure on account of committed liabilities with the original scope of work is to be serviced in the normative debt-equity ratio specified in Regulation 54.

23. The approved debt-equity ratio claimed by the petitioner for the transmission system is 78.75:21.25.

24. The petitioner has further claimed tariff after accounting for the de-capitalization expenditure of Rs. 45.90 lakh for the period up to 31.3.2004 towards equity in respect of 132 kV S/C Agartala-Kumarghat transmission line. As actual equity deployment exceeds the equity as per approved debt-equity ratio, we have limited the total equity to 21.25% of the capital cost excluding FERV, by reducing the notional equity for 132 kV Agartala-Agartala transmission line. However, in view of the judgment dated 4.10.2006 in Appeals No. 135 to 140 of 2005 of the Appellate Tribunal for Electricity, the entire amount of FERV has been considered against loan. Accordingly, debt equity ratio considered for the purpose of tariff in each case is as under:

(Rs. in lakh)

	Name of the assets	Capital cost as on date of commercial operation	Actual equity as on date of commercial operation	Additional capital expenditure	FERV	Capital cost excluding FERV	Notional equity as on 1.4.2007	Debt-equity ratio considered for the period 2007-09
1	132 kV D/C Agartala-Agartala transmission line	380.47	380.47	0.00	0.00	380.47	202.00	-
2.	32 kV S/C Agartala-Kumarghat transmission line	2307.54	359.45	(-) 45.90	(-) 95.46	2261.64	359.45	-
	Total	2688.01	739.92	(-)45.90	(-)95.46	2642.11	561.45	78.75:21.25

RETURN ON EQUITY

25. As per clause (iii) of Regulation 56 of the 2004 regulations, return on equity shall be computed on the equity base determined in accordance with regulation 54 @ 14% per annum. Equity invested in foreign currency is to be allowed a return in the same currency and the payment on this account is made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

26. The petitioner has claimed return on equity as on 1.4.2004 after accounting for equity reduction of Rs. 45.90 lakh on account of de-capitalization on works. For the reasons recorded in para 24 above the petitioner shall be entitled to return on equity during the tariff period as under.

(Rs. in lakh)

Name of the assets	Equity	Return in Equity	
		2007-08	2008-09
(i) 132 kV D/C Agartala-Agartala transmission line	202.00	28.28	28.28
(ii) 132 kV S/C Agartala-Kumarghat transmission line	359.45	50.32	50.32

INTEREST ON LOAN

27. Clause (i) of regulation 56 of the 2004 regulations *inter alia* provides that,-

“(a) Interest on loan capital shall be computed loan wise on the loans arrived at in the manner indicated in regulation 54.

(b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan in accordance with Regulation 54 minus cumulative repayment as admitted by the Commission or any other authority having power to do so, up to 31.3.2004. The repayment for the period 2004-09 shall be worked out on a normative basis.

(c) The transmission licensee shall make every effort to re-finance the loan as long as it results in net benefit to the beneficiaries. The costs associated with such re-financing shall be borne by the beneficiaries.

(d) The changes to the loan terms and conditions shall be reflected from the date of such re-financing and benefit passed on to the beneficiaries.

(e) In case of dispute, any of the parties may approach the Commission with proper application. However, the beneficiaries shall not withhold any payment ordered by the Commission to the transmission licensee during pendency of any dispute relating to re-financing of loan;

(f) In case any moratorium period is availed of by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

(g) The transmission licensee shall not make any profit on account of re-financing of loan and interest on loan;

(h) The transmission licensee may, at its discretion, swap loans having floating rate of interest with loans having fixed rate of interest, or vice versa, at its own cost and gains or losses as a result of such swapping shall accrue to the transmission licensee:

Provided that the beneficiaries shall be liable to pay interest for the loans initially contracted, whether on floating or fixed rate of interest.”

28. The petitioner has claimed interest on loan in the following manner:

(i) In case of 132 kV D/C Agartala-Agartala transmission line the actual financial package has 100% equity.

(ii) In case of 132 kV S/C Agartala-Kumarghat transmission line,-

(i) On the basis of actual rate of interest on actual average loan, the weighted average rate of interest on loan is worked out for various years.

(ii) Gross loan indicated above has been considered as notional loan. As the normative repayment of loan is less than the depreciation+ AAD for the year has been taken as repayment and the net loan closing amount thus arrived is the net loan opening for the following year. The weighted average rate of interest on loan for respective years as per above has been multiplied to arrive at interest on loan.

29. In our calculation, the interest on loan has been worked out as detailed below:
- (i) In case of 132 kV S/C Agartala-Kumarghat transmission line, the petitioner have utilised only ADB –I loan. Gross loan amount and repayment of instalments as per the Form 13 along with the supporting documents has been used to work out weighted average rate of interest on actual loan. As ADB-I loan has floating rate of interest, the rate of interest (7.26%) as on 1.4.2007 has been considered. The Notional loan amount has been arrived at by working out the notional equity as indicated above and than deducting it from the admitted capital cost as on 1.4.2007;
 - (ii) In case of 132 kV D/C Agartala-Agartala transmission line, the notional loan has been arrived at by deducting the notional equity from the admitted cost as on 1.4.2007. Further, as there are no actual loan, therefore, for calculations purpose, rate of interest of 7.26% as in the case of 132 kV S/C Agartala-Kumarghat transmission line, has been considered ;
 - (iii) For the purpose of calculating the interest on loan to be recovered in tariff, in respect of 132 kV S/C Agartala-Kumarghat transmission line, actual repayment up to 31.3.2004 has been taken from Form 13A. For both the assets, annual depreciation during 2004-05, 2005-06 and 2006-07 has been considered as respective year's repayment. Average outstanding loan has thereafter been computed considering notional loan repayment equal to the depreciation allowed during the year 2007-08 and 2008-09;

- (iv) Weighted average rate of interest on actual loan worked out as per (i) above has been applied on the average loan during the year to arrive at the interest on loan;

(Rs. in lakh)

	132 kV D/C Agartala-Agartala transmission line		132 kV S/C Agartala- Kumarghat transmission line		
Details of loan	2007-08	2008-09		2007-08	2008-09
Interest on loan					
Notional Gross Loan as on DOCO	-	-	1948.09	-	-
Addition due to Additional Capitalisation	-	-	(-)45.90	-	-
Addition due to FERV	-	-	(-)95.46	-	-
Opening Gross Loan	178.47	178.47	1806.73	1806.73	1806.73
Cumulative Repayment up to DOCO/Previous Year	37.80	50.40		417.06	475.40
Net Loan-Opening	140.67	128.07		1389.67	1331.33
Repayment during the year	12.60	12.60		58.33	58.33
Net Loan-Closing	128.07	115.47		1331.33	1273.00
Average Loan	134.37	121.77		1360.50	1302.17
Weighted Average Rate of Interest on Loan	7.26%	7.26%		7.26%	7.26%
Interest	9.76	8.84		98.77	94.54

30. In respect of 132 kV S/C Agartala-Kumarghat transmission line, the detailed calculations in support of the weighted average rate of interest are contained in annexure attached.

DEPRECIATION

31. Sub-clause (a) of clause (ii) of Regulation 56 of the 2004 regulations provides for computation of depreciation in the following manner, namely:

- (i) The value base for the purpose of depreciation shall be the historical cost of the asset.
- (ii) Depreciation shall be calculated annually based on straight line method over the useful life of the asset and at the rates prescribed in Appendix II to these regulations. The residual value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of

the historical cost of the asset. The historical capital cost of the asset shall include additional capitalisation on account of Foreign Exchange Rate Variation up to 31.3.2004 already allowed by the Central Government/Commission.

- (iii) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.
- (iv) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

32. The petitioner has claimed the depreciation on the capital cost of Rs. 380.47 lakh and Rs. 2166.18 lakh, respectively. The petitioner has not indicated any cumulative depreciation recovery for the period up to 31.3.2004.

33. In respect of 132 kV D/C Agartala-Agartala transmission line, the petitioner has claimed depreciation on the capital cost on as date of commercial operation. As there is no actual loan, the remaining depreciable value has been spread over the balance useful life of the asset (balance life of the asset as on 1.4.2004 is 23 years) .i.e. Rs. 342.42 lakh /23 = Rs. 14.89 lakh. For the purpose of tariff, the capital cost has been segregated into notional debt and equity as per reasons recorded in paras 24 and 29 (ii) above and therefore, depreciation has been charged in the usual manner. As there is net notional loan opening during the year 2004-05, the gross block for 2004-05 has been multiplied by the rate of depreciation.

34. For the period 1.4.2007 to 31.3.2009 the depreciation works out to Rs. 12.60 lakh and Rs. 58.33 lakh respectively each year by applying rate of depreciation of 3.312% and 2.6929% respectively.

ADVANCE AGAINST DEPRECIATION

35. Advance Against Depreciation is permissible only if loan repayment in a year exceeds the depreciation, and the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year. Since notional loan repayment has been assumed to be equal to the depreciation recovered in tariff, no Advance Against Depreciation is admissible.

OPERATION & MAINTENANCE EXPENSES

36. In accordance with clause (iv) of Regulation 56 the 2004 regulations, the following norms are prescribed for O & M expenses

	Year				
	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses (Rs. in lakh per ckt-km)	0.227	0.236	0.246	0.255	0.266
O&M expenses (Rs in lakh per bay)	28.12	29.25	30.42	31.63	32.90

37. The petitioner in its affidavit dated 17.9.2007 has submitted that the transmission voltage in all the regions except NER is 400 kV and 220 kV and very few lines are of 132 kV voltage level, and keeping this in view, while working out total number of bays and the unit O&M rates for NER, the outgoing line feeders of voltage level up to 132 kV only were considered. It may be mentioned that in NER generally the main transmission lines are of 132 kV level and outgoing feeders are of 33 kV level with 132/33 kV ICTs. Due to omission of 33 kV voltage level outgoing line bays, the total number of bays considered for calculation purpose were less. Further, inadvertently, a few of 132 kV voltage level outgoing feeders were also not considered in the calculations submitted in the petition. Accordingly, the petitioner has revised the statement for the total number of bays under operation in NER. The statement has been prepared considering the following bays which are in line with the methodology considered.

- (i) line bay up to voltage level of 132 kV;
- (ii) Outgoing line bays up to voltage level of 33 kV (distribution bays);
- (iii) Bus reactor line bays up to voltage level of 33 kV; and
- (iv) HV and LV bays with all the ICTs.

38. The petitioner has submitted a detailed statement of bays under operation as on 31.3.2005 in NER. The petitioner has prayed that for computation of O & M expenses, Form-2 filed with petition may be taken in to consideration and O & M expenses may be allowed accordingly.

39. Against the petitioner's claim based on per bay rates of Rs 39,84,930 and Rs. 41,44,330 for the years 2007-08 and 2008-09, per bay rates of Rs. 31,63,000 and Rs. 32,90,000 respectively have been applied for O & M expenses as per the 2004 regulations. Similarly, against the petitioner's claim based on per ckt. kilometre rate of Rs. 39,760 and Rs. 41,350 for the years 2007-08 and 2008-09, per kilometre rates of Rs. 25,500 and Rs. 26,600 respectively have been applied as laid down under the 2004 regulations.

40. The petitioner's entitlement to O & M expenses for ckt km and bays has been worked out as given hereunder:

(Rs. in lakh)					
	132 kV D/C Agartala-Agartala transmission line		132 kV S/C Agartala-Kumarghat transmission line		
	2007-08	2007-08		2007-08	2008-09
O&M expenses for 16.788. ckt km line length	4.28	4.46	O&M expenses for 104.02 ckt-km line length	26.53	27.67
O&M expenses for 2 bays	63.26	65.80	O&M expenses for 1 bay	31.63	32.90
TOTAL	67.54	70.26	TOTAL	58.16	60.57

41. The petitioner has submitted that the wage revision of its employees is due with effect from 1.1.2007. Therefore, O&M expenses should be subject to revision on account of revision of employee cost from that date. In the alternative, it has been prayed that the increase in employee cost due to wage revision be allowed as per

actuals for extra cost to be incurred consequent to wage revision. We are not expressing any view, as this issue does not arise for consideration at this stage. The petitioner may approach for a relief in this regard at an appropriate stage in accordance with law.

INTEREST ON WORKING CAPITAL

42. The components of the working capital and the interest thereon are discussed hereunder:

(i) Maintenance spares

Regulation 56(v)(1)(b) of the 2004 regulations provides for maintenance spares @ 1% of the historical cost escalated @ 6% per annum from the date of commercial operation. Accordingly, the capital expenditure on the date of commercial operation is Rs. 380.47 lakh and Rs. 2307.54 lakh, respectively which has been considered as the historical cost for the purpose of the present petition and maintenance spares have been worked out accordingly by escalating 1% of the historical cost @ 6% per annum. In this manner, the value of maintenance spares works out as on 1.4.2007 are given hereunder:

			(Rs. in lakh)
Name of the assets	Date of commercial operation	Value of maintenance spares as on 1.4.2007	
(i) 132 kV D/C Agartala-Agartala transmission line	1.1.2001	6.43	
(ii) 132 kV S/C Agartala-Kumarghat transmission line	1.4.1998	33.22	

(ii) O & M expenses

Regulation 56(v)(1)(a) of the 2004 regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O & M expenses for 1 month of O&M expenses of the respective year as claimed in the petition. This has been considered in the working capital.

(iii) Receivables

As per Regulation 56(v)(1)(c) of the 2004 regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis 2 months' transmission charges.

(iv) Rate of interest on working capital

As per Regulation 56(v)(2) of the 2004 regulations, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2004 or on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation, whichever is later. The interest on working capital is payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 10.25% based on SBI PLR as on 1.4.2004, which has been considered in the calculation.

43. The necessary computations in support of interest on working capital are appended hereinbelow:

(Rs. in lakh)

	132 kV D/C Agartala-Agartala transmission line		132 kV S/C Agartala-Kumarghat transmission line	
	2007-08	2008-09	2007-08	2008-09
Maintenance Spares	6.43	6.81	33.22	35.22
O & M expenses	5.63	5.86	4.85	5.05
Receivables	20.25	20.56	45.70	45.42
Total	32.30	33.23	83.77	85.69
Rate of Interest	10.25%	10.25%	10.25%	10.25%
Interest	3.31	3.41	8.59	8.78

TRANSMISSION CHARGES

44. The transmission charges being allowed for the transmission system are summarised below:

	132 kV D/C Agartala- Agartala transmission line		132 kV S/C Agartala- Kumarghat transmission line	
	2007-08	2008-09	2007-08	2008-09
Depreciation	12.60	12.60	58.33	58.33
Interest on Loan	9.76	8.84	98.77	94.54
Return on Equity	28.28	28.28	50.32	50.32
Advance against Depreciation	0.00	0.00	0.00	0.00
Interest on Working Capital	3.31	3.41	8.59	8.78
O & M Expenses	67.54	70.26	58.16	60.57
Total	121.49	123.39	274.18	272.55

45. In addition to the transmission charges, the petitioner shall be entitled to other charges like income-tax, incentive, surcharge and other cess and taxes in accordance with the 2004 regulations. .

46. The petitioner has sought approval for the reimbursement of expenditure of Rs. 1, 55,458/- incurred on publication of notices in the newspapers. The petitioner shall claim reimbursement of the said expenditure directly from the respondent in one installment. The petitioner has also sought reimbursement of filing fee of Rs.5 lakh paid. A final view on reimbursement of filing fee is yet to be taken by the Commission for which views of the stakeholder have been called for. The view taken on consideration of the comments received shall apply in the present case as regards reimbursement of filing fee.

47. The petitioner is already billing the respondents on provisional basis in accordance with the Commission's order dated 27.4.2007. The provisional billing of tariff shall be adjusted in the light of final tariff now approved by us.

48. This order disposes of Petition No. 86/2006.

Sd/-
(R.KRISHNAMOORTHY)
MEMBER
New Delhi dated the 25th March 2008

sd/-
(BHANU BHUSHAN)
MEMBER

132 kV S/C Agartala-Kumarghat transmission line

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN					
(Rs. in Lakh)					
	2004-05	2005-06	2006-07	2007-08	2008-09
1	Details of Loan				
	ADB-I				
	Gross Loan- Opening	1948.09	1948.09	1948.09	1948.09
	Cum Repayment up to DOCO/Previous year	242.06	327.67	422.06	526.12
	Net Loan-Opening	1608.05	1522.44	1428.05	1323.99
	Repayment during the year	85.61	94.39	104.06	114.73
	Net Loan-Closing	1522.44	1428.05	1323.99	1209.26
	Average Loan	1565.24	1475.24	1376.02	1266.62
	Rate of Interest	7.51%	7.51%	7.51%	7.26%
	Interest	117.55	110.79	103.34	91.96
	Rep Schedule	Half yearly instalments from 1.06.2000			
	Total Loan				
	Gross Loan- Opening	1948.09	1948.09	1948.09	1948.09
	Cum Repayment up to DOCO/Previous year	242.06	327.67	422.06	526.12
	Net Loan-Opening	1608.05	1522.44	1428.05	1323.99
	Repayment during the year	85.61	94.39	104.06	114.73
	Net Loan-Closing	1522.44	1428.05	1323.99	1209.26
	Average Loan	1565.24	1475.24	1376.02	1266.62
	Rate of Interest	7.51%	7.51%	7.51%	7.26%
	Interest	117.55	110.79	103.34	91.96