

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

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

Petition No. 88/2006

In the matter of

Determination of transmission tariff for Augmentation Scheme in North Eastern Region for the period from 1.4.2004 to 31.3.2009.

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, Public 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 Augmentation Scheme (the transmission scheme) 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") after accounting for additional capitalization of Rs. 804.30 lakh on works during 1999-2000 to 2005-06 and Rs. 172.91 lakh on account of FERV for the period ending 31.3.2004. 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 investment approval for the transmission scheme was accorded by Ministry of Power under its letter dated 31.3.1995 at an estimated cost of Rs. 8357 lakh, which included IDC of Rs. 1117 lakh. Subsequently, Revised Cost Estimate-I for the transmission scheme was approved by Ministry of Power vide its letter dated 5.2.2001 at an estimated cost of Rs. 12213 lakh, including IDC of Rs. 1248 lakh. Thereafter, Revised Cost Estimate-II for the transmission scheme was approved by the Board of Directors of the petitioner company under its letter dated 24.4.2006 at an estimated cost of Rs. 13391 lakh, which includes IDC of Rs.1208 lakh. The transmission scheme was declared under commercial operation on 1.2.2000.

3. The petitioner in the petition claimed the transmission charges based on capital expenditure up to 31.3.2005. Subsequently, the petitioner vide its affidavit dated 19.9.2007 has submitted the revised Form-9 and has prayed for consideration of additional capital expenditure of Rs. 276.16 lakh for the period 2005-06. The transmission charges claimed based on capital expenditure up to 31.3.2005 are given as under:

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	370.12	371.44	371.44	371.44	371.44
Interest on Loan	663.03	615.02	563.52	508.17	452.33
Return on Equity	345.83	361.23	361.23	361.23	361.23
Advance against Depreciation	193.29	236.21	284.99	338.76	343.05
Interest on Working Capital	64.67	66.69	68.55	70.53	71.74
O & M Expenses	809.28	841.63	875.30	910.31	946.73
Total	2446.22	2492.22	2525.03	2560.44	2546.52

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

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
O & M expenses	155.75	165.10	175.00	185.51	196.64
Maintenance Spares	67.44	70.14	72.94	75.86	78.89
Receivables	407.70	415.37	420.84	426.74	424.42
Total	630.89	650.61	668.78	688.11	699.95
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	64.67	66.69	68.55	70.53	71.74

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.

8. The petitioner has considered the capital expenditure of Rs. 12916.05 lakh after accounting for additional capitalization of Rs. 308.11 lakh and Rs, 220.03 lakh on works for the period from 1.2.2000 to 31.3.2004 and 1.4.2004 to 31.3.2005 respectively and Rs. 172.91 lakh on account of FERV for the period from 2001-04 over the capital expenditure of Rs.12215.00 lakh as on the date of commercial operation.

9. Tariff for the transmission scheme 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.

Additional capitalization -1999-2000 to 2005-06

10. The details submitted by the petitioner in support of its additional capital expenditure are given hereunder:

Year	Amount (Rs. in lakh)	Head of expenditure
1999-01	(-) 101.20	Land = Rs. 2.37 lakh Buildings = Rs. 67.38 lakh Transmission line = Rs. (-) 2.74 lakh Sub-station = Rs. (-) 152.93 lakh PLCC = Rs. (-) 15.28 lakh
2001-04	409.31	Land = Rs. (-) 27.37 lakh Buildings = Rs. 210.98 lakh Transmission line = Rs. 130.88 lakh Sub-station = Rs.101.50 lakh PLCC = Rs. (-) 6.68 lakh
2004-05	220.03	Buildings = Rs. 387.82 lakh Transmission line = Rs. (-) 165.6 lakh Sub-station = Rs. (-) 2.15 lakh
2005-06	276.16	Buildings = Rs. 253.79 lakh Transmission line = Rs. (-) 1.66 lakh Sub-station = Rs. 24.03 lakh
Total	804.30	

11. The petitioner vide its affidavit dated 12.3.2007 has clarified that as per original approval dated 31.3.1995, the provision of Rs. 474 lakh (excluding IDC

and IEDC) was kept against civil works (infrastructure building and colony). Subsequently, in the Revised Cost Estimate-II, the provision for the same was kept at Rs. 999 lakh. It has been stated the expenditure towards building and civil works was delayed because of slow progress of civil works of colony. All the work sites under scheme are in remote troubled /insurgency prone and hilly areas which are not well connected by roads and the working hours were restricted requiring additional manpower. Further, according to the petitioner, long spells of rains were reducing the available working days. The petitioner has further clarified that the additional capital expenditure is part of the original scope of work

12. The gross block as on date of commercial operation, namely 1.2.2000 is Rs. 12215.00 lakh. The claims for additional capitalization of Rs. 308.11 lakh for period up to 31.3.2004, Rs. 220.03 lakh for the year 2004-05 and Rs. 276.16 lakh for the year 2005-06 are within the original scope of work, and are found to be in order for additional capitalization. Accordingly, the additional expenditure of Rs. 804.30 lakh has been allowed to be capitalized.

Extra Rupee Liability during the years 2001-04:

13. Regulation 1.13 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.”

14. As already noted, the petitioner has claimed additional capitalization of Rs. 172.91 lakh on account of FERV for the period up to 31.3.2004, ASEB in its reply has requested the Commission to examine the admissibility of the amount of Rs. 172.91 lakh on account of FERV from date of commercial operation to 31.3.2004. We find that the petitioner's claim in this regard is based on the terms and conditions of tariff applicable during 2001-04, reproduced above. 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 on account of FERV has been admitted for tariff computation.

Time Over-run

15. The transmission system was scheduled to be commissioned by October 1998. However, this was declared under commercial operation on 1.2.2000. Thus, there is delay of about 15 months in the commissioning. The severe insurgency problem in the States of Tripura, Manipur and Assam in the years 1998-2000 had reportedly adversely affected the work progress. The petitioner has submitted the following reasons for delay:

(i) **Effect of insurgent activities around Jiriban in the State of Manipur:**

The insurgent activities in the State of Manipur have started growing out of proportion since 1985. On 17.5.1985, all the petitioner's employees posted at Jiribam and Imphal were served extortion notices. On 30.10.1996, eleven employees of petitioner in two gangs were detained by armed militants for ransom while they set out to petrol Jiribam-Loktak transmission line. One gang was released after 5 hours of detention and other was released on 2.11.1996. On 29.3.1997, about 10 armed militants had severely beaten up the male employees residing in staff quarters at Jiribam sub-station and several employees were hospitalized. On 30.3.1997, a platoon of CRPF had to be posted at the sub-station complex. In background of these developments,

construction of Jiribam-Badarpur transmission line suffered serious set back particularly within the State of Manipur due to the demand for ransom by the militants. After great persuasion, some local sub-contracting agencies were engaged by the contractor to execute the work.

(ii) **Effect of militant activities in Tripura:** Badarpur-Kumarghat transmission line had suffered badly due to insurgent activities within the State of Tripura in 1997 onwards. Chief Manager, Kumarghat was served a ransom note of Rs. one crore on 11.5.1998. The petitioner's executive was served a ransom note of Rs. 10 lakh on 24.4.1998. The transmission line is passing through North-Tripura districts, declared as disturbed area by the State Government. One Junior Engineer of the petitioner posted at Kumarghat was kidnapped by militants on 11.6.1998 for ransom and was released on 7.7.1998. These activities resulted into slow progress of work as availability of security forces was not under petitioner's control.

(iii) **Delay in tree-enumeration, cutting in the State of Tripura:** Due to insurgent activities tree enumeration, cutting in the reserved forest areas of Tripura had taken longer time as the forest officials were not ready to go to the forests without proper security. This resulted in undue long time due to poor security environment.

(iv) **Transportation delay due to frequent bandhs:** There has been frequent bandhs in and around Silcher, Guwahati, Shillong during last three years causing delay in transportation of materials from the various parts of the country to North-Eastern region. Tripura and Silcher being at the farthest ends, any bandh called in the States of Assam, Meghalaya and Tripura affected delivery of the material to the project and this resulted in considerable

delay. In view of above, petitioner has submitted that reasons for time over-run were beyond its control.

16. There is satisfactory explanation for the delay in completion of the transmission system. 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 the transmission system is considered to be beyond the control of the petitioner.

COST VARIATION

17. The petitioner has submitted that its Board of Directors has accorded approval of the Revised Cost Estimate-II at an estimated cost of Rs. 13391 lakh against previous approval of Rs. 12213 lakh. The reasons for revision in cost of the Revised Cost Estimate-II are due to increase in the line length, price variation, land and compensation and FERV and some other reasons.

TOTAL CAPITAL COST

18. Against the above background, the gross block of Rs. 13192.21 lakh as on 1.4.2007 has been worked out for the purpose of tariff based on the gross block of Rs. 12215 lakh as on the date of commercial operation after accounting for additional capitalisation of Rs. 804.30 lakh on works and Rs. 172.91 lakh on account of FERV.

DEBT- EQUITY RATIO

19. 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 consider 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.”

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

21. The petitioner has considered debt-equity ratio of 84.62:15.38 as on the date of commercial operation. The petitioner has further claimed tariff after accounting for the additional capital expenditure of Rs. 804.30 lakh on works and FERV of Rs. 172.91 lakh towards equity. We have considered the actual debt-equity ratio as on the date of commercial operation. The additional capital expenditure for the period 1.4.2000 to 31.3.2001 has been segregated in the debt-equity ratio as on the date of commercial operation. The additional capitalisation for the period 2001-04 has been adjusted so as to bring it closer to approved debt-equity ratio. The additional capitalization for the period 2004-06 has been segregated in to normative debt-equity ratio of 70:30. 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, for the purpose of tariff, an amount of Rs. 2421.75 lakh has

been considered as equity as on 1.4.2007, which is 18.36% of the actual capital cost on that date.

RETURN ON EQUITY

22. 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.

23. The petitioner has claimed return on equity of Rs. 2470.19 lakh as on 1.4.2004 after accounting for equity of Rs. 977.21 lakh on account of additional capitalization on works and FERV for the period 1.2.2000 to 31.3.2004. For the reasons recorded in para 21 above equity of Rs. 2421.75 lakh has been considered for the period 2007-09. Accordingly, the petitioner shall be entitled to return on equity of Rs.339.04 lakh each year during 2007-08 and 2008-09.

INTEREST ON LOAN

24. 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.”

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

(i) Gross loan opening has been considered from 2004-05.

(ii) 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.

(iii) Gross loan at (i) has been considered as notional loan. The weighted average rate of interest on loan for respective years as per above has been multiplied to arrive at interest on loan.

26. In our calculation, the interest on loan has been worked out as detailed below:

(i) Gross amount of loan, repayment of instalments and rate of interest etc have been considered as per petition. In case of PNB-I. Corporation Bank and ADB-I loans having floating rates of the interest, applicable rate of interest as on 1.4.2007 have been considered.

(ii) Notional loan corresponding to additional capitalisation from date of commercial operation to 31.3.2006 has been added to the loan

amount as on the date of commercial operation to arrive at total notional loan. This adjusted gross loan has been considered as normative loan for tariff calculation.

- (iii) For the purpose of calculating the interest on loan to be recovered in tariff, actual loan repayment up to 31.3.2004 as indicated in Form 13A of the petition has been considered. 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 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.
- (v) In the case of ADB-I loan, repayment instalments as per the revised amortization schedule of the ADB-I loan agreement enclosed with the petition has been referred to.

27. Based on the above, the year-wise details of interest worked out are given hereunder:

Details of loan	(Rs. in lakh)	
	2007-08	2008-09
Gross Loan as on DOCO	10335.85	
Addition due to Additional Capitalisation during 1999-2000 to 2005-06	261.70	
Addition due to FERV for the period up to 31.3.2004	172.91	
Gross Normative Loan as on 1.4.2007	10770.46	
Opening Normative Gross Loan		10770.46
Cumulative Repayment up to Previous Year		2643.37
Net Loan-Opening		8127.09
Addition due to Add Cap		-
Repayment during the year (Notional Repayment)		376.84
Net Loan-Closing		7750.26
Average Loan		7938.67
Weighted Average Rate of Interest on Loan		7.40%
Interest		587.81
		557.04

28. The detailed calculations in support of the weighted average rate of interest are contained in Annexure attached.

DEPRECIATION

29. 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.

30. The petitioner has claimed the depreciation on the capital cost of Rs. 13192.21 lakh. The petitioner has not indicated any cumulative depreciation recovery for the period up to 31.3.2004.

31. For the period 1.4.2007 to 31.3.2009 the depreciation works out to Rs. 376.84 lakh each year by applying rate of depreciation of 2.91% as shown below:

		(Rs. in lakh)	
Details of Depreciation		2007-08	2008-09
As on date of commercial operation	12215.00		
Addition during 1999-00 to 2005-06 due to additional capitalization	804.30		
Addition during 1999-00 to 2003-04 due to FERV	172.91	13192.21	13192.21
Gross Block as on 1.4.2007	13192.21	13192.21	13192.21
Rate of Depreciation	2.91%		
Depreciable Value		11809.52	11809.52
Balance Useful life of the asset		-	-
Remaining Depreciable Value		8734.06	8357.22
Depreciation		376.84	376.84

ADVANCE AGAINST DEPRECIATION

32. 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

33. 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

34. 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 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

35. 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.

36. 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.

37. The petitioner's entitlement to O & M expenses for 485.45 ckt km and 18 bays has been worked out as given hereunder:

(Rs. in lakh)		
	2007-08	2008-09
O&M expenses for 485.45 ckt kms line length	123.79	129.13
O&M expenses for 18 bays	569.34	592.20
Total	693.13	721.33

38. 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

39. 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. In the present case, the capital expenditure on the date of commercial operation is Rs.12215.00 lakh, 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 to Rs.185.51 lakh as on 1.4.2007.

(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. SBI PLR as on 1.4.2004 (10.25%) has been considered for computation of interest.

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

(Rs. in lakh)

	2007-08	2008-09
Maintenance Spares	185.51	196.64
O & M expenses	57.76	60.11
Receivables	342.82	342.61
Total	586.08	399.36
Rate of Interest	10.25%	10.25%
Interest	60.07	61.43

TRANSMISSION CHARGES

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

(Rs. in lakh)

	2007-08	2008-09
Depreciation	376.84	376.84
Interest on Loan	587.81	587.81
Return on Equity	339.04	339.04
Advance against Depreciation	0.00	0.00
Interest on Working Capital	60.07	61.43
O & M Expenses	693.13	721.33
Total	2056.89	2055.69

42. 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. .

43. The petitioner has sought approval for the reimbursement of expenditure of Rs. 1, 07,215/- 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.

44. 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.

45. This order disposes of Petition No. 88/2006.

Sd/-
(R.KRISHNAMOORTHY)
MEMBER
New Delhi dated the 13th February 2008

sd/-
(BHANU BHUSHAN)
MEMBER

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(Rs. in lakh)

Details of Loan	2004-05	2005-06	2006-07	2007-08	2008-09
Bond-VII					
Gross Loan- Opening	275.00	275.00	275.00	275.00	275.00
Cum Repayment up to DOCO/Previous year	55.00	110.00	165.00	220.00	275.00
Net Loan-Opening	220.00	165.00	110.00	55.00	0.00
Repayment during the year	55.00	55.00	55.00	55.00	0.00
Net Loan-Closing	165.00	110.00	55.00	0.00	0.00
Average Loan	192.50	137.50	82.50	27.50	0.00
Rate of Interest	13.64%	13.64%	13.64%	13.64%	13.64%
Interest	26.26	18.76	11.25	3.75	0.00
Rep Schedule	Annual instalments from 4.08.2003				
PNB-I					
Gross Loan- Opening	275.00	275.00	275.00	275.00	275.00
Cum Repayment up to DOCO/Previous year	27.50	55.00	82.50	110.00	137.50
Net Loan-Opening	247.50	220.00	192.50	165.00	137.50
Repayment during the year	27.50	27.50	27.50	27.50	27.50
Net Loan-Closing	220.00	192.50	165.00	137.50	110.00
Average Loan	233.75	206.25	178.75	151.25	123.75
Rate of Interest	8.66%	8.66%	8.66%	10.16%	10.16%
Interest	20.24	17.86	15.48	15.37	12.57
Rep Schedule	Annual instalments from 30.03.2004				
Bond- XIII- II					
Gross Loan- Opening	213.00	213.00	213.00	213.00	213.00
Cum Repayment up to DOCO/Previous year	35.50	71.00	106.50	142.00	177.50
Net Loan-Opening	177.50	142.00	106.50	71.00	35.50
Repayment during the year	35.50	35.50	35.50	35.50	35.50
Net Loan-Closing	142.00	106.50	71.00	35.50	0.00
Average Loan	159.75	124.25	88.75	53.25	17.75
Rate of Interest	7.85%	7.85%	7.85%	7.85%	7.85%
Interest	12.54	9.75	6.97	4.18	1.39
Rep Schedule	Annual instalments from 31.07.2003				
Corporation Bank					
Gross Loan- Opening	138.00	138.00	138.00	138.00	138.00
Cum Repayment up to DOCO/Previous year	6.90	20.70	34.50	48.30	62.10
Net Loan-Opening	131.10	117.30	103.50	89.70	75.90
Repayment during the year	13.80	13.80	13.80	13.80	13.80
Net Loan-Closing	117.30	103.50	89.70	75.90	62.10
Average Loan	124.20	110.40	96.60	82.80	69.00
Rate of Interest	9.15%	9.15%	9.15%	11.15%	11.15%
Interest	11.36	10.10	8.84	9.23	7.69
Rep Schedule	Annual instalments from 10.03.2004				
ADB-I					
Gross Loan- Opening	9434.85	9434.85	9434.85	9434.85	9434.85
Cum Repayment up to DOCO/Previous year	1397.37	1828.99	2304.85	2829.48	3407.88

Net Loan-Opening	8107.00	7675.38	7199.52	6674.89	6096.49
Repayment during the year	431.61	475.86	524.63	578.40	637.69
Net Loan-Closing	7675.38	7199.52	6674.89	6096.49	5458.80
Average Loan	7891.19	7437.45	6937.21	6385.69	5777.65
Rate of Interest	7.51%	7.51%	7.51%	7.26%	7.26%
Interest	592.63	558.55	520.98	463.60	419.46
Rep Schedule	Half yearly instalments from 1.6.2000				
Total Loan					
Gross Loan- Opening	10335.85	10335.85	10335.85	10335.85	10335.85
Cum Repayment up to DOCO/Previous year	1522.27	2085.69	2693.35	3349.78	4059.98
Net Loan-Opening	8883.10	8319.68	7712.02	7055.59	6345.39
Repayment during the year	563.41	607.66	656.43	710.20	714.49
Net Loan-Closing	8319.68	7712.02	7055.59	6345.39	5630.90
Average Loan	8601.39	8015.85	7383.81	6700.49	5988.15
Rate of Interest	7.71%	7.67%	7.63%	7.40%	7.37%
Interest	663.03	615.02	563.52	496.13	441.12