

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

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

**Petition No. 148/2007**

**In the matter of**

Determination of final transmission tariff for 400 kV D/C Siliguri-Purnea transmission line, 400 kV D/C Purnea-Muzaffarpur transmission line and 220 kV D/C Muzaffarpur (PGCIL)-Muzaffarpur (BSEB) transmission line in Eastern Region associated with Tala Hydro Electric Project, East-North Inter-connector and Northern Region transmission system for the period from 1.9.2006 to 31.3.2009.

**And in the matter of**

- |   |                         |
|---|-------------------------|
| Powerlinks Transmission Limited, New Delhi          | <b>..Petitioner</b>     |
| Vs  |                         |
| 1. Power Grid Corporation of India Limited, Gurgaon |                         |
| 2. West Bengal State Electricity Board, Kolkata     |                         |
| 3. Damodar Valley Corporation, Calcutta             |                         |
| 4. Bihar State Electricity Board, Patna             |                         |
| 5. Grid Corporation of Orissa Ltd., Bhubaneshwar    |                         |
| 6. Power Department, Govt. of Sikkim, Gangtok       |                         |
| 7. Jharkhand State Electricity Board, Ranchii       | <b>.... Respondents</b> |

**The following were present:**

1. Shri Suresh Schedev, PTL
2. Shri S. Datta, PTL
3. Shri B.A.Chaduhari, PTL
4. Shri D.K.Nandi, PTL
5. Shri J.B.Mandal, PTL
6. Shri R.L.Agnihotri, PTL
7. Ms. Nita Jha, PTL
8. Shri R.B.Sharma, Advocate, BSEB
9. Shri B.C.Pant, PGCIL
10. Shri U.K. Tyagi, PGCIL
11. Shri M.M.Mondal, PGCIL
12. Shri Prashant Sharma, PGCIL
13. Shri C. Kannan, PGCIL
14. Ms. Sangeeta Edwards, PGCIL
15. Shri Rakesh Prasad, PGCIL

**ORDER  
(DATE OF HEARING: 21.2.2008)**

The application has been made for approval of tariff for 400 kV D/C Siliguri-Purnea transmission line, 400 kV D/C Purnea-Muzaffarpur transmission

line and 220 kV D/C Muzaffarpur (PGCIL)-Muzaffarpur (BSEB) transmission line ( the transmission lines) in Eastern Region associated with Tala Hydro Electric Power, East-North Inter-connector and Northern Region transmission system (collectively referred to as the transmission system) for the period from 1.9.2006 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.4256.31 lakh during 2006-07 and up to 30.9.2007. The petitioner has also claimed reimbursement of insurance expenses, licence fee and higher O & M charges. The petitioner has further prayed for the reimbursement of expenditure from the beneficiaries incurred towards publishing notices in newspapers and the petition filing fee.

2. The administrative approval and expenditure sanction for the transmission system was accorded by Ministry of Power under letter dated 2.7.2003 at an estimated cost of Rs.198070 lakh, which included IDC of Rs.21792 lakh. Subsequently, the revised cost estimate for the transmission system was approved by Ministry of Power under letter dated 29.9.2005, at an estimated cost of Rs.161178 lakh, which included IDC of Rs.12170 lakh, for the petitioner’s scope of work. The apportioned approved cost of the transmission lines is stated to be Rs.73603 lakh.

3. The provisional transmission charges for the transmission lines, declared under commercial operation on 1.9.2006, were approved by the Commission in its order dated 16.1.2007 in Petition No.132/2006. The present petition is for approval of final tariff.

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

(Rs. in lakh)

	<b>2006-07(Pro rata)</b>	<b>2007-08</b>	<b>2008-09</b>
Depreciation	1007.24	1748.41	1774.46
Interest on Loan	2316.26	4274.81	4018.74
Return on Equity	1644.41	2863.68	2908.38
Advance against Depreciation	0.00	1494.05	2264.95
Interest on Working Capital	140.72	281.50	297.57
O & M Expenses	121.40	215.73	225.04
<b>Total transmission charges</b>	<b>5230.03</b>	<b>10878.18</b>	<b>11489.14</b>
Transmission Majoration Factor @ 10% of the transmission charges	523.00	1087.82	1148.91
<b>Grand Total</b>	<b>5753.03</b>	<b>11966.00</b>	<b>12638.05</b>

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

(Rs. in lakh)

	<b>2006-07(Pro rata)</b>	<b>2007-08</b>	<b>2008-09</b>
Maintenance Spares	692.47	734.02	778.06
O & M expenses	17.34	17.98	18.75
Receivables	1643.73	1994.33	2106.34
Total	2353.54	2746.33	2903.15
Rate of Interest	10.25%	10.25%	10.25%
<b>Interest</b>	<b>140.72</b>	<b>281.50</b>	<b>297.57</b>

6. The petitioner has claimed the following in addition to the transmission charges:

(Rs. in lakh)

	2006-07	2007-08	2008-09
Insurance Expenses	72.56	72.56	72.56
Licence fee	9.07	9.07	9.07
<b>Total</b>	<b>81.63</b>	<b>81.63</b>	<b>81.63</b>

7. The reply to the petition has been filed by Bihar State Electricity Board. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003.

8. BSEB, in its reply, has expressed reservations on the issue of allocation of power from Tala HEP allowed by Ministry of Power to Eastern Region constituents. It has been stated that Ministry of Power has swapped equivalent thermal capacity at Farakka STPS and Kahalgaon STPS with the capacity at Tala HEP. It is alleged that this has resulted in reduced energy availability to ER constituents because Tala HEP is run-of-river project and maximum generation is in summer/monsoon months whereas generation from Farakka STPS and Kahalgaon STPS is available on round-the-year basis. It has been further stated that the swapping arrangement has considerably increased the transmission charges in Eastern Region without getting any benefit in terms of additional power. BSEB has further informed that the average pooled generation cost of Farakka STPS and Kahalgaon STPS of NTPC is Rs 1.70 (approximately) per KWh whereas the cost of Tala HEP is Rs 1.84 per KWh including 4 paise/KWh trading margin of PTC. BSEB has submitted that transmission assets associated with Tala HEP from Tala to Muzzaffarpur, pooled with regional tariff of Eastern Region should be segregated from the regional tariff and recovered from ultimate users of the said assets. BSEB has sought to invoke provisions of Regulation 12 (Power to remove difficulties) and Regulation 13 (Power to relax) of the 2004 regulations to support its claim.

9. During the hearing, it was clarified that works related to allocation of power from Central sector generating stations is in the purview of Ministry of Power and BSEB should take up this issue with the Ministry. Regarding segregation of transmission charges, the petitioner has informed that prior to construction of the assets, BPTA on 9.1.2003 was signed with the beneficiaries in Eastern Region including BSEB for Tala transmission system in Eastern Region and for Eastern-

Northern inter-connector, joint BPTA was signed with the beneficiaries in Northern Region.

10. On careful consideration of the above points raised by BSEB and reply of the petitioner, we are of the opinion that these issues do not merit any consideration in these proceedings for approval of tariff. BSEB, if so advised, may take up the matter with appropriate authorities for redressal of its grievances.

### **CAPITAL COST**

11. 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. It is provided that 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.

12. The petitioner has claimed additional capitalization of Rs.4256.31 lakh on works for the period from 1.9.2006 to 30.9.2007, including an expenditure of Rs.2368.64 lakh for the period from 1.9.2006 to 31.3.2007, over the capital expenditure of Rs. 64990.72 lakh as on the date of commercial operation.

13. The Commission vide its order dated 14.1.2008 had *inter alia* directed the petitioner to submit auditor's certificate giving break-up of cost of land, transmission line, PLCC etc. The certificate was submitted by the petitioner vide affidavit dated 6.2.2008. However, during the hearing held on 21.2.2008, it was argued by BSEB that additional capitalisation should be considered for completed financial year only. Consequently, the petitioner has submitted auditor's certificate

giving details of additional capitalisation from the date of commercial operation and up to 31.3.2007 vide affidavit dated 19.3.2008, as given hereunder:

. Year	Nature of expenditure
2006-07	Colony and office building = Rs. 397.88 lakh
	Transmission line = Rs. 1970.76 lakh
	Total = Rs. 2368.64 lakh

#### **ADDITIONAL CAPITALIZATION 2006-07**

14. Clause (1) of Regulation 53 of the 2004 regulations provides-

“(1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off 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 works subject to the ceiling norm specified in regulation 52;
- (iv) Liabilities to meet award of arbitration or 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 transmission system.”

15. The additional capital expenditure claimed for the year 2006-07 is within the original scope of work and is found to be in order as it was against the committed liability. Accordingly, the additional capital expenditure of Rs. 2368.64 lakh has been allowed. Regulation 53 (4) of the 2004 regulations allows for two revisions in the tariff period on account of impact of additional capitalisation. This additional capitalisation shall be treated as the first revision and the petitioner is at liberty to approach the Commission for second revision in accordance with the 2004 regulations.

## **Time Over-run**

16. As per the original approval, the transmission line was scheduled to be commissioned by June 2006. The line was declared under commercial operation on 1.9.2006. Therefore, there was a time delay of three months in the commissioning of the transmission line. The petitioner has explained following reasons for delay:

- (i) Two general assembly elections in Bihar during February 2005 and November 2005 and Panchayat elections in April and May 2006, adversely affected the progress of site works and mobilization of men, material as well as T & P.
- (ii) The Panchayat election in Bihar were held in April-May, 2006 which adversely affected the site work and mobilization of men, material as well as T&P for 15 days.
- (iii) During July 2004, because of heavy rains and swollen rivers of Kosi, Gandhak etc, there was an 'unprecedented flood' in Bihar. The districts of Purnea, Madhepura, Saharsa, Samastipur, Vaishali, Muzaffarpur, Gopalganj were most affected and routing of transmission line passing through these areas. This resulted in substantial delay affecting the completion schedule of project. The petitioner has enclosed photocopies of the newspaper clippings in support of the claim.
- (iv) The petitioner has further submitted that due to effective planning and advance action taken on different fronts, the commissioning was proposed for the month of August 2006, thereby matching with commissioning of the first unit of Tala HEP on 31<sup>st</sup> July, 2006 and

scheduling of power flow from Tala HEP with effect from 4<sup>th</sup> August 2006. However, due to inevitable requirement of multi-party coordination at the Central and State levels, power flow between Eastern and Northern Regions through the transmission line could commence from 26.8.2006 after synchronization of Eastern and Northern Regional Systems. Therefore, the petitioner declared the transmission line under commercial operation w.e.f. 1<sup>st</sup> September 2006.

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

18. BSEB has stated that the reasons for delay in commissioning of the transmission line namely, assembly and Panchayat elections are general in nature and are normally faced by power transmission licensees. It has been argued that these factors were required to be tackled in the normal course of the project completion for which due provisions are always made in the completion schedule. According to BSEB, the delay is attributable to the petitioner and hence any increase in IEDC and IDC on this account should be borne by the petitioner.

19. We have considered the matter very carefully. There is generally satisfactory explanation from the petitioner for the delay of about 3 months 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.



## **COST VARIATION**

20. As against the apportioned approved cost of Rs. 73603 lakh, the actual expenditure of the transmission line is Rs. 67359 lakh as on 31.3.2007. Therefore, there is no cost over-run for the purpose of the present petition.

## **TOTAL CAPITAL COST**

21. Against the above background, gross block of Rs. 67359.36 lakh as on 31.3.2007 has been worked out for the purpose of tariff over the gross block of Rs. 64990.72 lakh as on the date of commercial operation, after accounting for additional capitalisation of Rs.2368.48 lakh for the year 2006-07.

## **DEBT- EQUITY RATIO**

22. Clause (2) of Regulation 54 of the 2004 regulations *inter alia* provides that,-

“(2) In case of the transmission system 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 transmission licensee is able to establish to the satisfaction of the Commission that deployment of equity higher than 30% was in the interest of general public.”

23. Note 1 below Regulation 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.

24. The petitioner has considered debt-equity ratio of 70:30 as actually deployed on the date of commercial operation. The petitioner has further considered the amount of additional capitalization in the debt-equity ratio of 70:30.

We have considered the debt-equity ratio on the date of commercial operation and for the additional capitalisation on works of Rs. 2368.64 lakh as considered by the petitioner. Accordingly, for the purpose of tariff, an amount of Rs. 19497.22 lakh has been considered as equity as on 1.9.2006 and Rs. 20207.81 lakh as on 1.4.2007.

### **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. For the reasons recorded in para 24 above equity of Rs.19497.22 lakh has been considered as on 1.9.2006 and on 1.4.2007 and onwards, equity of Rs. 20207.81 lakh has been considered each year. However, tariff for the period 1.9.2006 to 31.3.2007 has been allowed on average equity of Rs. 19852.52 lakh. Accordingly, the petitioner shall be entitled to return on equity of Rs. 1621.29 lakh during 2006-07 on pro rata basis and Rs. 2829.09 lakh each year during 2007-08 and 2008-09.

### **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.

© 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;

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) IFC, ADB, IDFC and SBI loans have been utilised and gross loan opening has been considered from 2006-07. These loans have also been used for additional capitalization purpose. Repayment of loan during the year has been considered as per the loan schedule.

(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) Total of the gross loan up to 30.9.2007 including the loan amount corresponding to additional capital expenditure has

been considered and the interest on loan has been calculated.

29. 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 as per the supporting documents with the lenders, as submitted by the petitioner have been used to work out weighted average rate of interest on actual loan.
- (ii) Notional loan arising out of additional capitalization from date of commercial operation to 31.3.2007 has been added in loan amount as on date of commercial operation to arrive at total notional loan. This adjusted gross loan has been considered as normative loan for tariff calculations.
- (iii) Tariff has been worked out considering normative loan and normative repayments. Once the normative loan has been arrived at, it has been considered for all purposes in the tariff. Normative repayment has been worked out by the following formula :

$$\frac{\text{Actual repayment of actual loan during the year}}{\text{Opening balance of actual loan during the year}} \times \text{Opening balance of normative loan during the year}$$

- (iv) Moratorium in repayment of loan has been considered with reference to normative loan and if the normative repayment of loan during the year is less than the depreciation during the year, it has been considered as moratorium and depreciation during the year has been deemed as normative repayment of loan during the year.

(v) 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.

(vi) IDFC and SBI loans have floating rate of interest and rates of interest as applicable on date of commercial operation have been considered in the calculation, subject to mutual settlement between the parties in case of any change/resetting of the interest rate during the tariff period.

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

(Rs. in lakh)

Details of loan	2006-07(Pro rata)	2007-08	2008-09
Opening Gross Loan	45493.50	47151.55	47151.55
Cumulative Repayment up to date of commercial operation/previous year	0.00	991.18	4854.64
Net Loan-Opening	45493.50	46160.37	42296.91
Additions due to Additional Capitalisation	1658.05		
Repayment during the year	991.18	3863.46	3863.46
Net Loan-Closing	46160.37	42296.91	38433.45
Average Loan	45826.93	44228.64	40365.18
Weighted Average Rate of Interest on Loan	8.49%	9.40%	9.52%
<b>Interest</b>	<b>2269.81</b>	<b>4156.11</b>	<b>3842.24</b>

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

### **DEPRECIATION**

32. 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.

33. The gross depreciable value of the transmission line is  $0.9 \times (\text{Rs } 67359.36 \text{ lakh}) = \text{Rs. } 60623.42 \text{ lakh}$ .

34. Depreciation works out to Rs. 991.18 lakh for the period 1.9.2006 to 31.3.2007 on average gross block of Rs. 66175.04 lakh and Rs. 1728.07 lakh each year for the period 1.4.2007 to 31.3.2009 on gross block of Rs. 67359.36 lakh by applying rates of depreciation of 2.5677% during 2006-07 and deprecation rate of 2.5655% thereafter as shown below:

(Rs. in lakh)

Details of Depreciation	2006-07 (Pro rata)	2007-08	2008-09
Gross block at the beginning of the period	64990.72	67359.36	67359.36
Additional Capitalisation during the period	2368.64	-	-
Gross Block at the end of the period	67359.36	67359.36	67359.36
Rate of Depreciation	2.5677%	2.5655%	2.5655%
Depreciable Value (90%)	59557.54	60623.42	60623.42
Balance Useful life of the asset	-	-	-
Remaining Depreciable Value	59557.54	59632.24	55768.78
<b>Depreciation</b>	<b>991.18</b>	<b>1728.07</b>	<b>1728.07</b>

### **ADVANCE AGAINST DEPRECIATION**

35. As per sub-clause (b) of clause (ii) of Regulation 56 of the 2004 regulations, in addition to allowable depreciation, the transmission licensee is entitled to Advance Against Depreciation, computed in the manner given hereunder:

AAD = Loan repayment amount as per regulation 56 (i) subject to a ceiling of  $1/10^{\text{th}}$  of loan amount as per regulation 54 minus depreciation as per schedule

36. It is provided that Advance Against Depreciation shall be permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year. It is further provided that Advance Against Depreciation in a year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year.

37. The petitioner has claimed Advance Against Depreciation in the following manner:

- (i)  $1/10^{\text{th}}$  of gross loan considered for tariff computation.
- (ii) Cumulative loan as well as repayment of notional loan considered during the year.
- (iii) Depreciation as claimed in the petition.

38. In our calculation, Advance Against Depreciation has been worked as under:

- (i) 1/10<sup>th</sup> of gross loan has been worked out from the gross notional loan as per para 30 above.
- (ii) Repayment of notional loan during the year has been considered as per para 30 above.
- (iii) Depreciation as worked out as per para 34 has been taken into account.

39. The details of Advance Against Depreciation allowed for the transmission line is given hereunder:

(Rs. in lakh)

Details of Advance Against Depreciation	2006-07 (pro-rata)	2007-08	2008-09
1/10 <sup>th</sup> of Gross Loan(s)	4549.35	4715.15	4715.15
Repayment of loan	991.18	3863.46	3863.46
Minimum of the above	991.18	3863.46	3863.46
Depreciation during the year	991.18	1728.07	1728.07
(A) Difference	0.00	2135.39	2135.39
Cumulative Repayment of the Loan	991.18	4854.64	8718.10
Cumulative Depreciation/ Advance against Depreciation	991.18	2719.25	6582.71
(B) Difference	0.00	2135.39	2135.39
Advance Against Depreciation	<b>0.00</b>	<b>2135.39</b>	<b>2135.39</b>

### **OPERATION & MAINTENANCE EXPENSES**

40. 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

41. The petitioner has claimed O & M expenses for 846 ckt km which have been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:



	(Rs. in lakh)		
	Year		
	<b>2006-07(Pro rata)</b>	<b>2007-08</b>	<b>2008-09</b>
O&M expenses for 846 ckt kms line length	121.40	215.73	225.04
<b>Total</b>	<b>121.40</b>	<b>215.73</b>	<b>225.04</b>

42. The petitioner has claimed certain additional expenses on account of insurance and the licence fee. These claims have been considered in our order dated 28.4.2008 in Petition No. 147/2007. For the reasons recoded in the said order dated 28.4.2008, the petitioner is not entitled to any additional O & M expenses under the heads `insurance` and `licence fee` . .

43. The petitioner has submitted that the wage revision of its employees is due with effect from 1.1.2007. Therefore, according to the petitioner, 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**

44. 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. 64990.72 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.649.91 lakh as on 1.9.2006.

### **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)© 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 1<sup>st</sup> 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 1.4.2006, which is in accordance with the 2004 regulations and has been allowed.

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

(Rs. in lakh)

	<b>2006-07(Pro rata)</b>	<b>2007-08</b>	<b>2008-09</b>
Maintenance Spares	649.91	672.65	713.01
O & M expenses	17.34	17.98	18.75
Receivables	1466.07	1888.12	1837.19
Total	2133.32	2578.75	2568.95
Rate of Interest	10.25%	10.25%	10.25%
<b>Interest</b>	<b>127.55</b>	<b>264.32</b>	<b>263.32</b>

### **TRANSMISSION CHARGES**

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

(Rs. in lakh)

	<b>2006-07(Pro rata)</b>	<b>2007-08</b>	<b>2008-09</b>
Depreciation	991.18	1728.07	1728.07
Interest on Loan	2269.81	4156.11	3842.24
Return on Equity	1621.29	2829.09	2829.09
Advance against Depreciation	0.00	2135.39	2135.39
Interest on Working Capital	127.55	264.32	263.32
O & M Expenses	121.40	215.73	225.04
<b>Total</b>	<b>5131.24</b>	<b>11328.71</b>	<b>11023.15</b>

### **TRANSMISSION MAJORATION FACTOR**

47. The petitioner has claimed the Transmission Majoration Factor (TMF) @ 10% of the transmission charges. This has been opposed by some of the respondents. This aspect has already been considered in Petition No. 147/2007 and the Commission by its order dated 28.4.2008 has upheld the entitlement of the petitioner to TMF. For the reasons recorded in the said order dated 28.4.2008, we are of the view that 10% mark up (pre-tax) on transmission charges shall be allowed as the Transmission Majoration Factor in the present petition also.

## **GENERAL**

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

49. In view of Transmission Service Agreement entered into between the petitioner and respondent No. 1, the petitioner shall claim all the charges from respondent No. 1. It is also noted that BPTAs have been entered into between respondent No. 1 and the beneficiaries, respondents No. 2 to 7. Accordingly, Respondent No. 1 shall raise bills for all the charges, including the Transmission Majoration Factor approved in this order. These charges shall be shared by the beneficiaries in Eastern Regions, respondents No. 2 to 7 in accordance with the 2004 regulations.

50. The petitioner has sought approval for the reimbursement of expenditure of Rs.1, 40, 053/- 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.

51. The petitioner is already billing the respondents on provisional basis in accordance with the Commission's order dated 16.1.2007 in Petition No.

132/2006. The provisional billing of tariff shall be adjusted in the light of final tariff now approved by us.

52. This order disposes of Petition No. 148/2007.

Sd/-  
**(R.KRISHNAMOORTHY)**  
**MEMBER**  
New Delhi dated the 30<sup>th</sup> April 2008

sd/-  
**(BHANU BHUSHAN)**  
**MEMBER**

## Annexure

## CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(Rs. in lakh)

	Details of Loan	2006-07	2007-08	2008-09
<b>1</b>	<b>IFC</b>			
	Gross Loan opening	14160.69	14160.69	14160.69
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	1180.06
	Net Loan-Opening	14160.69	14160.69	12980.63
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	1180.06	1180.06
	Net Loan-Closing	14160.69	12980.63	11800.57
	Average Loan	14160.69	13570.66	12390.60
	Rate of Interest	8.80%	8.80%	8.80%
	Interest	1246.32	1194.39	1090.53
	Repayment Schedule	24 equal half yearly instalments from 15-7-2007		
<b>2</b>	<b>ADB</b>			
	Gross Loan opening	12591.24	12591.24	12591.24
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	1049.27
	Net Loan-Opening	12591.24	12591.24	11541.97
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	1049.27	1049.27
	Net Loan-Closing	12591.24	11541.97	10492.70
	Average Loan	12591.24	12066.60	11017.33
	Rate of Interest	9.14%	9.14%	9.14%
	Interest	1150.56	1102.62	1006.74
	Repayment Schedule	24 semi annual equal instalments from 15-7-2007		
<b>3</b>	<b>IDFC</b>			
	Gross Loan opening	9267.79	9267.79	9267.79
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	772.32
	Net Loan-Opening	9267.79	9267.79	8495.47
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	772.32	772.32
	Net Loan-Closing	9267.79	8495.47	7723.16
	Average Loan	9267.79	8881.63	8109.32
	Rate of Interest	7.75%	10.17%	10.48%
	Interest	718.25	903.26	849.86
	Repayment Schedule	48 Qly Instalments from 15.4.2007		
<b>4</b>	<b>SBI</b>			
	Gross Loan opening	9473.79	9473.79	9473.79
	Cumulative Repayment upto DOCO/previous year	0.00	197.37	986.85
	Net Loan-Opening	9473.79	9276.42	8486.94
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	197.37	789.48	789.48
	Net Loan-Closing	9276.42	8486.94	7697.45
	Average Loan	9375.10	8881.68	8092.20
	Rate of Interest	7.88%	9.90%	10.19%
	Interest	738.76	879.29	824.59
	Repayment Schedule	48 Qly Instalments from 31.3.2007		
<b>5</b>	<b>IFC (For Add Cap)</b>			
	Gross Loan opening	0.00	616.10	616.10
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	51.34
	Net Loan-Opening	0.00	616.10	564.76
	Additions during the year	616.10	0.00	0.00
	Repayment during the year	0.00	51.34	51.34
	Net Loan-Closing	616.10	564.76	513.42
	Average Loan	308.05	590.43	539.09

	Rate of Interest	8.80%	8.80%	8.80%
	Interest	27.11	51.97	47.45
6	<b>ADB (For Add Cap)</b>			
	Gross Loan opening	0.00	458.91	458.91
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	38.24
	Net Loan-Opening	0.00	458.91	420.67
	Additions during the year	458.91	0.00	0.00
	Repayment during the year	0.00	38.24	38.24
	Net Loan-Closing	458.91	420.67	382.42
	Average Loan	229.46	439.79	401.55
	Rate of Interest	9.14%	9.14%	9.14%
	Interest	20.97	40.19	36.69
7	<b>IDFC (For Add Cap)</b>			
	Gross Loan opening	0.00	237.78	237.78
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	19.82
	Net Loan-Opening	0.00	237.78	217.97
	Additions during the year	237.78	0.00	0.00
	Repayment during the year	0.00	19.82	19.82
	Net Loan-Closing	237.78	217.97	198.15
	Average Loan	118.89	227.87	208.06
	Rate of Interest	7.75%	10.17%	10.48%
	Interest	9.21	23.17	21.80
8	<b>SBI (For Add Cap)</b>			
	Gross Loan opening	0.00	345.28	345.28
	Cumulative Repayment upto DOCO/previous year	0.00	7.19	35.97
	Net Loan-Opening	0.00	338.09	309.31
	Additions during the year	345.28	0.00	0.00
	Repayment during the year	7.19	28.77	28.77
	Net Loan-Closing	338.09	309.31	280.54
	Average Loan	169.04	323.70	294.93
	Rate of Interest	7.88%	9.90%	10.19%
	Interest	13.32	32.05	30.05
	<b>Total Loan</b>			
	Gross Loan opening	45493.51	47151.58	47151.58
	Cumulative Repayment upto DOCO/previous year	0.00	204.56	4133.86
	Net Loan-Opening	45493.51	46947.02	43017.72
	Additions during the year	1658.07	0.00	0.00
	Repayment during the year	204.56	3929.30	3929.30
	Net Loan-Closing	46947.02	43017.72	39088.42
	Average Loan	46220.26	44982.37	41053.07
	Rate of Interest	8.49%	9.40%	9.52%