

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

1. **Shri Ashok Basu, Chairperson**
2. **Shri K.N.Sinha, Member**
3. **Shri Bhanu Bhushan, Member**
4. **Shri A.H.Jung, Member**

**Petition No. 69/2004**

**In the matter of**

Approval of transmission charges for Korba-Budhipadar transmission system in Eastern and Western Regions for the period from 1.4.2004 to 31.3.2009.

**And in the matter of**

Power Grid Corporation of India Limited

...Petitioner

**Vs**

1. Madhya Pradesh State Electricity Board, Jabalpur
2. Bihar State Electricity Board, Patna
3. West Bengal State Electricity Board, Kolkata
4. Grid Corporation of Orissa Ltd. Bhubaneshwar
5. Damodar Valley Corporation, Kolkata
6. Power Deptt. Govt. of Sikkim, Gangtok
7. Jharkhand State Electricity Board, Ranchi
8. Gujarat Electricity Board, Baroda
9. Chhattisgarh State Electricity Board, Raipur
10. Maharashtra State Electricity Board, Jabalpur
11. Electricity Department, Govt. of Goa, Panaji, Goa
12. Electricity Department, Admn of Daman & Diu, Daman
13. Electricity Department, Admn of Dadra Nagar Haveli, Silvassa
14. Karnataka Power Transmission Corp. Ltd., Bangalore.... **Respondents**

**The following were present:**

1. Shri U.K. Tyagi, PGCIL
2. Shri C. Kannan, PGCIL
3. Shri P.C. Pankaj, PGCIL
4. Shri Prasant Sharma, CM, PGCIL
5. Shri M.M. Mondal, CM (Fin), PGCIL
6. Shri D.D.Khandelwal, MPSEB
7. Shri Deepak Srivastava, MPSEB

**ORDER**

**(DATE OF HEARING: 10.11.2005)**

The petition has been filed for approval for transmission charges for Korba-Budhipadar transmission system (the transmission system) an inter-regional link between Eastern and Western Regions 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 that it be permitted to continue the billing of transmission charges on the same basis as charged on 31.3.2004, pending determination of tariff in the present petition. No other specific relief is prayed for.

2. The approval for revised cost estimate of Rs.3553 lakh, including IDC of Rs.120 lakh for the transmission system was accorded by the Board of Directors of petitioner company vide its memorandum dated 10.3.2000. The date of commercial operation of the transmission system is 1.9.1999. The transmission system comprises of the 220 kV S/C Budhipadar-Korba line and associated substation bays.

3. The annual transmission charges for the period from 1.4.2001 to 31.3.2004 were decided by the Commission in its order dated 18.7.2003 in Petition No. 49/2002 at a gross block of Rs. 3012.57 lakh including additional capitalization on account of FERV of Rs. 10.63 lakh for the period 1.9.1999 to 31.3.2001.

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

(Rs. in lakh)

	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Depreciation	81.39	81.39	81.39	81.39	81.39
Interest on Loan	175.19	141.10	107.00	72.90	47.93
Return on Equity	92.73	92.73	92.73	92.73	92.73
Advance against Depreciation	39.52	152.75	152.75	152.75	113.24
Interest on Working Capital	12.67	14.36	14.11	13.87	13.13
O & M Expenses	69.89	72.67	75.68	78.55	81.84
<b>Total</b>	<b>471.39</b>	<b>555.00</b>	<b>523.66</b>	<b>492.19</b>	<b>430.26</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>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
Maintenance Spares	39.23	41.58	44.07	46.72	49.52
O & M expenses	5.82	6.06	6.31	6.55	6.82
Receivables	78.57	92.50	87.28	82.03	71.71
Total	123.62	140.14	137.65	135.30	128.05
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	12.67	14.36	14.11	13.87	13.13

6. The replies to the petition were filed by Madhya Pradesh Electricity Board (MPSEB), Gujarat State Electricity Board and West Bengal State Electricity Board. In response to the public notices published by the petitioner in accordance with the procedure specified by the Commission, no comments have been received from general public. MPSEB in its reply pointed out that certain other beneficiaries in Western Region were also availing of the transmission system for conveyance of surplus from Eastern Region and therefore, it was contended that these beneficiaries are also liable to share the transmission charges

7. The other beneficiaries named by MPSEB in its reply were not impleaded by the petitioner. Therefore, in their absence, it was not possible to take a view in the matter. The Commission by its order dated 22.9.2005, therefore, directed the petitioner to implead the other state utilities named by MPSEB. The petitioner was further directed to furnish copy of the petition to the newly impleaded respondents. In addition, Western Regional Power Committee and Western Regional Load Despatch Centre were also directed to be present at the hearing.

8. In compliance of the directions, the petitioner filed the amended cause title of the petition and also served copy of the petition on the newly impleaded respondents. However, none of them have filed any response, nor has any one of them appeared

before the Commission on the date fixed for hearing. Accordingly, we have decided to proceed further with the process of tariff determination.

### **CAPITAL COST**

9. As per clause (2) of regulation 52 of the 2004 regulations in case of the projects existing on 31.3.2004, the project cost admitted by the Commission for determination of tariff prior to 1.4.2004 shall form the basis for determination of tariff.

10. The petitioner has considered the capital expenditure of Rs.3012.57 lakh admitted by the Commission in the order dated 18.7.2003 *ibid*. The petitioner has not claimed any additional capitalisation on works. The petitioner has considered de-capitalisation of Rs.8.81 lakh on account of FERV for the period 1.4.2001 to 31.3.2004. Accordingly, gross block of Rs. 3003.76 lakh has been claimed by the petitioner for the purpose of tariff.

### **Extra Rupee Liability during the years 2001-04:**

11. 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.

12. 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.

13. De- capitalization of Rs. 8.81 lakh on account of FERV, which is matching with calculations submitted by the petitioner, has been admitted for tariff calculations.

14. Based on the above, gross block of Rs. 3003.76 lakh, including decapitalization of FERV of Rs. 8.81 lakh claimed, as on 1.4.2004 has been considered for the purpose of tariff.

#### **DEBT- EQUITY RATIO**

15. Regulation 54 of the 2004 regulations *inter alia* provides that,-

(1) In case of the existing project, 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.

(2) In case of the transmission system for which investment approval was accorded prior to 1.4.2004 and which is likely to be declared under commercial

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

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

Provided further that the Commission may in appropriate case consider equity higher than 30% for the purpose of determination of tariff, where the transmission licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% was in the interest of general public;

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

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

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

16. The petitioner has claimed tariff based on debt-equity of 77.95:22.05 as considered by the Commission in its order dated 18.7.2003 *ibid*. Accordingly, the petitioner has adjusted FERV amount against loan and equity as on 1.4.2004 on the basis of debt and equity ratio as per order dated 18.7.2003.

17. The petitioner in the petition has stated the approved debt-equity ratio as 80:20. Therefore, the entire amount of Rs. 8.81 lakh on account of decapitalization for FERV has been adjusted against equity so as to bring equity close to the approved debt-equity ratio. Based on this, Rs. 655.47 lakh has been considered as the equity for the purpose of determination of tariff in the present petition against equity of Rs.664.28 lakh considered in the order dated 18.7.2003.

### **RETURN ON EQUITY**

18. 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.

19. The petitioner has claimed return on equity of Rs. 662.34 lakh against equity of Rs. 664.28 lakh, considered in the order dated 18.7.2003 ibid after adjustment of equity of Rs.1.94 lakh for decapitalization of FERV. However, after adjustment of Rs. 8.81 lakh on account of decapitalization of FERV as per para 17 above, an amount of Rs. 655.47 lakh has been considered as equity. Accordingly, the petitioner shall be entitled to return on equity @ Rs. 91.77 lakh each year during the tariff period.

### **INTEREST ON LOAN**

20. As per clause (i) of Regulation 56 of the 2004 regulations,-

- (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 as per regulation 54 minus cumulative repayment as admitted by the Commission for the period up to 31.3.2004. The repayment for the period 2004-09 shall be worked out accordingly on normative basis.

(c) The transmission licensee shall make every effort to swap the loan as long as it results in net benefit to the long-term transmission customers. The costs associated with such swapping shall be borne by the long-term transmission customers.

(d) The changes to the loan terms and conditions shall be reflected from the date of such swapping and benefits passed on to the beneficiaries.

(e) 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.

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

(i) Gross loans, cumulative loan repayment up to previous year as admitted by the Commission in the order dated 18.7.2003 *ibid* have been taken as the Opening Balance as on 1.4.2004.

(ii) On the basis of actual rate of interest on average loan as worked out in the debt-equity ratio as admitted in order dated 18.7.2003 *ibid*, the weighted average rate of interest on loan is worked out for various years.

(iii) Gross loans as admitted by the Commission in order dated 18.7.2003 has been considered as notional loan and the weighted average rate of interest



on loan for respective years as per above has been multiplied to arrive at interest on loan.

(iv) In addition to above, Notional loan component of FERV up to 31.03.2001 as per para 2 as above have been considered separately and actual applicable rate of interest on Foreign Loan have been considered to workout the interest on this component.

22. In the calculation, the interest on loan has been worked as detailed below:

(i) Details of net outstanding loan as on 31.3.2004, repayment schedule for the period 2004-09, rate of interest as on 1.4.2004 etc .have been taken as per loan details submitted by the petitioner under its letter dated 31.8.2005, based on which loan allocation approved for the year 2003-04 has been reset for the instalments for the period 2004-09 for working out weighted average rate of interest.

(ii) Gross notional loan and cumulative repayment up to 31.3.2004 has been taken from the order dated 18.7.2003.

(iii) Notional loan arising out of de-capitalization on account of FERV has been worked out is nil.

(iv) Tariff is worked out considering normative loan and normative repayments. Once the normative loan is arrived at, it is considered for all purposes in the tariff. Normative repayment is worked out by the following formula:

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

(v) Moratorium in repayment of loan is 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 is considered as moratorium and depreciation during the year is deemed as normative repayment of loan during the year.

(vi) Weighted average rate of interest on actual loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

(vii) Corporation Bank, PNB and Bank of India, Cayman Island carry the floating rate of interest and rate of interest as applicable as on 1.4.2004 has 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.

23. The detailed calculations on interest on loan are given hereunder:

(Rs. in lakh)

Details of loan	Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
<b>Interest on Loan</b>						
Gross Loan Order 18.7.2003	2348.29					
Addition due to Additional Capitalisation	0.00					
Addition due to FERV	0.00					
Gross Normative Loan	2348.29	2348.29	2348.29	2348.29	2348.29	2348.29
Cumulative Repayment up to Previous Year		303.73	633.18	962.63	1292.08	1621.53
Net Loan-Opening		2044.56	1715.11	1385.66	1056.21	726.76
Repayment during the year		329.45	329.45	329.45	329.45	195.23
Net Loan-Closing		1715.11	1385.66	1056.21	726.76	531.53
Average Loan		1879.83	1550.38	1220.94	891.49	629.15
Weighted Average Rate of Interest on Loan		9.3492%	9.1298%	8.7919%	8.2042%	7.6436%
Interest		175.75	141.55	107.34	73.14	48.09

## **DEPRECIATION**

24. 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.

25. The gross depreciable value of the asset, as per (ii) above, is 0.9 x Rs. 3003.76 lakh=Rs. 2703.38 lakh. Cumulative depreciation and AAD recovered in tariff up to 31.3.2004 is Rs. 625.28 lakh. Remaining depreciable value as on 1.4.2004 is thus Rs. 2078.10 lakh. The petitioner shall be entitled to claim an amount of Rs. 81.39 lakh

each year during the tariff period on account of depreciation by applying rate or depreciation of 2.71%, as shown below:

		(Rs. in lakh)					
<b>Details of Depreciation</b>		<b>Up to 31.3.2004</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>
As per order dated 18.7.2003		3012.57					
Addition during 2001-04 due to Additional Capitalisation		0.00					
Addition during 2001-04 due to FERV		(-)8.81					
Gross Block as on 31.3.2004		3003.76	3003.76	3003.76	3003.76	3003.76	3003.76
Rate of Depreciation	2.710%						
Depreciable Value	90%		2703.38	2703.38	2703.38	2703.38	2703.38
Balance Useful life of the asset	-		-	-	-	-	-
Remaining Depreciable Value			2078.10	1996.71	1761.88	1527.05	1292.22
Depreciation			81.39	81.39	81.39	81.39	81.39

### **ADVANCE AGAINST DEPRECIATION**

26. 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 1/10th of loan amount as per regulation 54 minus depreciation as per schedule.

27. 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.

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

- (i) 1/10th of gross loan is worked out from the gross notional loan admitted by the Commission order dated 18.7.2003.
- (ii) Cumulative loan as well as repayment of notional loan during the year have been considered.
- (iii) Depreciation as claimed in the petition.
- (iv) In cumulative depreciation, Advance Against Depreciation allowed up to 2003-04 as per order dated 18.7.2003 ibid has not been considered.

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

- (i) 1/10th of gross loan has been worked out from the gross notional loan as per para 23 above.
- (ii) Cumulative loan as well as repayment of notional loan during the year has been considered as per para 23 above.
- (iii) Depreciation as worked out as per para 25 has been taken into account.
- (iv) In cumulative depreciation recovered up to 2003-04, Advance Against Depreciation has been included as per order dated 18.7.2003 ibid.

30. The details of Advance Against Depreciation allowed for the transmission system, is given hereunder:

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
1/10th of Gross Loan(s)	234.83	234.83	234.83	234.83	234.83
Repayment of Loan	329.45	329.45	329.45	329.45	195.23
Minimum of the above	234.83	234.83	234.83	234.83	195.23
Depreciation during the year	81.39	81.39	81.39	81.39	81.39
(A) Difference	153.43	153.43	153.43	153.43	113.84
Cumulative Repayment of the Loan	633.18	962.63	1292.08	1621.53	1816.76
Cumulative Depreciation/ Advance against Depreciation	706.68	788.07	1022.90	1257.73	1492.56
(B) Difference	(-)73.50	174.56	269.18	363.80	324.20
<b>Advance Against Depreciation Minimum of (A) and (B)</b>	0.00	153.43	153.43	153.43	113.84

## **OPERATION & MAINTENANCE EXPENSES**

31. 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

32. The petitioner has claimed O & M expenses for 184 ckt. kms and one bay at Korba, which has been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

(Rs. in lakh)

	Year				
	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses for 184 ckt. Km line length	41.77	43.42	45.26	46.92	48.94
O&M expenses for one bay	28.12	29.25	30.42	31.63	32.90
<b>Total</b>	<b>69.89</b>	<b>72.67</b>	<b>75.68</b>	<b>78.55</b>	<b>81.84</b>

33. 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**

34. 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 of Rs. 3001.94 lakh on the date of commercial operation 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. The value of maintenance spares as on 1.4.2004 works out to Rs. 39.23 lakh.

**(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 is in accordance with the 2004 regulations and has been allowed.

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

	(Rs. in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	39.23	41.58	44.07	46.72	49.52
O & M expenses	5.82	6.06	6.31	6.55	6.82
Receivables	71.80	92.53	87.29	82.03	71.68
Total	116.85	140.16	137.67	135.29	128.02
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
<b>Interest</b>	<b>11.98</b>	<b>14.37</b>	<b>14.11</b>	<b>13.87</b>	<b>13.12</b>

### **TRANSMISSION CHARGES**

36. A summary sheet showing basic details of capital cost and other related aspects is annexed to this order. The transmission charges being allowed for the transmission system are summarised below.

	(Rs. in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	81.39	81.39	81.39	81.39	81.39
Interest on Loan	175.75	141.55	107.34	73.14	48.09
Return on Equity	91.77	91.77	91.77	91.77	91.77
Advance against Depreciation	0.00	153.43	153.43	153.43	113.84
Interest on Working Capital	11.98	14.37	14.11	13.87	13.12
O & M Expenses	69.89	72.67	75.68	78.55	81.84
<b>Total</b>	<b>430.78</b>	<b>555.18</b>	<b>523.73</b>	<b>492.15</b>	<b>430.05</b>



37. 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.

### **Sharing of charges**

38. MPSEB in its reply has stated that from the year 2003 onwards, all the constituents of Western Region except Goa are importing power from Eastern Region. Therefore, MPSEB has contended that since other states in Western Region are also using the transmission system, sharing of charges for the transmission system should be as in cases of other inter-regional assets, i.e. in the ratio of 50:50 by Western and Eastern Regions. Gujarat Electricity Board (GEB) vide affidavit dated 28.8.2004, has also made a similar submission.

39. Member Secretary, WREB has given following details of the energy scheduled by Western Region constituents from the generating stations owned by National Thermal Power Corporation in Eastern Region.

Year : 2004-05

(in MUs)

Month	GEB	MPSEB	CSEB	MSEB	GOA	DD	DNH	Total
April-04	41.47	157.24	0.00	41.47	0.00	13.48	12.95	266.61
May-04	41.41	153.11	0.00	46.96	0.00	13.46	12.93	267.86
June-04	38.13	128.60	0.00	57.49	0.00	12.39	11.91	248.51
July-04	38.88	160.51	0.00	46.32	0.00	12.64	12.14	270.49
Aug-04	28.78	125.91	0.00	75.53	0.00	9.35	8.99	248.56
Sep-04	39.20	157.24	0.00	102.86	0.00	12.74	12.25	324.27
Oct-04	31.66	139.97	0.00	50.13	0.00	13.72	13.19	248.67
Nov-04	30.96	127.25	0.00	48.95	0.00	12.34	13.38	232.87
Dec-04	31.75	112.49	17.97	50.19	0.00	13.63	13.29	239.32
Jan-05	31.28	96.38	24.44	49.46	0.00	13.51	13.02	228.09
Feb-05	31.16	103.83	24.35	49.27	0.00	13.46	12.97	235.03
Mar-05	34.14	85.89	26.68	53.97	0.00	14.74	14.21	229.62
Total	418.81	1548.41	93.44	672.58	0.00	155.46	151.23	3039.92

Year: 2005-06 (Upto Sept. 2005)

(in MUs)

Month	GEB	MPSEB	CSEB	MSEB	GOA	DD	DNH	Total
April-05	29.81	75.55	23.31	47.14	0.00	12.88	12.42	201.11
May-05	37.98	86.45	2.31	61.45	0.00	13.07	12.60	213.85
June-05	38.34	82.37	27.14	62.16	0.00	12.77	12.44	235.22
July-05	37.34	62.66	28.38	60.55	0.00	12.58	12.12	213.63
Aug-05	42.80	62.78	31.87	69.18	0.00	14.41	13.89	234.93
Sep-05	41.42	58.77	34.10	70.17	0.00	14.65	14.11	233.21
Total	227.69	428.57	147.11	370.65	0.00	80.35	77.58	1331.951

40. Member Secretary, WREB has submitted that the present allocation of power to Western Region constituents from NTPC stations in Eastern Region is as under:

Constituent	in MW
GUVNL	77
MPSEB	175
CSEB	60
MSEB	125
Goa	0
DD	26
DNH	25
Total	488

41. Member Secretary, WREB has stated that in view of the fact that other constituents of Western Region (except Goa) other than MPSEB and GEB are drawing power from Eastern Region, they have to pay wheeling charges to MPSEB and GEB for utilizing the transmission system. Therefore, Member Secretary, WREB has suggested that 2/3rd of the charges for the transmission system should be pooled in the total transmission charges of Western Region.

#### **Options for consideration of the Commission**

42. In the Statement of reasons dated 10.2.2005 in support of the amendments in open access regulations, the Commission has already decided that w.e.f. 1.4.2005, in case of use of inter-regional assets for wheeling of allocated power or power flowing pursuant to long-term contract, transmission charges *prorata* to the capacity used, shall be payable by the users. The balance charges, after deducting adjustable part

(presently 87.5% of inter-regional lines) of the recovery from short-term customers shall be shared by the long-term customers of the two contiguous regions in the ratio of 50:50 as reliability support charges (upto 31.3.2005, charges are to be shared between the long-term customers after deducting revenue from the short-term customers). Since the transmission system is also an inter-regional asset, the same principle may be applied, except as regards the ratio for sharing of the charges. The options on the question of sharing available are as under:

**Option I:** No change in sharing formula, that is, sharing in the ratio of 1/3:1/2:1/6 between long-term customers in ER, (MPSEB+CSEB) and GEB respectively as per the order dated 18.7.2003, as clarified in subsequent orders on the subject.

**Option- II :** Sharing in the ratio of 50:50 by the long-term customers of Eastern and Western Regions like other inter-regional lines operating so far.

**Option- III :** 1/3 of the charges may continue to be shared by the long-term customers in Eastern Region. Remaining 2/3 of the charges to be shared by the long-term customers of Western Region.

43. Drawal of power from Eastern Region by other entities in Western Region only establishes the fact that these entities are using this line but it does not necessarily lead to conclusion that sharing for this line should also be on 50:50 basis like other inter-regional lines in use so far. It may be recalled that the Commission in its statement of reasons dated 10.2.2005 in support of the amendment in open access regulations has already held that the sharing on the basis of 50:50 may not be applied on all future inter-regional lines. The sharing for future inter-regional lines may be decided on case to case basis based on relative benefit to the beneficiaries of the two regions. Therefore, if contention of MPSEB is accepted there will be no alternative but

to provide sharing for future lines also on 50:50 basis. Further, since Eastern Region constituents had agreed to share only 1/3 of the charges for this line prior to its construction, it may not be fair to increase their share to 50% now. Therefore, option-II is not favoured.

44. Option-I also does not seem to be fair. The reason for this special sharing formula decided by the Commission at the time of awarding tariff for the first time was that Eastern Region constituents had agreed to share 1/3 of the charges and MPSEB had stated that it was willing to share 50% of the charges when the line was conceived. GEB was drawing power from Eastern Region but all other constituents in Western Region had stated that they shall not be importing power from Eastern Region. Copy of the affidavit dated 6<sup>th</sup> July 2000 submitted by MSEB in Petition No. 9/2000 stating that it does not wish to import power from Eastern Region and hence would not share cost of this line is enclosed as Annex. Therefore, now that it has come to the notice of the Commission that other constituents of Western Region are also importing power from Eastern Region w.e.f. 23.4.2003, it may be fair to stipulate sharing as per Option-III i.e. in the ratio of 1/3:2/3 between long-term customers of Eastern Region and Western Region respectively. Goa, which is presently not importing power from ER, will also get reliability benefits of this line and should share charges for this line.

45. We direct that charges for the transmission system shall be shared in the ratio of 1/3:2/3 between the long-term customers in Eastern and Western Regions respectively w.e.f. 1.4.2004. Within the region, the long-term customers are to share transmission charges in the ratio of their allotted transmission capacity, as defined in the

2004 regulations. This may not be seen as changing the sharing retrospectively as charges w.e.f. 1.4.2004 are presently being paid on provisional basis only.

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

47. This order disposes of Petition No. 69/2004.

Sd/-  
**(A.H.JUNG)**  
**MEMBER**

Sd/-  
**(BHANU BHUSHAN)**  
**MEMEBER**

Sd/-  
**(K.N.SINHA)**  
**MEMBER**

Sd/-  
**(ASHOK BASU)**  
**CHAIRPERSON**

**New Delhi dated the 16<sup>th</sup> March, 2006**

Summary Sheet				
<b>Name of the Company:</b>		PGCIL		
<b>Name of the Element:</b>		Korba-Budhipadar Transmission system		
<b>Actual DOCO:</b>		1.9.1999		
<b>Petition No.:</b>		69/2004		
<b>Tariff setting Period:</b>		2004-09		
(Rs.in lakh)				
<b>1</b>	<b>Capital Cost of the Project</b>			<b>3553.00</b>
<b>2</b>	<b>Admitted Capital Cost as on 1.4.2004 for Calculation of Debt and Equity<sup>1</sup></b>			<b>3012.57</b>
<b>3</b>	<b>Additional Capitalization(works)</b>			<b>0.00</b>
	2001-02		0.00	
	2002-03		0.00	
	2003-04		0.00	
	Total		0.00	
<b>4</b>	<b>Additional Capitalization(FERV)</b>			<b>-8.82</b>
	2001-02		7.13	
	2002-03		-3.88	
	2003-04		-12.07	
	Total		-8.82	
<b>5</b>	<b>Total Capital Cost as on 1.4.2004(2+3+4)</b>			<b>3003.76</b>
<b>6</b>	<b>Means of Finance<sup>1</sup> :</b>			
	Debt	78.18%	2348.29	
	Equity	21.82%	655.47	
	Total	100.00%	3003.76	
<b>7</b>	<b>Gross Loan as on 1.4.2004</b>			<b>2348.29</b>
	<b>Cumulative Repayment up to 31.3.2009 :</b>			<b>1816.76</b>
	Repaid up to 31.3.2004		303.73	
	1.4.2001 to 31.3.2004 (ACE & FERV)		0.00	
	1.4.2004 to 31.3.2009		1513.03	
	Total		1816.76	
<b>8</b>	<b>Balance Loan to be repaid beyond 31.3.2009 :</b>			<b>531.53</b>
<b>9</b>	<b>Depreciation recovered up to 31.03.09 :</b>			<b>1606.40</b>
		<b>Dep</b>	<b>AAD</b>	<b>Total</b>
	Recovered up to 31.3.2004	511.06	114.06	625.12
	1.4.2001 to 31.3.2004 (ACE & FERV)	0.16	0.00	0.16
	1.4.2004 to 31.3.2009	406.97	574.15	981.12
	Total			1606.40
<b>12</b>	<b>Balance Depreciation to be recovered beyond 31.3.2009 :</b>			<b>1096.98</b>
	Capital cost for the purpose of Depreciation			3012.57
	ACE + FERV			-8.82
	Capital cost as 1.4.2004			3003.76
	Less: Land Cost			0.00
				3003.76
	90% of Capital Cost as above			2703.38
	Cum. Depreciation to be recovered up to 31.3.09			1606.40
	Balance Depreciation to be recovered beyond 31.3.09			1096.98