

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

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

Petition No. 96/2004

In the matter of

Approval of transmission charges for Rihand transmission system in Northern region for the period from 1.4.2004 to 31.3.2009 .

And in the matter of

Power Grid Corporation of India Limited

....Petitioner

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd, Jaipur
2. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
4. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Vidyut Prasaran Nigam Ltd, Panchkula
8. Power Development Department, Govt. of J&K, Srinagar
9. Uttar Pradesh Power Corporation Ltd., Lucknow
10. Delhi Transco Ltd, New Delhi
11. Chandigarh Administration, Chandigarh
12. Uttranchal Power Corporation Ltd, Dehradun
13. Northern Railway, Baroda House New Delhi

Respondents

The following were present:

1. Shri P.C. Pankaj, PGCIL
2. Shri U.K. Tyagi, PGCIL
3. Shri C. Kannan, PGCIL
4. Shri Prasant Sharma, PGCIL
5. Shri. S.N. Joshi, JAVVNL
6. Shri. A.K Tandon, UPPCL

ORDER
(DATE OF HEARING: 7.9.2005)

The petition has been filed for approval of transmission charges for Rihand transmission system (the transmission system) in Northern Region for the period from 1.4.2004 to 31.3.2009 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (hereinafter referred to as "the 2004 regulations"). The petitioner had 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. The petitioner has vide its affidavit dated 30.5.2005 prayed for reimbursement of Rs. 1,73,384/= spent for publication of notice for tariff application. No other specific relief is prayed for.

2. Approval of Ministry of Power for setting up transmission system associated with Rihand STPP-I was accorded vide letter dated 31.5.1989 at a total capital cost of Rs. 1063.00 crore including IDC of Rs. 38.50 crore. Subsequently, the cost estimate was revised vide Ministry of Power letter dated 19.4.1995 for capital investment of Rs. 1460.58 crore including IDC of Rs. 130.97 crore. Date of commercial operation of the various transmission lines and associated sub-stations comprising the project are between 1.3.1988 and 30.6.1992. Details of the lines comprising the transmission system, their dates of commercial operation and ckt km are as hereunder:

S. No.	Name of the transmission line	Date of commercial operation	Actual line length in ckt km (for O & M)
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(i)	400 kV Rihand-Singrauli - I S/C line	1.3.1988	42.03
(ii)	400 kV Rihand-Singrauli-Vindhyachal-Kanpur S/C line	26.12.1988	441.95
(iii)	400 kV Kanpur – Ballabgarh S/C Line	10.10.1988	385.60
(iv)	400 kV Ballabgarh – Jaipur S/C line	10.10.1988	226.00
(v)	400 kV Ballabgarh – Dadri D/C line (Ckt-I) (Ckt-II)	22.6.1990 1.7.1990	53.40 53.40
(vi)	400 kV Dadri – Mandola D/C line	22.11.1990	92.60
(vii)	400 kV Dadri – Malerkota S/C line	30.6.1992	297.22
(viii)	400 kV Bassi – Heerapura I S/C line	14.3.1987	47.76
(ix)	400 kV Bassi – Heerapura II S/C line	14.3.1987	48.99
(x)	500 kV Rihand - Dadri HVDC (Pole I) (Pole II)	10.1.1992 20.5.1991	815.00 815.00
(xi)	33 kV Rihand - Chapki S/C line	10.1.1992	26.00
(xii)	33 kV Rihand - Dankar S/C line	10.1.1992	26.00
	Total		3370.95

3. The tariff for the block 2001-2004 was decided by the Commission in its order dated 26.2.2004 in Petition No. 38/2002 at a gross block of Rs. 128557.88 lakh including Agra Reactor and additional capitalization on account of FERV up to 31.3.2001.

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

	(Rs. in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	4019.15	4019.15	4019.15	4019.15	4019.15
Interest on Loan	273.28	186.86	97.63	25.88	0.00
Return on Equity	6487.56	6487.56	6487.56	6487.56	6487.56
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	586.51	607.59	629.97	653.90	680.24
O & M Expenses	2621.13	2726.04	2836.97	2947.17	3068.07
Total	13987.62	14027.21	14071.28	14133.67	14255.03

5. 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
Maintenance Spares	3172.33	3362.67	3564.43	3778.30	4005.00
O & M expenses	218.43	227.17	236.41	245.60	255.67
Receivables	2331.27	2337.87	2345.21	2355.61	2375.84
Total	5722.03	5927.71	6146.06	6379.51	6636.51

Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	586.51	607.59	629.97	653.90	680.24

6. The replies to the petition have been filed by Jodhpur Vidyut Vitaran Nigam Ltd, Ajmer Vidyut Vitaran Nigam Ltd., Punjab State Electricity Board and Jaipur Vidyut Vitaran Nigam Ltd. No comments or suggestion have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003.

Additional capital Expenditure during the years 2001-04

7. Regulation 1.10 of the CERC (Terms and Conditions of Tariff) Regulations,2001 provides that tariff revisions during the tariff period on account of capital expenditure within the approved project cost incurred during the tariff period may be entertained by the Commission only if such expenditure exceeds 20% of the approved cost. In all cases, where such expenditure is less than 20%, tariff revision shall be considered in the next tariff period.

8. The petitioner has claimed decapitalisation of Rs. 167.32 lakh due to burning out of ICT at Ballabgarh in July 2000 and additional capitalisation of Rs. 408.89 lakh incurred in its replacement in September 2000. As the cost of replacement was to be met through the insurance cover, there is no justification for considering this for the purpose of tariff determination. Accordingly, for the purpose of tariff calculation, neither the decapitalisation due to the burning out of ICT in July 2000 nor the additional capitalisation on account of the installation of new ICT in September 2000 has been considered. Only the decapitalisation on account of replaced assets at Ballabgarh amounting to Rs. 34.68 lakh is considered for the purpose of tariff calculation.

CAPITAL COST

9. As per clause (2) of Regulation 52 of the 2004 regulations in case of the projects existing as 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. The petitioner has submitted the following details of capital expenditure in the amended petition:

(Rs in lakh)	
Capital Expenditure as per Commission's order dated 26.2.2004 for the block 2001-2004	128557.88
Gross Block of Old ICT-II at Ballabgarh burnt during July 2000 to be decapitalised	(-)167.32
Cost of New ICT procured from BHEL to replace the burnt ICT at Ballabgarh to be capitalised	408.89
Capital Cost as on 1.4.2001	128799.45
Original cost of the replaced asset including FERV capitalised as per Commission's order dated 13.4.2005 in Petition No. 110/2002 to be decapitalised	(-)34.68
Total Capital cost as on 31.3.2004	128764.77

10. However, as mentioned in para 8 above, neither the decapitalisation on account of burning out of ICT at Ballabgarh nor capitalisation arising out of its replacement is being considered.

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 provides 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 The petitioner has claimed Rs. 854.90 lakh towards FERV for the period 2001-04. FERV worked out by the petitioner for the period up to 31.3.2004 is in accordance with AS-11 and matches with our calculation. Accordingly, FERV claimed is considered for the purpose of tariff calculation.

14. Based on the above, gross block of Rs. 129378.10 lakh is considered as per the following details:

(Rs. In lakh)	
Cost approved in the order dated 26.2.2004	128557.88
Decapitalisation on account of replaced assets at Ballabgargh	(-)34.68
FERV due for block 2001-04	854.90
Capital cost as on 1.4.2004	129378.10

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 50:50 as admitted in the order dated 26.2.2004. While computing debt-equity ratio, the petitioner has segregated decapitalisation during 2000-01 and 2002-03 amounting to Rs. 167.32 lakh and Rs. (-)34.68 on the basis of debt–equity ratio as per the order dated 26.2.2004. However, it has treated the capitalisation amount of Rs. 408.89 lakh entirely as equity.

17. In our calculation, debt-equity ratio allowed to finance the capital expenditure in the order dated 26.2.2004 has been considered. Decapitalisation during 2002-03 and FERV for the years 2001-04 for various assets have been segregated in notional loan and notional equity in the debt-equity ratio as per the above order. Accordingly,. The debt-equity ratio considered in the present petition is 50:50.

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. 46339.69 lakh. However, equity for the purpose of tariff, as on 1.4.2001, had been arrived at in the order dated 26.2.2004 as Rs. 45604.35 lakh. Taking into account decapitalisation of Rs. 34.68 lakh and adding additional capitalisation of Rs. 854.90 lakh, during 2001-04, the equity as on 1.4.2004 is taken as 46014.46 lakh. Accordingly, the petitioner shall be entitled to return on equity @ 6442.02 lakh for each year during the tariff period.

INTEREST ON LOAN

20. 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 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 of any dispute, any of the parties may approach the Commission with proper application. However, the long term transmission customers shall not withhold any payment ordered by the Commission to the transmission licensee during pendency of any dispute relating to swapping 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 swapping of loan and interest on loan.

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 26.2.2004 *ibid* has been taken as the opening balance as on 1.4.2004

(ii) The petitioner has adjusted the loan figures on account of replacement of Government of India loan with LIC Tr.III on 17.3.2003. This has resulted in difference in the figures of repayment during 2003.04 and closing balance on 31.3.2004.

(iii) 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.

(iv) Gross loans as admitted by the Commission in the order dated 26.2.2004 *ibid* and adjusted as per (ii) above, 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.

- (v) Notional loan component of FERV upto 31.3.2001 as per para 16 above have been included and weighted average rate of interest as per (ii) have been considered.

22. In our calculation, the interest on loan has been worked out 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 from the loan reconciliation statement for working out weighted average rate of interest.

- (ii) Gross loan and cumulative repayment up to 31.3.2004 has been taken from the order dated 23.10.2003 which has been adjusted in respect of Government of India loan/LIC Tr.III refinancing.

- (iii) Notional loan arising out of FERV during the years 2001-04 has been considered.

- (iv) Repayment of notional loan arising due to decapitalisation during the years 2002-03 and FERV during the years 2001-04 has been worked out by the following formula:

$$\frac{\text{Actual repayment of actual loan during each year}}{\text{-----}} \times (\text{Op.bal. + Addition of normative loan during corresponding Yr.})$$

Opening balance of actual loan during corresponding year

(v) Tariff is worked out considering normative loan and normative repayments. Normative repayment is worked out by the following formula:

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

(vi) 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.

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

(viii) In case of loans carrying the floating rate of interest namely IBRD-I, rate of interest as applicable on 1.4.2004 has been in the calculation subject to mutual settlement between the parties in case of any change/resetting of the interest rate during the tariff period.

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

(Rs. in lakh)						
Details of loan	Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan						

Gross loan as per order dated 23.10. 2003	45604.35					
Addition due to additional capitalisation	(17.34)					
Addition due to FERV	427.45					
Gross Normative Loan	46014.45	46014.45	46014.45	46014.45	46014.45	46014.45
Cumulative Repayment up to Previous Year		40678.43	44688.88	46014.45	46014.45	46014.45
Net Loan-Opening		5336.02	1325.57	0.00	0.00	0.00
Repayment during the year		4010.45	1325.57	0.00	0.00	0.00
Net Loan-Closing		1325.57	0.00	0.00	0.00	0.00
Average Loan		3330.79	662.78	0.00	0.00	0.00
Weighted Average Rate of Interest on Loan		4.8654%	5.0300%	5.3488%	5.8555%	6.1877%
Interest		162.06	33.34	0.00	0.00	0.00

DEPRECIATION

23. 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.

24. Land cost included in the capital cost of the asset is Rs. 721.86 lakh. Thus, the gross depreciable value of the transmission system, as per (ii) above, is $0.9 \times \text{Rs. } 129378.10 \text{ lakh} - 721.86 \text{ lakh} = \text{Rs. } 115790.61 \text{ lakh}$ as on 1.4.2004. Cumulative depreciation and AAD recovered in tariff up to 31.3.2004 is Rs.82224.06 lakh. Remaining depreciable value as on 1.4.2004 is thus Rs. 33566.55 lakh.

25. Depreciation for the period 1.4.2004 to 31.3.2009 works out as shown below:

		(Rs. in lakh)					
Details of Depreciation		Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
As per order dated 23.10.2003	128557.88						128557.88
Addition during 2001-04 due to Additional Capitalisation	(34.68)						(34.68)
Addition during 2001-04 due to FERV	854.89						854.89
Gross Block as on 31.3.2004	129378.10	129378.10	129378.10	129378.10	129378.10	129378.10	129378.10
Rate of Depreciation	3.0998%						
Depreciable Value	90%		115790.61	115790.61	115790.61	115790.61	115790.61
Balance Useful life of the asset	17		17	16	15	14	13
Remaining Depreciable Value			33566.55	29556.10	25545.65	23842.60	22139.56
Depreciation			4010.45	4010.45	1703.04	1703.04	1703.04

26. As entire notional loan is repaid before the tariff period under consideration, the remaining depreciable value is spread over the balance useful life of the asset. As the weighted average useful life of the asset is 30 years, balance useful life of the asset as on 1.4.2004 has been worked out as 17 years.

ADVANCE AGAINST DEPRECIATION

27. 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.

28. 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.

29. The petitioner has not claimed Advance Against Depreciation. Accordingly, the petitioner's entitlement to Advance Against Depreciation is, therefore, zero.

OPERATION & MAINTENANCE EXPENSES

32. 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

33. In respect of the assets covered in the present petition total line length is 3370.95 ckt kms and there are 66 bays. 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 3370.95 ckt.km line length	765.21	795.54	829.25	859.59	896.67
O&M expenses for 66 bays	1855.92	1930.50	2007.72	2087.58	2171.40
Total	2621.13	2726.04	2836.97	2947.17	3068.07

34. 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

35. 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. As per the earliest Government of India Notification, the cost is 1247.76 crore. This 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. 1876.17 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 of 2 months' transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 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.

36. 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	1876.17	1988.74	2108.06	2234.55	2368.62
O & M expenses	218.43	227.17	236.41	245.60	255.67
Receivables	2280.69	2278.76	1902.90	1923.94	1946.95
Total	4,375.29	4,494.67	4,247.38	4,404.09	4,571.24
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	448.47	460.70	435.36	451.42	468.55

TRANSMISSION CHARGES

37. 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	4010.45	4010.45	1703.04	1703.04	1703.04
Interest on Loan	162.06	33.34	0.00	0.00	0.00
Return on Equity	6442.02	6442.02	6442.02	6442.02	6442.02
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	448.47	460.70	435.36	451.42	468.55
O & M Expenses	2621.13	2726.04	2836.97	2947.17	3068.07
Total	13684.13	13672.55	11417.39	11543.66	11681.69

IMPACT OF ADDITIONAL CAPITALISATION DURING THE YEARS 2001-2004

38. In the petitions filed by NTPC for approval of revised fixed charges for additional capitalization for the period 1.4.2001 to 31.3.2004, the Commission has decided that additional capital expenditure be added to the gross block as on 1.4.2001 to arrive at the gross block as on 1.4.2004 for the purpose of fixation of tariff for the period 2004-05 to 2008-09. the Commission has further ordered that NTPC would be entitled to earn return on equity @ 16% on equity portion of additional capitalization approved and interest on loan at the rate as applicable during 2001-02 to 2003-04. The return on equity and interest on loan are payable on additional capitalization from 1st April of the financial year following the financial year to which additional capital expenditure relates. Impact of de-

capitalisation for the years 2001-04 in respect of the transmission assets being considered in this petition as shown below, shall be payable by the petitioner to the respondents from the tariff for the current period:

(Rs. in Lakh)					
		2001-02	2002-03	2003-04	Total
Additional Capitalisation		0.00	(34.68)	0.00	(34.68)
Financing of Additional Capitalisation					
Notional Loan		0.00	(17.34)	0.00	(17.34)
Notional Equity		0.00	(17.34)	0.00	(17.34)
Total		0.00	(34.68)	0.00	(34.68)
Effective Additional Capitalisation					
Opening Loan Balance		0.00	0.00	(13.61)	
Addition of Loan		0.00	(17.34)	0.00	(17.34)
Repayment of Loan		0.00	(3.73)	(3.09)	(6.81)
Closing Loan Balance		0.00	(13.61)	(10.53)	
Effective Loan			0.00	(13.61)	
Weighted Average Rate of Interest on Loan		8.1122%	8.5687%	7.2877%	
Effective Equity			0.00	(17.34)	
Interest on Loan			0.00	(0.99)	(0.99)
Return on Equity	16%		0.00	(2.77)	(2.77)
Impact of Additional Capitalisation			0.00	(3.76)	(3.76)

39. The petitioner has sought approval for the reimbursement of expenditure of Rs. 1,73,884/- incurred on publication of notices in the newspapers. The petitioner shall claim reimbursement of the said expenditure directly from the respondents in one installment in the ratio applicable for sharing of transmission charges. 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.

40. 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. These transmission charges shall be included in the regional transmission tariff for Southern Region and shall be shared by the regional beneficiaries in accordance with the 2004 regulations.

41. 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.

42. This order disposes of Petition No.96/2004.

(BHANU BHUSHAN)
MEMBER

(K.N.SINHA)
MEMBER

(ASHOK BASU)
CHAIRPERSON

New Delhi dated the 9th May 2006

Summary Sheet

Name of the Company:		PGCIL	
Name of the Element:		Rihand Transmission System including Agra Reactor in Northern Region	
Actual DOCO:		Oct.,88-June,97 as per prior period tariff Order and March,1987 to June,1996 as per input of Engg. Division	
Petition No.:		96/2004	
Tarrif setting Period:		2004-09	
(Rs.in lacs)			
1 Capital Cost of the Project		128557.88	
2 Cumulative depreciation recovered as on 31.03.97		37349.19	
3 Net Fixed Assets as on 1.4.1997		91208.69	
4 Admitted Capital Cost as on 01.04.2004 for Calculation of Debt and Equity¹		91208.69	
5 Additional Capitalisation(works)		-34.68	
For the year 2001-02		0.00	
For the year 2002-03		-34.68	
For the year 2003-04		0.00	
Total		-34.68	
6 Additional Capitalisation(FERV)		854.89	
For the year 2001-02		-101.58	
For the year 2002-03		689.43	
For the year 2003-04		267.04	
Total		854.89	
7 Total Capital Cost as on 01.04.2004(4+5+6)		92028.91	
8 Means of Finance¹ :			
Debt		50.00%	46014.45
Equity		50.00%	46014.45
Total		100.00%	92028.91
9 Gross Loan as on 01.04.2004		46014.45	
10 Cumulative Repayment upto 31.3.2009 :		46014.45	
Repaid upto 31.03.2004		40544.39	
From 01.04.01 to 31.03.2004 (ACE & FERV)		134.05	
From 01.04.2004 to 31.03.2009		5336.02	
Total		46014.45	
11 Balance Loan to be repaid beyond 31.03.2009 :		0.00	
12 Depreciation recovered upto 31.03.09 :		95354.09	
	Dep	AAD	Total
Recovered upto 31.03.2004	82195.74	0.00	82195.74
From 01.04.01 to 31.03.2004 (ACE & FERV)	28.32	0.00	28.32
From 01.04.2004 to 31.03.2009	13130.03	0.00	13130.03
Total			95354.09
13 Balance Depreciation to be recovered beyond 31.03.2009 :		20436.52	
Capital cost for the purpose of Depreciation		128557.88	
ACE + FERV		820.21	
Capital cost as 01.04.2004		129378.10	
Less: Land Cost		721.86	
		128656.23	
90% of Capital Cost as above		115790.61	
Cum. Depreciation to be recovered upto 31.03.09		95354.09	
Balance Depreciation to be recovered beyond 31.03.09		20436.52	
<p>¹The tariff was set by GOI for the period upto 31.03.2001 vide notification GoI Notification F no. 2/3/Powergrid/Tariff/98 dated 16.11.1998 and no. GoI Notification F no. 2/3/Powergrid/Tariff/99(10) dated 14.05.1999 on NFA on basis .The same was adopted by the Commission in petition 38/2002 pertaining to tariff period 2001-04.Accordingly,the Gross Block as on 01.04.1997 considered was Rs.124776lacs only .Cumulative depreciation recovered upto 31.03.1997 amounting to Rs.37349.19 lacs was deducted to arrive at NFA as on 31.03.1997 amounting to Rs.87426.81 lacs.Adding FERV upto 31.03.2001 amounting to Rs.3781.88 lacs the capital cost considered in petition 38/2002 for the purpose of segregating in to debt and equity in 50:50 ratio was Rs.91208.69 lacs.Decapitalisation and FERV during 2001-04 amounting Rs.(-) 34.68 and Rs.854.89 lacs respectively have been added to arrive at capital cost as on 1.04.2004.</p>			