

9. Uttar Pradesh Power Corporation Limited, Lucknow
 10. Delhi Transco Limited, New Delhi
 11. Chandigarh Administration, Chandigarh
 12. Uttaranchal Power Corporation Limited, Dehradun
 13. Chief Electrical Distribution Engineer, Northern Railway, New Delhi..
- Respondents**

ORDER

In these petitions, the petitioner, Power Grid Corporation of India Ltd had sought approval for tariff in respect of its various transmission systems 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”). On completion of pleadings and after hearing the parties, final tariff in respect of various elements of the transmission systems for the period 1.4.2004 to 31.3.2009 was awarded. The details of the orders, capital cost considered in the orders and final tariff awarded by the Commission are given in Annexures I to IV of this order.

2. Tamil Nadu Electricity Board (TNEB) filed Appeal No. 135/2005 in the Appellate Tribunal for Electricity (the Tribunal) against order dated 30.6.2006 of the Commission in Petition No 40/2002, vide which while fixing transmission tariff in respect of 400 kV D/C Kaiga-Sirsi transmission line along with associated bays for the period 1.4.2001 to 31.3.2004, the methodology similar to that adopted in respect of the Transmission System was followed. TNEB had, *inter alia*, questioned the methodology of bifurcation of FERV into debt and equity for the purpose of tariff determination. This appeal, as also some other linked appeals were disposed of by the Tribunal through a common judgment dated 4.10.2006. The Tribunal vide its judgment dated 4.10.2006 held as under:

“16. According to Explanation 1 to clause 4.4 (c), the premium raised by the Transmission Utility while issuing share capital and investment of internal resources created out of free reserve of the existing utility, if any, for the funding of the project, shall also be reckoned as paid up capital for the purpose of computing the return on equity subject to fulfillment of certain conditions. Explanation also makes no provision for increasing the equity beyond 50% of the book value of the transmission system. Once the fixed cost has been agreed to be financed in a certain ratio of debt and equity, the equity can be affected by FERV only if the equity is in foreign exchange. The provision of FERV as a pass through has been kept to ensure that any liability or gain, if any, arising on account of any variation in foreign exchange rates (whether debt or equity) is passed on to the beneficiary. In case there is no FERV liability or gain, as the case may be, there will not be any FERV adjustment. In the instant case the additional liability arising on account of FERV shall have an impact only on the debt liability and not equity capital. In this view of the matter, we hold that FERV adjustment is to be made in respect of debt liability and not in respect of the equity. Accordingly, we hold that the CERC is only to make adjustment in respect of debt liability and not in respect of the equity.

17. In view of the aforesaid discussion, the appeal is partly allowed to the extent indicated above. The Central Electricity Regulatory Commission shall re-calculate the effect of FERV on the debt liability.”

3. The above decision was reiterated by the Tribunal in its judgment dated 22.12.2006 in Appeal No 161 Of 2006 (M.P. State Electricity Board Vs. Power Grid Corporation of India and Others) which related to transmission tariff for Vindhyachal Stage -I Additional Transmission System in Western Region for the period 1.4.2001 to 31.3.2004.

4. The decision of the Tribunal, involving interpretation of the notification dated 16.12.1997 of Ministry of Power, is considered to be judgment *in rem* and thereby has universal application in all the cases of similar nature. Accordingly, it has been decided to apply the ratio of the judgment in all similar cases and re-calculate the tariff in accordance with the judgment of the Tribunal.

5. In terms of judgment dated 4.10.2006 of the Tribunal in Appeal No 135 of 2005 and other related appeals, addition of notional equity on account of FERV is

not to be considered for computation of return on equity. As a consequence, the entire amount of FERV shall form part of loan.

6. Further, through this order, we are revising the tariff in the process of implementation of the Tribunal judgment dated 16.5.2007 in Appeal No. 121 of 2005. Briefly the background of the case is as under:

- (i) The petitioner on its establishment, took-over the transmission network from the Central generating companies like NTPC, NHPC, NLC and NEEPCO with effect from 1.4.1992 on book value.
- (ii) Prior to setting up of the Commission, the tariff for the various transmission systems owned by the petitioner was fixed by the Central Government in Ministry of Power, based on advice from the Central Electricity Authority.

7. For the purpose of tariff determination, Ministry of Power considered the capital cost on the following basis:

- (i) Capital cost as on 31.3.1992 was notionally divided into debt and equity in the ratio of 50:50.
- (ii) Cumulative depreciation accrued till 31.3.1992 was deducted from capital cost as at (a) above to arrive at Net Asset Value which was used for tariff purposes.

- (iii) Net asset value obtained at (ii) above, was divided notionally in to debt and equity in the ratio of 50:50. In other words both debt and equity as in (i) above were reduced equally by one-half of the cumulative depreciation mentioned in (ii) above.
- (iv) This approach was continued during 1.4.1992 to 31.3.1997, with equity getting depleted further by 50% of depreciation amount charged during this period.
- (v) The approach was discontinued after 31.3.1997, and there was no further depletion of equity thereafter.

8. When the Commission determined tariff, the capital cost evolved by Ministry of Power was taken as the basis.

9. Aggrieved by the above principle followed by the Commission, the petitioner made an application, being Petition No 26/2005 urging that in respect of all its assets, the depleted equity amounting to Rs. 64600 lakh through the application of the above methodology be restored.

10. The said application was dismissed vide the Commission's order dated 11.5.2005, whereupon, the petitioner filed Appeal No. 121 of 2005 before the Tribunal.

11. The above appeal was disposed of by the Tribunal vide its judgment dated 16.5.2007 with the following directions:

“CONCLUSION

33. Thus, we have no hesitation in holding that the aforesaid grave error committed by the Central Government as a regulator while determining tariff for the block year 1992-1997, requires to be rectified with effect from April 1, 2004.

34. In the light of the aforesaid discussion, the issues raised in Para 19 are determined and answered as follows:

ISSUE No.1: The regulator committed grave error in fixing equity while determining tariff for the block year 1992-1997 and 1997-2002.

ISSUE No.2: The appellant is entitled to the restoration of equity of Rs.664 Crore, with effect from April 1, 1992, for the purposes of accounting.

ISSUE No.3: Consequent to restoration of equity, tariff needs to be determined for the period commencing from April 1, 2004.

ISSUE No.4: The Order of the CERC is liable to be set aside.

ISSUE No.5: The CERC shall re-determine the transmission tariff for the period commencing from April 1, 2004.

35. In view of the aforesaid determination, the appeal is allowed. The order of the CERC is set aside and the matter is remitted to it (CERC) for re-determination of the tariff for the period commencing from April 1, 2004 in accordance with law and having regard to the observations made by us.

We make it clear that the appellant shall not be entitled to claim tariff difference from the period anterior to 01.04.2004. “

12. In pursuance of the above judgment of the Tribunal, the petitioner filed region-wise applications for revision of tariff for the period 2004-2009 after restoration of equity. The project-wise details for revision of equity in respect of the transmission assets in the Northern Region were filed in Petition No 40/2007.

13. Based on the above two judgments of the Tribunal, the transmission charges for the assets forming subject matter of the present order have been recalculated. The details of revised calculation of annual transmission tariff and

annual transmission tariff in respect of transmission are also incorporated in the annexure I to IV of this order.

14. Revision of the capital cost on the above basis has resulted in the revision of notional equity as on 1.4.2004 and accordingly return thereon. This has also led to the revision of other elements of the transmission charges in some cases. While re-calculating the transmission charges, the methodology considered is the same as considered while originally fixing these charges for the period 2004-2009 except in case of interest on loan. While re-calculating interest on loan, outstanding loan as on 1.4.2004 has been re-worked out based on the judgment of the Appellate Tribunal for Electricity, in cases involving National Thermal Power Corporation, wherein the Appellate Tribunal decided to compute interest on loan based on normative repayment. Further, where loan has been fully repaid, depreciation recoverable has been spread over the balance useful life of the transmission asset.

15. The petitioner shall recover the balance amount in the six equal monthly installments.

Sd/-

(R KRISHNAMOORTHY)
MEMBER
New Delhi, dated 29th February, 2008

sd/-

(BHANU BHUSHAN)
MEMBER

Annexure - I

1. Petition No. 96/2004
2. Subject: Approval of tariff in respect of Rihand Transmission System in Northern Region for the period from 1.4.2004 to 31.3.2009.
3. Date of order of approval of tariff: 9.5.2006.
4. **Original tariff**

(a) Summary of the tariff awarded

(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

(b) Computation of capital cost

(Rs. in lakh)

Cost approved in the order dated 9.5.2006, as on 1.4.2001 (Gross Block)	128557.88
Cumulative depreciation up to 31.3.1997	37349.19
Admitted capital cost as on 1.4.2001 for tariff purpose	91208.69
Additional capitalization due to works from 1.4.2001 to 31.3.2004	(-) 34.68
Additional capitalization due to FERV 1.4.2001 to 31.3.2004	854.69
Total capital cost as on 1.4.2004 considered for the purpose of tariff	92028.91

(c) Computation of equity: Rs. 46014.45 lakh in the debt – equity ratio of 50:50

5. **Revised tariff claimed by the petitioner**

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	1974.50	1974.50	1974.50	1974.50	1974.50
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	9056.52	9056.52	9056.52	9056.52	9056.52
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	455.71	470.18	485.51	501.58	518.71
O & M Expenses	2621.13	2726.04	2836.97	2947.17	3068.07
Total	14107.86	14227.25	14353.52	14479.78	14617.81

6. Revised tariff computations

(a) Capital cost

(Rs. in lakh)

Cost approved in the order dated 9.5.2006, as on 1.4.2001 (Gross Block)	128557.88
Additional capitalization due to works from 1.4.2001 to 31.3.2004	(-) 34.68
Additional capitalization due to FERV from 1.4.2001 to 31.3.2004	854.69
Total capital cost as on 1.4.2004	129377.01

(b) Equity and return on equity:

Equity as on 1.4.2004 as per order

dated 9.5.2006. Rs. 46014.45 lakh

Addition on account of restitution of equity Rs. 18674.60 lakh

Reduction on account of FERV up to 31.3.2001 Rs. 1890.94 lakh

Reduction on account of FERV for the period
from 1.4.2001 to 31.3.2004 Rs. 427.45 lakh

Net equity as on 1.4.2004 Rs. 62370.66 lakh

Return on equity Rs. 8731.89 lakh
per annum

(c) Interest on loan

(Rs. in lakh)

Details of loan	Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Notional loan	66169.88					
Addition due to additional capitalization	(17.34)					
Addition due to FERV	854.89					
Gross Normative Loan	67007.44	67007.44	67007.44	67007.44	67007.44	67007.44
Cumulative Repayment up to Previous Year		66444.79	67007.44	67007.44	67007.44	67007.44
Net Loan-Opening		562.64	0.00	0.00	0.00	0.00
Repayment during the year		562.64	0.00	0.00	0.00	0.00
Net Loan-Closing		0.00	0.00	0.00	0.00	0.00
Average Loan		281.32	0.00	0.00	0.00	0.00
Weighted Average Rate of Interest on Loan		4.8654%	5.0300%	5.3488%	5.8555%	6.1877%
Interest		13.69	0.00	0.00	0.00	0.00

(d) Depreciation

(Rs. in lakh)

Details of Depreciation		2004-05	2005-06	2006-07	2007-08	2008-09
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	16	15	14	13
Remaining Depreciable Value		33566.55	29556.10	27708.84	25861.58	24014.33
Depreciation		4010.45	1847.26	1847.26	1847.26	1847.26

(e) Interest on working capital

(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	2643.81	2294.59	2315.63	2336.67	2359.68
Total	4,738.40	4,510.50	4,660.11	4,816.82	4,983.97
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	485.69	462.33	477.66	493.72	510.86

(f) Revised annual transmission charges

(Rs.in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	4010.45	1847.26	1847.26	1847.26	1847.26
Interest on Loan	13.69	0.00	0.00	0.00	0.00
Return on Equity	8731.89	8731.89	8731.89	8731.89	8731.89
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	485.69	462.33	477.66	493.72	510.86
O & M Expenses	2621.13	2726.04	2836.97	2947.17	3068.07
Total	15862.85	13767.51	13893.78	14020.04	14158.08

Annexure II

1. Petition No.98/2004
2. Approval of tariff in respect of Approval of tariff in respect of 220 kV Anta transmission system in Northern Region for the period from 1.4.2004 to 31.3.2009
3. Date of order of approval of tariff: 15.12.2005.
4. **Original tariff**

- (a) Summary of the tariff awarded

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	128.65	128.65	128.65	128.65	128.65
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	358.08	358.08	358.08	358.08	358.08
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	28.85	29.90	31.02	32.16	33.41
O & M Expenses	330.05	343.19	357.46	370.92	386.55
Total	845.62	859.81	875.20	889.80	906.68

- (b) Computation of capital cost

(Rs. in lakh)

Cost approved in the order dated 15.12.2005, as on 1.4.2001 (Gross Block)	6534.18
Cumulative depreciation up to 31.3.1997	1581.33
Admitted capital cost as on 1.4.2001 for the purpose of tariff	4952.85
Additional capitalization due to works from 1.4.2001 to 31.3.2004	0.00
Additional capitalization due to FERV 1.4.2001 to 31.3.2004	162.51
Total capital cost as on 1.4.2004 considered for the purpose of tariff	5115.36

- (c) Computation of equity: Rs. 2557.68 lakh in the debt – equity ratio of 50:50

5. **Revised tariff claimed by the petitioner**

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	128.65	128.65	128.65	128.65	128.65
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	468.82	468.82	468.82	468.82	468.82
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	30.77	31.82	32.94	34.09	35.34
O & M Expenses	330.05	343.19	357.46	370.92	386.55
Total	958.28	972.48	987.86	1002.48	1019.36

6. Revised tariff computations

(a) Capital cost

(Rs. in lakh)

Cost approved in the order dated 15.12.2005, as on 1.4.2001 (Gross Block)	6534.18
Additional capitalization due to works from 1.4.2001 to 31.3.2004	0.00
Additional capitalization due to FERV from 1.4.2001 to 31.3.2004	162.51
Total capital cost as on 1.4.2004	6696.69

(b) Equity and return on equity:

Equity as on 1.4.2004 as per order

dated 15.12.2005 Rs. 2557.68 lakh

Addition on account of restitution of equity Rs. 790.67 lakh

Reduction on account of FERV up to 31.3.2001 Rs. 387.43 lakh

Reduction on account of FERV for the period from 1.4.2001 to 31.3.2004 Rs. 81.26 lakh

Net equity as on 1.4.2004 Rs. 2879.66 lakh

Return on equity Rs.403.15 lakh per annum

(c) Interest on loan

(Rs. in lakh)

Details of loan	Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Notional loan	3654.52					
Addition due to additional capitalization	0.00					
Addition due to FERV	162.51					
Gross Normative Loan	3817.03	3817.03	3817.03	3817.03	3817.03	3817.03
Cumulative Repayment up to Previous Year		3817.03	3817.03	3817.03	3817.03	3817.03
Net Loan-Opening		0.00	0.00	0.00	0.00	0.00
Repayment during the year		0.00	0.00	0.00	0.00	0.00
Net Loan-Closing		0.00	0.00	0.00	0.00	0.00
Average Loan		0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of Interest on Loan		0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Interest		0.00	0.00	0.00	0.00	0.00

(g) Depreciation

(Rs. in lakh)

Details of Depreciation		2004-05	2005-06	2006-07	2007-08	2008-09
Rate of Depreciation	2.6134%					
Depreciable Value	90%	6027.02	6027.02	6027.02	6027.02	6027.02
Balance Useful life of the asset		21	20	19	18	17
Remaining Depreciable Value		2670.83	2543.65	2416.47	2289.29	2162.10
Depreciation		127.18	127.18	127.18	127.18	127.18

(c) Interest on working capital

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	112.98	119.76	126.95	134.57	142.64
O & M expenses	27.50	28.60	29.79	30.91	32.21
Receivables	148.33	150.70	153.26	155.70	158.51
Total	288.82	299.06	310.00	321.17	333.36
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	29.60	30.65	31.77	32.92	34.17

(d) Revised annual transmission charges

(Rs.in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	127.18	127.18	127.18	127.18	127.18
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	403.15	403.15	403.15	403.15	403.15
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	29.60	30.65	31.77	32.92	34.17
O & M Expenses	330.05	343.19	357.46	370.92	386.55
Total	889.99	904.18	919.57	934.18	951.05

Annexure III

1. Petition No.105/2004
2. Approval of tariff in respect of transmission system associated with Auraiya Gas Power Project (625 MW) in Northern Region for the period from 1.4.2004 to 31.3.2009.
3. Date of order of approval of tariff: 12.12.2005.
4. **Original tariff**
 - (a) Summary of the tariff awarded

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	219.16	219.16	219.16	219.16	219.16
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	626.76	626.76	626.76	626.76	626.76
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	38.55	39.79	41.10	42.46	43.93
O & M Expenses	367.84	382.51	398.30	413.46	430.72
Total	1252.31	1268.22	1285.32	1301.84	1320.57

- (b) Computation of capital cost

(Rs. in lakh)

Cost approved in the order dated 12.12.2005, as on 1.4.2001 (Gross Block)	11454.80
Cumulative depreciation up to 31.3.1997	2780.15
Admitted capital cost as on 1.4.2001 for the purpose of tariff	8674.65
Additional capitalization due to works from 1.4.2001 to 31.3.2004	0.00
Additional capitalization due to FERV 1.4.2001 to 31.3.2004	279.03
Total capital cost as on 1.4.2004 considered for the purpose of tariff	8953.68

- (c) Computation of equity: Rs.4476.84 lakh in the debt – equity ratio of 50:50

5. **Revised tariff claimed by the petitioner**

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	219.16	219.16	219.16	219.16	219.16
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	821.36	821.36	821.36	821.36	821.36
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	41.93	43.17	44.49	45.84	47.31
O & M Expenses	367.84	382.51	398.30	413.46	430.72
Total	1450.29	1466.20	1483.31	1499.82	1518.56

6. Revised tariff computations

(a) Capital cost

(Rs. in lakh)	
Cost approved in the order dated 12.12.2005, as on 1.4.2001 (Gross Block)	11454.80
Additional capitalization due to works from 1.4.2001 to 31.3.2004	0.00
Additional capitalization due to FERV from 1.4.2001 to 31.3.2004	279.03
Total capital cost as on 1.4.2004	11733.83

(b) Equity and return on equity:

Equity as on 1.4.2004 as per order

dated 12.12.2005 Rs. 4476.84 lakh

Addition on account of restitution of equity Rs. 1390.08 lakh

Reduction on account of FERV up to 31.3.2001 Rs. 645.97 lakh

Reduction on account of FERV for the period
from 1.4.2001 to 31.3.2004 Rs. 139.52 lakh

Net equity as on 1.4.2004 **Rs. 5081.43 lakh**

Return on equity Rs. 711.40 lakh per
annum

(h) Interest on loan

(Rs. in lakh)						
Details of loan	Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Notional loan	6373.37					
Addition due to additional capitalization	0.00					
Addition due to FERV	279.03					
Gross Normative Loan	6652.41	6652.41	6652.41	6652.41	6652.41	6652.41
Cumulative Repayment up to Previous Year		6652.41	6652.41	6652.41	6652.41	6652.41
Net Loan-Opening		0.00	0.00	0.00	0.00	0.00
Repayment during the year		0.00	0.00	0.00	0.00	0.00
Net Loan-Closing		0.00	0.00	0.00	0.00	0.00
Average Loan		0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of Interest on Loan		0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Interest		0.00	0.00	0.00	0.00	0.00

(i) Depreciation

(Rs. in lakh)

Details of Depreciation		2004-05	2005-06	2006-07	2007-08	2008-09
Rate of Depreciation	2.7110%					
Depreciable Value	90%	10560.45	10560.45	10560.45	10560.45	10560.45
Balance Useful life of the asset		21	20	19	18	17
Remaining Depreciable Value		4551.12	4334.40	4117.68	3900.96	3684.24
Depreciation		216.72	216.72	216.72	216.72	216.72

(c) Interest on working capital

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	136.71	144.91	153.61	162.82	172.59
O & M expenses	30.65	31.88	33.19	34.46	35.89
Receivables	222.66	225.31	228.16	230.91	234.03
Total	390.02	402.09	414.96	428.19	442.52
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	39.98	41.21	42.53	43.89	45.36

(d) Revised annual transmission charges

(Rs.in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	216.72	216.72	216.72	216.72	216.72
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	711.40	711.40	711.40	711.40	711.40
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	39.98	41.21	42.53	43.89	45.36
O & M Expenses	367.84	382.51	398.30	413.46	430.72
Total	1335.94	1351.85	1368.95	1385.47	1404.20

Annexure IV

1. Petition No.109/2004
2. Approval of tariff in respect of Chamera Stage-I Transmission System in Northern Region for the period from 1.4.2004 to 31.3.2009.
3. Date of order of approval of tariff: 2.2.2006.
4. **Original tariff**

- (a) Summary of the tariff awarded

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	472.04	472.04	472.04	472.04	472.04
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	1520.65	1520.65	1520.65	1520.65	1520.65
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	86.27	89.26	92.42	95.75	99.30
O & M Expenses	219.51	228.27	237.66	246.75	257.01
Total	2298.47	2310.21	2322.77	2335.19	2349.00

- (b) Computation of capital cost

(Rs. in lakh)

Cost approved in the order dated 2.2.2006, as 1.4.2001 (Gross Block)	24592.29
Cumulative depreciation up to 31.3.1997	2906.45
Admitted capital cost as on 1.4.2001 for the purpose of tariff	21685.84
Additional capitalization due to works from 1.4.2001 to 31.3.2004	0.00
Additional capitalization due to FERV 1.4.2001 to 31.3.2004	37.67
Total capital cost as on 1.4.2004 considered for the purpose of tariff	21723.50

- (c) Computation of equity: Rs. 10861.75 lakh in the debt – equity ratio of 50:50

5. **Revised tariff claimed by the petitioner**

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	472.04	472.04	472.04	472.04	472.04
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	1724.07	1724.07	1724.07	1724.07	1724.07
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	89.81	92.79	95.96	99.29	102.84
O & M Expenses	219.51	228.27	237.66	246.75	257.01
Total	2505.42	2517.17	2529.73	2542.14	2555.96

6. Revised tariff computations

(a) Capital cost

(Rs. in lakh)

Cost approved in the order dated 2.2.2006, as on 1.4.2001 (Gross Block)	24592.29
Additional capitalization due to works from 1.4.2001 to 31.3.2004	0.00
Additional capitalization due to FERV from 1.4.2001 to 31.3.2004	37.67
Total capital cost as on 1.4.2004	24629.96

(b) Equity and return on equity:

Equity as on 1.4.2004 as per order

dated 2.2.006 Rs. 10861.76 lakh

Addition on account of restitution of equity Rs. 1453.23 lakh

Reduction on account of FERV up to 31.3.2001 Rs. 249.52 lakh

Reduction on account of FERV for the period from 1.4.2001 to 31.3.2004 Rs. 18.84 lakh

Net equity as on 1.4.2004 Rs. 12046.63 lakh

Return on equity Rs. 1686.53 lakh per annum

(j) Interest on loan

(Rs. in lakh)

Details of loan	Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Notional loan	12545.66					
Addition due to additional capitalization	0.00					
Addition due to FERV	37.67					
Gross Normative Loan	12583.33	12583.33	12583.33	12583.33	12583.33	12583.33
Cumulative Repayment up to Previous Year		12583.33	12583.33	12583.33	12583.33	12583.33
Net Loan-Opening		0.00	0.00	0.00	0.00	0.00
Repayment during the year		0.00	0.00	0.00	0.00	0.00
Net Loan-Closing		0.00	0.00	0.00	0.00	0.00
Average Loan		0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of Interest on Loan		0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
Interest		0.00	0.00	0.00	0.00	0.00

(k) Depreciation

(Rs. in lakh)

Details of Depreciation		2004-05	2005-06	2006-07	2007-08	2008-09
Rate of Depreciation	2.7528%					
Depreciable Value	90%	21985.76	21985.76	21985.76	21985.76	21985.76
Balance Useful life of the asset		24	23	22	21	20
Remaining Depreciable Value		11289.01	10818.64	10348.26	9877.89	9407.51
Depreciation		470.38	470.38	470.38	470.38	470.38

(c) Interest on working capital

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	440.32	466.74	494.75	524.43	555.90
O & M expenses	18.29	19.02	19.81	20.56	21.42
Receivables	410.92	412.88	414.97	417.04	419.35
Total	869.54	898.65	929.53	962.04	996.66
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	89.13	92.11	95.28	98.61	102.16

(d) Revised annual transmission charges

(Rs.in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	470.38	470.38	470.38	470.38	470.38
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	1686.53	1686.53	1686.53	1686.53	1686.53
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	89.13	92.11	95.28	98.61	102.16
O & M Expenses	219.51	228.27	237.66	246.75	257.01
Total	2465.54	2477.28	2489.84	2502.26	2516.07