# 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.127/2005** 

#### In the matter of

Approval of transmission tariff for (A) HVDC terminal station at Talcher and Kolar related with Pole-II, (B) 400 kV D/C Kolar-Hossur transmission line along with associated bays at Kolar and Hossur and (C) 400 kV S/C Salem-Udumalpet transmission line along with associated bay extension at Salem and Udumalpet etc. under transmission system associated with Talcher Super Thermal Power Station Stage-II for the period 1.4.2004 to 31.3.2009.

#### And in the matter of

Power Grid Corporation of India Limited

..Petitioner

Vs

- 1. Karnataka Power Transmission Corporation Ltd., Bangalore
- 2. Transmission Corporation of Andhra Pradesh Ltd., Hyderabad
- 3. Kerala State Electricity Board, Thiruvananthapuram
- 4. Tamil Nadu Electricity Board, Chennai
- 5. Electricity Department, Govt. of Pondicherry, Pondicherry
- 6. Electricity Department, Govt. of Goa, Panaji Respondents

#### The following were present:

- 1. Shri P.C. Pankaj, PGCIL
- 2. Shri U.K. Tyagi, PGCIL
- 3. Shri C.Kannan, PGCIL
- 4. Shri Rakesh Prasad, PGCIL
- 5. Shri M.M. Mondal, PGCIL
- Shri S.Sowmyanarayanan, TNEB

# ORDER (DATE OF HEARING: 30.3.2006)

The petition has been filed for approval of transmission tariff for (A) HVDC Terminal station at Talcher and Kolar related with Pole-II, (B) 400 kV D/C Kolar-Hossur transmission line along with associated bays at Kolar and Hossur, and (C) 400 kV S/C Salem-Udumalpet transmission line along with the associated bay extensions at Salem and Udumalpet etc. (the transmission assets) under transmission system

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associated with Talcher Super Power Station Stage-II (the transmission system) in Southern 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 has also prayed that it be allowed additional capitalization for the capital expenditure incurred during 2001-04 after date of commercial operation; the reimbursement from the beneficiaries of expenditure towards publishing of notices in newspapers and petition filing fee.

2. The investment approval for construction of the transmission system was accorded by the Central Government in Ministry of Power under letter dated 9.2.2000 at an estimated cost of Rs.386561 lakh (2<sup>nd</sup> quarter 1998 price level), including IDC of Rs. 39107 lakh. The scope of work included:

#### **Transmission Lines**

- (i) Talcher-Kolar ± 500 kV, 2000 MW HVDC bi-pole,
- (ii) Kolar-Hoody 400 kV D/C with Quad. Bersimis conductor,
- (iii) 400 kV Kolar-Madras S/C transmission line
- (iv) 400 kV Kolar-Hossur D/C transmission line,
- (v) 400 kV Hossur-Salem S/C transmission line,
- (vi) 400 kV Salem-Udumalpet S/C transmission line, and
- (vii) LILO of 400 kV Cuddapah Somanahalli S/C transmission line at Kolar.

#### **Sub-stations**

- (i) Talcher Converter Station (New),
- (ii) Kolar Converter Station (New) with 4x167 MVA, 400/220 kV single phase transformers,
- (iii) Extension of existing 400/220 kV Hoody sub-station of Karnataka, Power Transmission Corporation Ltd,
- (iv) Hossur 400/220 kV sub-station with 2x315 MVA transformer (New),
- (v) Extension of existing 400/220 kV Salem sub-station of POWERGRID,
- (vi) Extension of existing 400/220 kV Udumalpet sub-station of POWERGRID, and
- (vii) Extension of existing 400 kV Madras sub-station of POWERGRID.

3. The annual transmission charges in respect of the transmission assets up to 31.3.2004 were decided by the Commission in its order dated 3.8.2005 in Petition No.132/2002 at a total cost of Rs. 74963.61 lakh as on respective date of commercial operation. The dates of commercial operation of the transmission assets which form the subject matter of the present petition, the line length, apportioned approved cost and admitted capital cost are as stated below:

S. No.	Name of the transmission line	Date of commercial operation	Line length in Ckt-km ( for O & M)	Apportioned approved cost (Rs. in lakh)	Admitted capital cost ( Rs. in lakh)
(i)	HVDC terminal station at Talcher and Kolar related to Pole-II	1.3.2003	-	70542	64872.07
(ii)	400 kV D/C Kolar-Hossur transmission line, along with associated bays at Kolar and Hossur	1.4.2003	138	12716	5246.92
(iii)	400 kV S/C Salem-Udumalpet transmission line along with associated bay extension at Salem and Udumalpet	1.6.2003	137.91		4844.62
	Total		275.91	83258	74963.61

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

												(Rs.in lal	kh)		
	HVDC terminal station at Talcher and Kolar related to Pole-II				400 kV D/ associated t	C Kolar-Ho pays at Kolar a	ssur transmis ind Hossur	ssion line,	along with	400 kV S/C Salem-Udumalpet transmission line all associated bay extension at Salem and Udumalpet			along with		
	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007- 08	2008-09	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	2388.27	2389.20	2389.20	2389.20	2389.20	138.54	138.56	138.56	138.56	138.56	149.16	149.16	149.16	149.16	149.16
Interest on Loan	2493.95	2228.73	2017.20	1798.32	1575.09	285.44	264.49	241.21	217.21	192.87	277.35	255.54	231.51	207.22	182.71
Return on Equity	2117.48	2120.38	2120.38	2120.38	2120.38	191.76	191.84	191.84	191.84	191.84	313.54	313.54	313.54	313.54	313.54
Advance Against Deprection	42.08	1289.86	1558.33	1852.50	1888.86	0.00	44.65	118.68	149.73	146.23	0.00	70.19	103.29	115.09	116.41
Interest on Working Capital	208.87	230.98	237.19	244.03	246.64	18.86	19.72	21.07	21.68	21.73	21.25	22.54	23.19	23.48	23.62
O & M Expenses	478.04	497.25	517.14	537.71	559.30	87.57	91.07	94.79	98.45	102.51	87.55	91.05	94.77	98.43	102.48
Total	7728.70	8756.39	8839.45	8942.13	8779.46	722.16	750.32	806.15	817.47	793.73	848.84	902.01	915.44	906.91	887.91

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

	Ţ										(R	s.in lakh)			
	HVDC terminal station at Talcher and Kolar related to Pole-II				400 kV D/C bays at Kola	Kolar-Hossur r and Hossur	transmission li	ine, along with	associated		C Salem-Udur ay extension a			along with	
	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007- 08	2008-09
Maintena nce Spares	709.80	752.60	797.76	845.61	896.35	56.34	59.72	63.30	67.10	71.13	58.51	62.02	65.75	69.69	73.87
O & M expenses	39.84	41.44	43.10	44.81	46.61	7.30	7.59	7.90	8.20	8.54	7.30	7.59	7.90	8.20	8.54
Receivabl es	1288.12	1459.40	1473.24	1490.36	1463.24	120.36	125.05	134.36	136.24	132.29	141.47	150.34	152.57	151.15	147.98
Total	2037.76	2253.44	2314.10	2380.78	2406.20	184.00	192.36	205.56	211.54	211.96	207.28	219.95	226.22	229.04	230.39
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	208.87	230.98	237.20	244.03	246.64	18.86	19.72	21.07	21.68	21.73	21.25	22.54	23.19	23.48	23.61

6. The replies to the petition have been filed by Tamil Nadu Electricity Board and Kerala State Electricity Board. 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 CAPITALIZATION ON WORKS-2001-04**

- 7. In the present case, the petitioner has claimed an additional capitalization for the period 2001-2004. The details submitted by the petitioner in support of its claim for additional capital expenditure are given hereinunder:
- (i) HVDC terminal station at Talcher and Kolar related to Pole-II

SI.	Year	Particulars	Amount (Rs. in	Nature of expenditure
No.			lakh)	·
1.	2002-03	Sub-station	1731.49	Price variation payments = Rs.48.32 lakh
				Balance payments= Rs. 749.41 lakh
				Erection payments= Rs.938.26 lakh
2.	2003-04	PLCC	10.38	Balance payments= Rs. 10.38 lakh
	Total		1741.87	

(ii) 400 kV D/C Kolar-Hossur transmission line, along with associated bays at Kolar and Hossur;

SI.	Year	Particulars	Amount (Rs. in	Nature of expenditure
No.			lakh)	
1.	2003-04	Sub-station and land	69.16	Compensation payment against land = Rs.6.79 lakh Balance payments= Rs. 12.07 lakh Balance works against sub-station = Rs. 50.30 lakh
	Total		69.16	

(iii) 400 kV S/C Salem-Udumalpet transmission line along with associated bay extension at Salem and Udumalpet:

SI.	Year	Particulars	Amount (Rs. in	Nature of expenditure
No.			lakh)	
1.	2003-04	Transmission	744.93	Compensation payments = Rs.726.61 lakh
		line		Erection = Rs. 5.88 lakh
				Price variation = Rs.12.44 lakh
	Total		744.93	

8. The above expenditure was not considered by the Commission in its order dated 3.8.2005 ibid while approving tariff for the period ending 31.3.2004. The capital expenditure claimed is found to be in order as it was against the committed liability. Accordingly, the additional capital expenditure as claimed for the respective transmission asset has been allowed

## **ADDITIONAL CAPITALIZATION ON WORKS-2004-05**

- 9. The petitioner has sought approval of tariff after accounting for additional capital expenditure of Rs. 42.59 lakh incurred on account of balance payment and balance payment works as per details given below:
- (i) HVDC terminal station at Talcher and Kolar related to Pole-II

SI.	Year	Particulars	Amount (Rs. in	Nature of expenditure
No.			lakh)	
1.	2004-05	Sub-station and PLCC	41.39	Balance payments = Rs. 749.41 lakh Sub-station = Rs. 26.45 lakh and PLCC = Rs. 14.94 lakh
	Total		41.39	

(ii) 400 kV D/C Kolar-Hossur transmission line, along with associated bays at Kolar and Hossur

SI.	Year	Particulars	Amount (Rs. in	Nature of expenditure
No.			lakh)	
1.	2004-05	Transmission line	1.206	Balance works
	Total		1.20	

10. The additional capital expenditure claimed is with in the original scope of work and is admissible. However, the petitioner has not furnished the loan reconciliation details for the year 2004-05. Therefore, this additional capital expenditure has not been considered for the purpose of tariff. The petitioner is at liberty to seek revision of tariff based on this expenditure after finalisation of loan reconciliation statement.

### **CAPITAL COST**

- 11. As per clause (2) of Regulation 52 of the 2004 regulations in case of the projects existing up to 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.
- 12. The petitioner has claimed the capital expenditure admitted by the Commission in the order dated 3.8.2005 ibid together with additional expenditure incurred after the date of commercial operation. The petitioner has considered de-capitalization of Rs. 341.71 lakh on account of FERV in respect of HVDC terminal station at Talcher and Kolar related to Pole-II.

## FERV/Extra Rupee Liability during the years 2001-04

- 13. 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
- 14. Regulation 1.7 of the 2001 regulations 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.
- 15. As no objections are raised by the respondents to the petitioner's claim for decapitalization of Rs. 341.71 lakh on account of FERV in respect of HVDC terminal station at Talcher and Kolar related to Pole-II, FERV worked out is matching with calculations submitted by the petitioner, and is in accordance with the provision of AS-11, applicable for the period up to 31.3.2004, and is for the benefit of the respondents, the claim for de-capitalization has been admitted for tariff calculations.
- 16. Based on the above, gross block as given below has been considered for the purpose of tariff for each of the element, after allowing additional capitalization on works and addition capitalization of FERV as per the petition:

(Rs.in lakh) Name of the Element Capital cost as Additional **FERV** for the Capital per order dated expenditure Capitalization period up to 3.8.2005 31.3.2004 admitted up to 31.3.2004 HVDC terminal station at Talcher and 64872.07 1741.87 (-)341.71 66272.23 Kolar related to Pole-II 5246.92 69.16 5316.08 400 kV D/C Kolar-Hossur transmission line, along with associated bays at Kolar and Hossur kV S/C Salem-Udumalpet 4844.62 744.93 5589.55 transmission line along with associated bay extension at Salem and Udumalpet

74963.61

2555.96

(-)341.71

77177.86

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

Total

- 17. 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."
- 18. The petitioner has claimed tariff based on debt-equity ratio as considered by the Commission in its order dated 3.8.2005 ibid and the entire additional capital expenditure on works has been considered to have been financed out of equity. The petitioner has considered the de- capitalization of Rs. 341.71 lakh on account of FERV in respect of HVDC terminal station at Talcher and Kolar related to Pole-II in the same ratio as considered in the order dated 3.8.2005 for this asset. Debt-equity ratio considered by the petitioner for the different assets for the purpose of determination of tariff is indicated below:

(Rs.in lakh)

Name of the Element	On actual expenditure up to date of commercial operation as per order dated 3.8.2005	On addition capital expenditure on works	On FERV
HVDC terminal station at Talcher and Kolar related to Pole-II	79.29:20.71	0.00:100.00	79.29: 20.71
400 kV D/C Kolar-Hossur transmission line, along with associated bays at Kolar and Hossur	75.23:24.77	0.00:100.00	-
400 kV S/C Salem-Udumalpet transmission line along with associated bay extension at Salem and Udumalpet	69.15:30.85	0.00:100.00	-

19. in the instant case, the approved debt-equity ratio for the transmission system is stated to be 80:20. Therefore, the additional capital expenditure on works for different assets has been considered as debt to make debt-equity ration close to the approved debt-equity ratio of 80:20. De-capitalization for Rs. 341.71 lakh on account of FERV for HVDC terminal station has been segregated in to debt and equity in such

a manner so as to make over all debt-equity ratio equal to the approved debt-equity ratio. Therefore, debt-equity ratio and notional equity considered for tariff in each of the assets is hereinunder:

Name of the Element	Equity as per order dated 3 .8.2005 (Rs. in lakh)	Notional equity on account additional capitalization (Rs. in lakh)	Notional equity on account of FERV (Rs. in lakh)	Total equity (Rs. in lakh)	Debt- equity ratio considered
HVDC terminal station at Talcher and Kolar related to Pole-II	13433.07	0.00	(-)178.62	13254.45	80.:20
400 kV D/C Kolar-Hossur transmission line, along with associated bays at Kolar and Hossur	1299.92	0.00	0.00	1299.92	75.55:24.45
400 kV S/C Salem-Udumalpet transmission line along with associated bay extension at Salem and Udumalpet	1494.62	0.00	0.00	1494.62	73.26:26.74

## **RETURN ON EQUITY**

- 20. 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.
- 21. The petitioner has claimed return on the basis of order dated 3.8.2005 ibid along with notional equity on additional capitalization/de-capitalization as stated at para 18 above. For the reasons already discussed, we have not considered additional capital expenditure for the year 2004-05. The methodology followed by us for working out the equity has been narrated by us para 19 hereinabove. Thus, the return on equity recoverable each year during the tariff period is given hereunder:

(Rs. in lakh) Name of the Element **Equity** Return on equity HVDC terminal station at Talcher and Kolar related to Pole-II 13254.45 1855.62 400 kV D/C Kolar-Hossur transmission line, along with 1299.92 181.99 associated bays at Kolar and Hossur 400 kV S/C Salem-Udumalpet transmission line along with 1494.62 209.25 associated bay extension at Salem and Udumalpet 2246.86 Total 16048.99

## **INTEREST ON LOAN**

- 22. 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 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.
- 23. The petitioner has claimed interest on loan in the following manner:
  - (i) Gross loans, cumulative loan repayment and outstanding balance up to previous year as admitted by the Commission in Petition No. 132/2002 have been taken as the opening balance as on 1.4.2004.

- (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) Loans as admitted by the Commission in Petition No. 132/2002 have been considered as notional loan and the weighted average rate of interest on loan for respective years as per above has been multiplied with average notional loan to work out interest on loan.
- 24. 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, exchange rate as on 31.3.2004 etc. have been taken from above loan allocation statement submitted by the petitioner for working out weighted average rate of interest.
  - (ii) Gross notional loan and cumulative repayment up to 31.3.2004 have been taken from the order dated 3.8.2005.
  - (iii) Notional loan arising out of additional capitalization in case of three elements and de-capitalization on account of FERV in respect of HVDC terminal station at Talcher and Kolar related to Pole-II during the years 2001-04 has been considered.
  - 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:

Actual repayment of actual loan during the year
------ X O
Opening balance of actual loan during the year

X 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) The petitioner has considered the refinancing of Bond XII and Bond XIII Option-I loans by IBRD-II loan on 31.3.2004. As per loan reconciliation note dated 27. 5.2005, the actual disbursement of the IBRD-II loan was made on 6. 4.2004 by IBRD and hence the effect of refinancing of these loans has not been considered. Further, Bond XII and Bond XIII Option-I carry fixed interest rates while IBRD-II carries floating interest rate. Therefore, the refinancing carried out after 1.4.2004 has not been considered while determining 2004-09 tariff. The petitioner has submitted that in case of HVDC terminal station at Talcher and Kolar related to Pole-II Rs. 1106 lakh earlier allocated through OBC has been refinanced with KFW on 31. 3. 2004. This refinancing has not been considered in the loan reconciliation. Therefore, this KFW refinancing has not been considered in 2004-09 tariff determination.
- 25. Based on the above, the year-wise details of interest worked out are given hereunder:

(Rs. in lakh)

Interest on Loan	Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Loan as per last Order	51439.00					
Addition due to Additional Capitalisation	1741.87					
Addition due to FERV	-163.09					
Gross Normative Loan	53017.78	53017.78	53017.78	53017.78	53017.78	53017.78
Cumulative Repayment up to Previous Year		1632.48	5055.24	8802.49	13674.49	18546.49
Net Loan-Opening		51385.30	47962.54	44215.29	39343.29	34471.29
Repayment during the year		3422.75	3747.26	4872.00	4872.00	4872.00
Net Loan-Closing		47962.54	44215.29	39343.29	34471.29	29599.29
Average Loan		49673.92	46088.92	41779.29	36907.29	32035.29
Weighted Average Rate of Interest on Loan		6.84%	6.93%	7.00%	7.06%	7.14%
Interest		3397.98	3192.58	2922.75	2604.39	2286.03

## B) 400 KV D/C Kolar-Hossur Transmission line along with associated bays at kolar and Hosur (Rs. in lakh)

					(RS. III lar	MT)
Interest on Loan						
Gross Loan as per last Order	3947.00					
Addition due to Additional	69.16					
Capitalisation						
Addition due to FERV	0.00					
Gross Normative Loan	4016.16	4016.16	4016.16	4016.16	4016.16	4016.16
Cumulative Repayment up to		34.49	229.67	467.50	807.93	1148.36
Previous Year						
Net Loan-Opening		3981.67	3786.49	3548.66	3208.23	2867.80
Repayment during the year		195.18	237.83	340.43	340.43	340.43
Net Loan-Closing		3786.49	3548.66	3208.23	2867.80	2527.37
Average Loan		3884.08	3667.57	3378.44	3038.02	2697.59
Weighted Average Rate of Interest on		9.41%	9.39%	9.36%	9.35%	9.33%
Loan						
Interest		365.65	344.26	316.36	284.03	251.70

## C) 40 Udmalpet 400 KV S/C Salem-Udmalpet transmission line along with associated bay extension at Salem-

(Rs. in lakh)

					(113. III laki	1)
Interest on Loan						
Gross Loan as per last Order	3350.00					
Addition due to Additional	744.93					
Capitalisation						
Addition due to FERV	0.00					
Gross Normative Loan	4094.93	4094.93	4094.93	4094.93	4094.93	4094.93
Cumulative Repayment up to		43.03	287.13	584.62	933.03	1281.45
Previous Year						
Net Loan-Opening		4051.90	3807.80	3510.31	3161.90	2813.48
Repayment during the year		244.11	297.48	348.42	348.42	348.42
Net Loan-Closing		3807.80	3510.31	3161.90	2813.48	2465.07
Average Loan		3929.85	3659.05	3336.10	2987.69	2639.27
Weighted Average Rate of Interest on		9.60%	9.58%	9.56%	9.54%	9.53%
Loan						
Interest		377.22	350.47	318.91	285.15	251.40
Total A+B+C		4140.86	3887.32	3558.03	3173.58	2789.13

#### **DEPRECIATION**

- 26. 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.
- 27. The calculations in support of depreciation allowed on the basis of capital cost as per para 16 above, are appended below:

A)	HVDC Terminal station at Talcher and kolar Related to pole-II	(Rs. in lakh)

		Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Block							
As per Last Order		64872.07					
Addition during 2001-04 due to Additional Capitalisation		1741.87					
Addition during 2001-04 due to FERV		-341.71					
Gross Block as on 31.3.2004		66272.23	66272.23	66272.23	66272.23	66272.23	66272.23
Depreciation							
Rate of Depreciation	3.6023%						
Depreciable Value	90%		59645.01	59645.01	59645.01	59645.01	59645.01
Balance Useful life of the asset			0.00	0.00	0.00	0.00	0.00
Remaining Depreciable Value			57122.18	54589.77	50842.51	45970.51	41098.51
Depreciation			2387.34	2387.34	2387.34	2387.34	2387.34

B) 400 KV D/C Kolar-Hossur Transmission line along with associated bays at kolar and Hosur (Rs. in lakh)

(i ter in later)							
		Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Block							
As per Last Order		5246.92					
Addition during 2001-04 due to Additional Capitalisation		69.16					
Addition during 2001-04 due to FERV		0.00					
Gross Block as on 31.3.2004		5316.08	5316.08	5316.08	5316.08	5316.08	5316.08
Depreciation							
Rate of Depreciation	2.6056%						
Depreciable Value	90%		4731.49	4731.49	4731.49	4731.49	4731.49
Balance Useful life of the asset			0.00	0.00	0.00	0.00	0.00
Remaining Depreciable Value			4595.21	4456.69	4263.99	3923.56	3583.13
Depreciation			138.52	138.52	138.52	138.52	138.52

C) 400 KV S/C Salem-Udmalpet transmission line along with associated bay extension at Salem-Udmalpet

(Rs. in lakh)

		Up to 31.3.2004	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Block							
As per Last Order		4844.62					
Addition during 2001-04 due to		744.93					
Additional Capitalisation							
Addition during 2001-04 due to		0					
FERV							
Gross Block as on 31.3.2004		5589.55	5589.55	5589.55	5589.55	5589.55	5589.55
Depreciation							
Rate of Depreciation	2.6685%						
Depreciable Value	90%		5030.6	5030.6	5030.6	5030.6	5030.6
Balance Useful life of the asset			0	0	0	0	0
Remaining Depreciable Value			4922.25	4743.46	4445.98	4097.56	3749.15
Depreciation			149.156	149.156	149.156	149.156	149.156
Total A+B+C			2675.01	2675.01	2675.01	2675.01	2675.01

ΑD	VAN	ICE .	AGAINST	DEPRECIATION

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

AAD = Loan repayment amount as per regulation 56 (i) subject to a ceiling of 1/10<sup>th</sup> of loan amount as per regulation 54 minus depreciation as per schedule

- 29. 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.
- 30. In addition to Cumulative depreciation up to 2003-04 (excluding Advance Against Depreciation) as per last tariff setting, depreciation on FERV for the period 2001-04 has been added to arrive at total cumulative depreciation amount as on 31.03.2004.
- 31. The petitioner has claimed Advance Against Depreciation in the following manner:
  - (i) 1/10<sup>th</sup> of gross loan is worked out from the gross notional loan admitted by the Commission order dated 3.8.2005 ibid.
  - (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 addition to cumulative depreciation up to 2003-04 as per order dated 30.8.2005.

- 32. In our calculation, the Advance Against Depreciation has been worked out as under:
  - (i) 1/10<sup>th</sup> of gross loan is worked out from the gross notional loan as per para 25 above.
  - (ii) Repayment of Cumulative loan as well as repayment of notional loan during the year have been considered as per para 25 5bove.
  - (iii) Depreciation worked out in para 27 above has been considered.
  - (iv) <u>C</u>umulative depreciation up to 31.3.2004 has been worked out considering Cumulative Depreciation/Advance Against Depreciation up to 2003-04 as per order 3.8.2005 ibid and Depreciation recovered on FERV.
- 33. The details of Advance Against Depreciation allowed for each asset are given hereunder:
- A) HVDC Terminal station at Talcher and kolar Related to pole-II

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
1/10 <sup>th</sup> of Gross Loan(s)	5301.78	5301.78	5301.78	5301.78	5301.78
Repayment of the Loan	3422.75	3747.26	4872.00	4872.00	4872.00
Minimum of the above	3422.75	3747.26	4872.00	4872.00	4872.00
Depreciation during the year	2387.34	2387.34	2387.34	2387.34	2387.34
(A) Difference	1035.41	1359.92	2484.66	2484.66	2484.66
Cumulative Repayment of the Loan	5055.24	8802.49	13674.49	18546.49	23418.49
Cumulative Depreciation/ Advance against	4910.16	7442.57	11189.83	16061.83	20933.83
Depreciation					
(B) Difference	145.08	1359.92	2484.66	2484.66	2484.66
Advance against Depreciation Minimum of (A) and (B)	145.08	1359.92	2484.66	2484.66	2484.66

B) 400 KV D/C Kolar-Hossur Transmission line along with associated bays at kolar and Hosur (Rs. in lakh)

				(	,
	2004-05	2005-06	2006-07	2007-08	2008-09
Advance against Depreciation					
1/10 <sup>th</sup> of Gross Loan(s)	401.62	401.62	401.62	401.62	401.62
Repayment of the Loan	195.18	237.83	340.43	340.43	340.43
Minimum of the above	195.18	237.83	340.43	340.43	340.43

Depreciation during the year	138.52	138.52	138.52	138.52	138.52
(A) Difference	56.66	99.31	201.91	201.91	201.91
Cumulative Repayment of the Loan	229.67	467.50	807.93	1148.36	1488.79
Cumulative Depreciation/ Advance against Depreciation	274.80	413.32	606.02	946.45	1286.88
(B) Difference	-45.13	54.18	201.91	201.91	201.91
Advance against Depreciation Minimum of (A) and (B)	0.00	54.18	201.91	201.91	201.91

C) 400 KV S/C Salem-Udmalpet transmission line along with associated bay extension at Salem-Udmalpet

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Advance against Depreciation					
1/10 <sup>th</sup> of Gross Loan(s)	409.49	409.49	409.49	409.49	409.49
Repayment of the Loan	244.11	297.48	348.42	348.42	348.42
Minimum of the above	244.11	297.48	348.42	348.42	348.42
Depreciation during the year	149.16	149.16	149.16	149.16	149.16
(A) Difference	94.95	148.33	199.26	199.26	199.26
Cumulative Repayment of the Loan	287.13	584.62	933.03	1281.45	1629.86
Cumulative Depreciation/ Advance against Depreciation	257.51	436.29	733.77	1082.19	1430.60
(B) Difference	29.63	148.33	199.26	199.26	199.26
Advance against Depreciation Minimum of (A) and (B)	29.63	148.33	199.26	199.26	199.26
Total A+B+C	174.70	1562.43	2885.83	2885.83	2885.83

## **OPERATION & MAINTENANCE EXPENSES**

34. 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			

35. The petitioner has claimed O & M expenses for 275.91 (138+137.91) ckt- km of line length and 21 bays (10 at Kolar, 9 at Talcher and one each at Salem and Udumalpet sub-stations), which have been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

A) HVDC Terminal station at Talcher and kolar Related to pole-II

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses for line length	0.00	0.00	0.00	0.00	0.00
O&M expenses for bays	478.04	497.25	517.14	537.71	559.30

B) 400 KV D/C Kolar-Hossur Transmission line along with associated bays at kolar and Hosur

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses for line length	31.33	32.57	33.95	35.19	36.71
O&M expenses for bays	56.24	58.50	60.84	63.26	65.80
TOTAL	87.57	91.07	94.79	98.45	102.51

C) 400 KV S/C Salem-Udmalpet transmission line along with associated bay extension at Salem-Udmalpet

(Rs. in lakh)

Total A+B+C	653.16	679.37	706.70	734.59	764.29
TOTAL	87.55	91.05	94.77	98.43	102.48
O&M expenses for bays	56.24	58.50	60.84	63.24	65.80
O&M expenses for line length	31.31	32.55	33.93	35.17	36.68
	2004-05	2005-06	2006-07	2007-08	2008-09

36. 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

37. 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

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from the date of commercial operation. In the present case, element wise capital expenditure on the date of commercial operation which has been considered as the historical cost for the purpose of the present petition and maintenance spares have been worked out accordingly by escalating 1% of the historical cost @ 6% per annum. The necessary details are given hereunder:

Name of the Element	Date of Commercial	Capital Expenditure (Rs. in lakh) on the date of	Escalated spares Cost
	Operation	commercial operation	(Rs. in lakh)
HVDC terminal station at Talcher and Kolar related to Pole-II	1.3.2003	64872.07	691.08
400 kV D/C Kolar-Hossur transmission line, along with associated bays at Kolar and Hossur	1.4.2003	5246.92	55.62
400 kV S/C Salem-Udumalpet transmission line along with associated bay extension at Salem and Udumalpet	1.6.2003	4844.62	50.87

#### (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) 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 mon hs' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis 2 mon hs' 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 o<sup>n</sup> 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.

38. The necessary computations in support of interest on working capital are appended below:

.A) HVDC Terminal station at Talcher and kolar Related to pole-II

(Rs. in lakh)

					, -	,
		2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares		691.08	732.55	776.50	823.09	872.48
O & M expenses		39.84	41.44	43.10	44.81	46.61
Receivables		1413.99	1589.16	1738.28	1688.63	1639.20
Total		2144.90	2363.14	2557.88	2556.53	2558.28
Interest	10.25%	219.85	242.22	262.18	262.04	262.22

B) 400 KV D/C Kolar-Hossur Transmission line along with associated bays at kolar and Hosur

(Rs. in lakh)

			(RS. III laki)			
		2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares		55.62	58.95	62.49	66.24	70.22
O & M expenses		7.30	7.59	7.90	8.20	8.54
Receivables		132.29	138.51	159.52	154.73	150.01
Total		195.20	205.05	229.91	229.18	228.77
Interest	10.25%	20.01	21.02	23.57	23.49	23.45

C) 400 KV S/C Salem-Udmalpet transmission line along with associated bay extension at Salem-Udmalpet

(Rs. in lakh)

				(	
	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	50.87	53.92	57.16	60.59	64.22
O & M expenses	7.30	7.59	7.90	8.20	8.54

Receivables		145.62	161.86	165.84	160.80	155.83
Total		203.78	223.37	230.89	229.58	228.59
Interest	10.25%	20.89	22.90	23.67	23.53	23.43
Total A+B+C		260.75	286.13	309.41	309.07	309.10

## **TRANSMISSION CHARGES**

39. 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 summarized below.

A) HVDC Terminal station at Talcher and kolar Related to pole-II

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	2387.34	2387.34	2387.34	2387.34	2387.34
Interest on Loan	3397.98	3192.58	2922.75	2604.39	2286.03
Return on Equity	1855.62	1855.62	1855.62	1855.62	1855.62
Advance against Depreciation	145.08	1359.92	2484.66	2484.66	2484.66
Interest on Working Capital	219.85	242.22	262.18	262.04	262.22
O & M Expenses	478.04	497.25	517.14	537.71	559.30
Total	8483.91	9534.93	10429.70	10131.77	9835.18

B) 400 KV D/C Kolar-Hossur Transmission line along with associated bays at kolar and Hosur (Rs. in lakh)

	(1.01.11.10.11.1)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	138.52	138.52	138.52	138.52	138.52
Interest on Loan	365.65	344.26	316.36	284.03	251.70
Return on Equity	181.99	181.99	181.99	181.99	181.99
Advance against Depreciation	0.00	54.18	201.91	201.91	201.91
Interest on Working Capital	20.01	21.02	23.57	23.49	23.45
O & M Expenses	87.57	91.07	94.79	98.45	102.51
Total	793.74	831.04	957.13	928.39	900.07

C) 400 KV S/C Salem-Udmalpet transmission line along with associated bay extension at Salem-Udmalpet

(Rs. in lakh)

	(1.6. 11.14.11)					
	2004-05	2005-06	2006-07	2007-08	2008-09	
Depreciation	149.16	149.16	149.16	149.16	149.16	
Interest on Loan	377.22	350.47	318.91	285.15	251.40	
Return on Equity	209.25	209.25	209.25	209.25	209.25	
Advance against Depreciation	29.63	148.33	199.26	199.26	199.26	
Interest on Working Capital	20.89	22.90	23.67	23.53	23.43	
O & M Expenses	87.55	91.05	94.77	98.43	102.48	
Total	873.69	971.15	995.01	964.78	934.97	
Total A+B+C	10151.34	11337.12	12381.84	12024.94	11670.22	

- 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 by an affidavit dated 31.5.2005 has sought approval for the reimbursement of expenditure of Rs. 1, 08,117/- incurred on publication of notices in the newspapers. The petitioner shall claim reimbursement of the said expenditure directly from the respondents in one instalment in the ratio applicable for sharing of transmission charges. The petitioner has also sought reimbursement of filing fee of Rs.5.00 lakh paid. A final view on reimbursement of filing fee is yet to be taken by the Commission for which views of the stakeholder have been received. The view taken on consideration of the comments received shall apply in the present case as regards reimbursement of filing fee.

#### Impact of additional capitalization for the years 2001-04

42. 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 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

1<sup>st</sup> April of the financial year following the financial year to which additional capital expenditure relates. Impact of additional capitalization for the years 2002-03 and 2003-04 in respect of HVDC terminal station at Talcher and Kolar related to Pole-II only and not in respect of other assets as shown below, shall be recovered by the petitioner from the respondents along with tariff for the current period.

(Rs. in lakh)

	HVDC ter	VDC terminal station at Talcher and Kola related to Pole-II				
Additional Capitalisation		1731.49	10.38	Total 1741.87		
Financing of Additional Capitalisation						
Notional Loan		1731.49	10.38	1741.87		
Notional Equity		0.00	0.00	0.00		
Total		1731.49	10.38	1741.87		
Effective Additional Capitalisation						
Opening Loan Balance		0.00	1731.49			
Addition of Loan		1731.49	10.38	1741.87		
Repayment of Loan		0.00	53.63	53.63		
Closing Loan Balance		1731.49	1688.24			
Effective Loan		0.00	1731.49			
Weighted Average Rate of Interest on Loan		6.8913%	6.8299%			
Effective Equity		0.00	0.00			
Interest on Loan		0.00	118.26	118.26		
Return on Equity	16%	0.00	0.00	0.00		
Impact of Additional Capitalisation		0.00	118.26	118.26		

- 43. 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.
- 44. This order disposes of Petition No.127/2005.

Sd-/ sd-/ sd-/ sd-/
(A.H.JUNG) (BHANU BHUSHAN) (K.N.SINHA) (ASHOK BASU)
MEMBER MEMBER MEMBER CHAIRPERSON

New Delhi dated the 9th May 2006

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## **SUMMARY SHEET**

Nan	e of the Company:	PGCIL											
		HVDC te					V D/C						Salem-
		Talcher	and Kola	r related	d to		nission li						mission
		Pole-II				associated bays at Kolar				line along with associated bay extension at Salem and			
						and H	ossur			bay ex Uduma		at Sai	em and
	e of the Element:		1		1	1 4 2002					•		
Actu	Actual DOCO: 1.3.2003				1.4.2003				1.6.2003				
Peti	Petition No.: 127/2005				127/2005 <b>2004-09</b>				127/2005 2004-09				
Tari	f setting Period:	2004-09			(Rs.in	2004-09			(Rs.in	2004-09			(Rs.in
					lakh)				lakh)				lakh)
1	Capital Cost of the Project				770542				12716@				12716@
	Admitted Capital Cost as on 1. 4.20	04 for Calcula	tion of Debt	and Equity	64872.07				5246.92				4844.6
5	Additional Capitalisation(works)				1741.87				69.16				744.93
	2001-02			0.00				0.00				0.00	
	2002-03	1		1731.49				0.00				0.00	
	2003-04	1		10.38				69.16				744.93	
	Total	1	1	1741.87		-		69.16				744.93	0.00
6	Additional Capitalisation(FERV)	1		0.00	(-)341.71			0.00	0.00			0.00	0.00
	2001-02	1	1	0.00				0.00				0.00	
	2002-03			(-)126.03				0.00				0.00	
	2003-04			(-)215.68				0.00				0.00	
	Total			(-)341.71				0.00				0.00	
7	Total Capital Cost as on 1. 4.2004(2	2+3+4)			66272.23				5316.08				5589.55
8	Means of Finance :												
	Debt			80.00%	53017.78			75.55%	4016.16			73.26%	4094.93
	Equity			2.0.00%	13254.45			24.45%	1299.92			26.74%	1494.62
	Total			100.00%	66272.23			100.00%	5316.08			100.00%	5589.55
9	Gross Loan as on 1. 4.2004				53017.78				4016.16				4094.93
	Cumulative Repayment up to 31.3.2	2009 :			23418.49				1488.79				1629.86
	Repaid up to 31. 3.2004			1583.87				33.90				35.20	
	1. 4.2001 to 31. 3.2004 (ACE & FE	RV)		48.61				0.59				7.83	
	.2004 to 31. 3.2009			21786.01				1454.29				1586.84	
	Total			23418.49				1488.79				1629.86	
10	Balance Loan to be repaid beyond 3	31. 3.2009 :			29599.29				2527.37				2465.07
11	Depreciation recovered up to 31. 3.	09 :			23418.49				1488.79				1629.86
			Dep	AAD	Total		Dep	AAD	Total	Dep	AAD	Total	
	Recovered up to 31. 3.2004		2351.43		2351.43		136.28	0.00	136.28	108.35	0.00	108.35	
	1. 4.2001 to 31. 3.2004 (ACE & FERV)		8.61	0.00	8.61		0.00	0.00		0.00	0.00	0.00	
	1. 4.2004 to 31. 3.2009		11936.69	86958.98	20895.67		64/200			745.78	775.73	1521.51	
							5692.59		1352.51				
12	Total				23418.49				1488.79			1629.86	
	Balance Depreciation to be recover		3.2009 :		36226.51				3242.70				3400.73
	Capital cost for the purpose of Dep	reciation	1	64872.07		<u> </u>		5246.92 69.16				4844.62 744.93	
	ACE + FERV		1	1400.16		-		5316.08				5589.55	
	Capital cost as 1. 4.2004	1	1	66272.23									
	Less: Land Cost	1	1	0.00				58.87				0.00	
	ĺ	1	ĺ	66272.23	I	1	1	5257.21				5589.55	
			+					4704 40		1		E000 00	
	90% of Capital Cost as above Cum. Depreciation to be recovered	1 1. 01 0 5		59645.01 23418.49				4731.49 1488.79				5030.60 1629.86	

@ For both the assets taken together.