

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram

1. Dr. Pramod Deo, Chairperson
2. Shri R. Krishnamoorthy, Member
3. Shri S.Jayaraman, Member
4. Shri V.S.Verma, Member

Petition No. 84/2006

In the matter of

Determination of transmission tariff for Ranaganadi transmission system in North Eastern Region for the period from 1.4.2004 to 31.3.2009.

And in the matter of

Power Grid Corporation of India Ltd.,Gurgaon **Petitioner**
Vs

1. Assam State Electricity Board, Guwahati
2. Meghalaya State Electricity Board, Shillong
3. Government of Arunachal Pradesh, Itanagar
4. Power and Electricity Department, Govt. of Mizoram, Aizawl
5. Electricity Department, Govt. of Manipur, Imphal
6. Department of Power, Govt. of Nagaland, Kohima
7. Tripura State Electricity Corporation Limited, Agartala **Respondents**

Following were present:

1. Shri M.G.Ramachandran, Advocate, PGCIL
2. Shri U.K.Tyagi, PGCIL
3. Shri M.M.Mondal, PGCIL
4. Shri R.Prasad, PGCIL
5. Ms. Sangeeta Edwards, PGCIL
6. Shri Sanjay Sen, Advocate, ASEB
7. Shri H.M.Sharma,ASEB
8. Shri R.K.Kapoor, ASEB
9. Ms. Mallika Sharma Bezbaruah, Consumer,
10. Shri A.K. Datta, representative of Ms. Mallika Sharma Bezbaruah

**ORDER
(DATE OF HEARING: 28.5.2009)**

The petitioner, Power Grid Corporation of India Limited, had filed this petition for approval of transmission charges for Ranaganadi transmission

system (the transmission system) in North Eastern 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”).

2. The investment approval for the transmission system was accorded by Ministry of Home Affairs vide letter dated 9.4.1987 at an estimated cost of Rs.4734 lakh. Subsequently, revised cost estimate for the transmission system was approved by Ministry of Power vide its letter dated 27.8.2000 at an estimated cost of Rs. 17243 lakh, which included IDC of Rs. 3125 lakh. The scope of work included in the transmission system and the date of commercial operation of the respective transmission line covered under the transmission system are as stated below:

S. No.	Name of the transmission line	Date of commercial operation	Line length in Ckt-km (for O & M)
(i)	132 kV S/C Nirjuli-Dikrong transmission line	1.10.2001	22.29
(ii)	400 kV D/C Ranganadi-Balipara transmission line	1.1.2003	332.67
	Total		354.96

3. On completion of pleadings and after hearing the parties, final tariff in respect of the transmission system was awarded vide order dated 7.3.2008 for the period 1.4.2007 to 31.3.2009.

4. The summary of tariff awarded vide said order dated 7.3.2008 is given as under:

(Rs.in lakh)

	132 kV S/C Nirjuli-Dikrong transmission line		400 kV D/C Ranganadi-Balipara transmission line	
	2007-08	2008-09	2007-08	2008-09
Depreciation	27.23	27.23	27.23	27.23
Interest on Loan	31.49	27.52	31.49	27.52
Return on Equity	55.60	55.60	55.60	55.60
Advance against Depreciation	0.00	0.00	0.00	0.00
Interest on Working Capital	4.10	4.14	4.10	4.14
O & M Expenses	37.31	38.83	37.31	38.83
Total	155.73	153.31	155.73	153.31

5. The petitioner filed Appeal No. 73/2008 before the Appellate Tribunal for Electricity against order dated 7.3.2008. The Appellate Tribunal vide its judgment dated 4.11.2008 set aside the said order dated 7.3.2008 and directed to re-determine the transmission tariff for the period from 1.4.2004 in accordance with the 2004 regulations.

6. In view of the decision of the Appellate Tribunal, the petition was re-heard.

7. Learned counsel for the ASEB submitted that the petition had not been filed as per the 2004 regulations. It was pointed out that the Commission vide its order dated 2.1.2007 had directed the petitioner to submit the Forms 5B, 5C and 5D, duly completed in all respects. He further submitted that information had not been furnished.

8. The representative of ASEB, Shri Sharma submitted that 33 kV distribution feeders were additionally included by the petitioner to claim tariff, though as per the Grid Code specified by the Commission, such distribution feeders were not to be included for the purpose of the transmission tariff. He further submitted that certain costs capitalized, had not been actually incurred. He requested the Commission to look into the cost escalation aspects as well.

9. Contradicting the petitioner's submission that it had not actually recovered cumulative depreciation considered in the earlier order, the representative of Tripura stated that the petitioner had recovered the entire depreciation. According to him, UCPTT, which was in vogue up to 31.3.2004, resulted in increase in energy transmitted and consequently in increase in revenue, this also led to recovery of entire depreciation. He also raised the issue of inclusion of 33 kV bays for tariff computation and further submitted that the petitioner should furnish the information in Forms 5B, 5C and 5D before the process of tariff determination was undertaken by the Commission.

10. The representative of the consumer, Ms. Mallika Sharma Bezbaruah submitted that she was not made a party before the Appellate Tribunal by the petitioner. He requested to direct the petitioner to submit the information in Forms 5B, 5C and 5D.

11. In response to the respondents' submissions, the representative of the petitioner submitted that none of them had challenged the Commission's order dated 31.12.2007 on above grounds. Aggrieved with the Commission's orders, the petitioner had filed the appeal before the Appellate Tribunal. There was, therefore, no ground for raising these issues at this stage, he argued. The representative of the petitioner propounded that the petitioner had filed the tariff petitions as per the 2004 regulations and the information as per Forms 5B, 5C and 5D, introduced in the regulations was to be furnished for the projects commissioned on or after 1.4.2004. Therefore, these Forms were not furnished with the petitions, he explained. These Forms had been furnished for the

assets declared under commercial operation on or after 1.4.2004, he informed. The representative of the petitioner further submitted that there were a number of assets on which expenditure was incurred after the date of the commercial operation and for such assets the petitioner had submitted the auditor's certificates. It was stated that NERPC had agreed to capitalization of certain expenditure. He further submitted that the petitioner took over the transmission network from NTPC, NHPC, NLC and NEEPCO w.e.f 1.1.1992 which included 33 kV transmission lines in NER. In NER, the transmission lines were of 132 kV level and outgoing feeders were of 33 kV level with 132/33 kV ICTs. These transmission lines were being used for evacuation of Central Sector power. Thus, 33 kV transmission lines were also included for O&M purpose.

12. The representative of the petitioner further stated that the Commission had approved tariff from 1.4.2007 based on certain capital cost. At this stage, there could be no question of going back on capital cost and that what was true for 1.4.2007, is also true for 1.4.2004.

13. The tariff for the transmission system for the period from 1.4.2004 to 31.3.2009 has been recalculated as discussed in the succeeding paras, after taking into account the submission made by the parties at the hearing. We have generally accepted the submissions made by the petitioner.

CAPITAL COST

14. As per clause (1) of Regulation 52 of the 2004 regulations, subject to prudence check, the actual expenditure incurred on completion of the project shall form the basis for determination of final tariff. The final tariff shall be

determined based on the admitted capital expenditure actually incurred up to the date of commercial operation of the transmission system and shall include capitalised initial spares subject to a ceiling norm as 1.5% of original project cost. The regulation is applicable in case of the transmission system declared under commercial operation on or after 1.4.2004.

15. The capital expenditure including de-capitalization considered by the petitioner for tariff purpose is given here under:

(Rs. in lakh)						
	Expenditure up to the date of commercial operation	Expenditure from date of commercial operation to 31.3.2004	Capital cost as on 31.3.2004	Expenditure from 1.4.2004 to 31.3.2005	Capital cost as on 1.4.2005	Balance estimated expenditure
132 kV S/C Nirjuli-Dikrong transmission line	794.26	0.00	794.26	0.00	794.26	0.00
400 kV D/C Ranganadi-Balipara transmission line	14216.02	(-)0.23	14215.79	(-) 29.19	14186.60	103.61
	15010.28	(-) 0.23	15010.05	(-) 29.19	14980.86	103.61

Additional capitalization/De-capitalization

16. In the present case, the petitioner has claimed de-capitalization of Rs.0.23 lakh for the period 2001-04 and Rs. 29.19 lakh for the period 2004-05 in respect of 400 kV D/C Ranganadi-Balipara transmission line. The details submitted by the petitioner in support of its claim for additional capital expenditure are given hereunder:

Year	Amount (Rs. in lakh)	Head of expenditure
2003-04	(-) 0.23	Transmission line = Rs.0.23 lakh (Adjustment of price variation bill)
2004-05	(-) 29.19	Transmission Line = Rs. 29.10 lakh (Balance payment and price variation payment of Rs. 8.34 lakh, adjusted against de-capitalized amount of Rs. 37.44 lakh) Sub-station = Rs. 0.09 lakh (Tools written off)

17. The de-capitalisation claimed is found to be in order. Accordingly, the de-capitalisation of Rs. 0.23 lakh for the year 2003-04 and Rs. 29.19 lakh for the year 2004-05 has been allowed to be decapitalised.

18. We have also decided that the capital cost as per para 15 above, would form the basis for final tariff.

TOTAL CAPITAL COST

19. Against the above background, gross block of Rs. 794.26 lakh as on 1.4.2004 in respect of 132 kV S/C Nirjuli-Dikrong transmission line and Rs. 14215.79 lakh as on 1.4.2004 and Rs. 14186.60 lakh as on 1.4.2005 in respect of 400 kV D/C Ranganadi-Balipara transmission line has been worked out for the purpose of tariff after accounting for de-capitalization of Rs. 0.23 lakh for the period 2003-04 and Rs. 29.19 lakh for the period 2004-05.

DEBT- EQUITY RATIO

20. Clause (1) of Regulation 54 of the 2004 regulations *inter alia* provides that,-

“(1) In case of the existing projects, 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 with effect from 01.04.2004:

Provided that in cases where the tariff for the period ending 31.3.2004 has not been determined by the Commission, debt-equity ratio shall be as may be decided by the Commission:

Provided further that in case of the existing projects where additional capitalisation has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 53, equity in the additional capitalisation to be considered shall be :-

- (a) 30% of the additional capital expenditure admitted by the Commission, or
- (b) equity approved by the competent authority in the financial package, for additional capitalisation, or
- (c) actual equity employed,

whichever is the least:

Provided further that in case of additional expenditure admitted under the second proviso, the Commission may considered equity of more than 30% if the transmission licensee is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public.”

21. The Note 1 below Regulations 53 lays down that any expenditure on account of committed liabilities with the original scope of work is to be serviced in the normative debt-equity ratio specified in Regulation 54.

22. The petitioner has claimed debt-equity ratio of 32.61:67.39 and 32.55:67.45 for the 132 kV S/C Nirjuli-Dikrong transmission line and 400 kV D/C Ranganadi-Balipara transmission line, respectively as on the date of commercial operation. The petitioner has indicated that deployment of equity to the extent of 67.45% in respect of 400 kV D/C Ranganadi-Balipara transmission line is because of direct equity deployed by NEEPCO.

23. The petitioner has stated in the petition that the approved debt-equity ratio is 50:50. Therefore, equity has been adjusted in order to bring debt and equity ratio closer to the approved debt-equity. Debt-equity ratio in respect of de-

capitalised assets during 2004-05 has been adjusted in the ratio of 70:30.

Accordingly, equity considered for the purpose of tariff is as under:

(Rs. in lakh)

	Name of the assets	Equity as on 1.4.2004	Deletion due to de-capitalization	Average equity for the period 2004-05	Equity considered as on 1.4.2005 and onwards
1	132 kV S/C Nirjuli-Dikrong transmission line	397.13	0.00	397.13	397.13
2.	400 kV D/C Ranganadi-Balipara transmission line	7107.90	8.76	7103.52	7099.14

RETURN ON EQUITY

24. 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.

25. The petitioner has claimed return on equity as on 1.4.2004 after accounting for equity on account of decapitalization on works for the period up to 31.3.2005. For the reasons recorded in para 23 above the petitioner shall be entitled to return on equity during the tariff period as under.

(Rs. in lakh)

	Return on equity				
	2004-05	2005-06	2006-07	2007-08	2008-09
132 kV S/C Nirjuli-Dikrong transmission line	55.60	55.60	55.60	55.60	55.60
400 kV D/C Ranganadi-Balipara transmission line	994.49	993.88	993.88	993.88	993.88

INTEREST ON LOAN

26. Clause (i) of regulation 56 of the 2004 regulations *inter alia* provides that,-

“(a) Interest on loan capital shall be computed loan wise on the loans arrived at in the manner indicated in regulation 54.

(b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan in accordance with Regulation 54 minus cumulative repayment as admitted by the Commission or any other authority having power to do so, up to 31.3.2004. The repayment for the period 2004-09 shall be worked out on a normative basis.

(c) The transmission licensee shall make every effort to re-finance the loan as long as it results in net benefit to the beneficiaries. The costs associated with such re-financing shall be borne by the beneficiaries.

(d) The changes to the loan terms and conditions shall be reflected from the date of such re-financing and benefit passed on to the beneficiaries.

(e) In case of dispute, any of the parties may approach the Commission with proper application. However, the beneficiaries shall not withhold any payment ordered by the Commission to the transmission licensee during pendency of any dispute relating to re-financing of loan;

(f) In case any moratorium period is availed of by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

(g) The transmission licensee shall not make any profit on account of re-financing of loan and interest on loan;

(h) The transmission licensee may, at its discretion, swap loans having floating rate of interest with loans having fixed rate of interest, or vice versa, at its own cost and gains or losses as a result of such swapping shall accrue to the transmission licensee:

Provided that the beneficiaries shall be liable to pay interest for the loans initially contracted, whether on floating or fixed rate of interest.”

27. In our calculation, the interest on loan has been worked out as detailed below:

(i) Gross amount of loan, repayment of instalments and rate of interest as per the Form-13 of the petition have been used to work out weighted average rate of interest on actual loan;

(ii) Notional loan corresponding to additional capitalization from date of commercial operation to 31.3.2005 has been added to the loan

amount as on the date of commercial operation to arrive at total notional loan. This adjusted gross loan has been considered as normative loan for tariff calculation ;

- (iii) Tariff has been worked out considering normative loan and normative repayments. Normative repayments are worked out by the following formula :

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

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

28. Based on above, year-wise interest on loan has been worked out as under:

(Rs. in lakh)

Details of loan	132 kV S/C Nirjuli-Dikrong transmission line					400 kV D/C Ranganadi-Balipara transmission line				
	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007-08	2008-09
Opening Gross Loan	397.13	397.13	397.13	397.13	397.13	7107.90	7087.46	7087.46	7087.46	7087.46
Cumulative Repayment upto DOCO/Previous Year	131.87	159.09	186.32	213.55	240.78	2344.21	2722.57	3100.56	3530.65	3992.00
Net Loan-Opening	265.26	238.04	210.81	183.58	156.35	4763.69	4364.89	3986.90	3556.81	3095.47
Addition due to Add cap	0.00					-20.43				
Repayment during the year	27.23	27.23	27.23	27.23	27.23	378.37	377.99	430.09	461.34	461.34
Net Loan-Closing	238.04	210.81	183.58	156.35	129.12	4364.89	3986.90	3556.81	3095.47	2634.12
Average Loan	251.65	224.42	197.19	169.96	142.74	4564.29	4175.89	3771.85	3326.14	2864.79
Weighted Average Rate of Interest on Loan	14.59%	14.59%	14.59%	14.59%	14.59%	14.59%	14.59%	14.59%	14.59%	14.59%
Interest	36.72	32.74	28.77	24.80	20.83	665.93	609.26	550.31	485.28	417.97

29. The detailed calculations in support of the weighted average rate of interest are contained in Annexure-I and Annexure-II attached.

DEPRECIATION

30. Sub-clause (a) of clause (ii) of Regulation 56 of the 2004 regulations provides for computation of depreciation in the following manner, namely:

(a) The value base for the purpose of depreciation shall be the historical cost of the asset.

(b) 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.

(c) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.

(d) 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.

31. In our calculations, the depreciation has been considered as under:

(a) Depreciation for the period from the date of commercial operation to 31.3.2004 has been worked out by applying the rates as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001; and

(b) Depreciation for 2004-05 onwards has been considered on the capital expenditure as on 1.4.2004.

32. Depreciation has been worked out as under:

(Rs. in lakh)

Details of loan	132 kV S/C Nirjuli-Dikrong transmission line					400 kV D/C Ranganadi-Balipara transmission line				
	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007-08	2008-09
Gross block as on the date of commercial operation	794.26					14215.79				
Addition due to additional capital expenditure	-	-	-	-	-	(-29.19)	-	-	-	-
Gross block as 1.4.2004	794.26	794.26	794.26	794.26	794.26	14186.60	14186.60	14186.60	14186.60	14186.60
Rate of Depreciation	3.428%	3.428%	3.428%	3.428%	3.428%	2.664%	2.664%	2.664%	2.664%	2.664%
Depreciable Value	714.83	714.83	714.83	714.83	714.83	12781.08	12767.94	12767.94	12767.94	12767.94
Balance Useful life of the asset	-	-	-	-	-	-	-	-	-	-
Remaining Depreciable Value	646.76	619.53	592.31	565.08	537.85	12308.92	11917.42	11539.43	11109.34	10648.00
Depreciation	27.23	27.23	27.23	27.23	27.23	378.37	377.99	377.99	377.99	377.99

ADVANCE AGAINST DEPRECIATION

33. 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

34. 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.

35. Accordingly, in our calculation the Advance Against Depreciation in respect of 400 kV D/C Ranganadi-Balipara transmission line has been worked as detailed below:

(a) 1/10th of gross loan is worked out from the Gross Notional Loan as per para 28 above.

(b) Repayment of notional loan during the year is considered as per para 28 above.

(c) Depreciation is worked out as per para 32 above.

(d) In the calculation of Advance Against Depreciation, cumulative depreciation/Advance Against Depreciation up to the preceding year along with the depreciation of the current year have been considered.

36. Details of Advance Against Depreciation in respect of 400 kV D/C Ranganadi-Balipara transmission line allowed are given hereunder:

	(Rs. in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
1/10th of Gross Loan(s)	710.79	708.75	708.75	708.75	708.75
Repayment of the Loan	378.37	377.99	430.09	461.34	461.34
Minimum of the above	378.37	377.99	430.09	461.34	461.34
Depreciation during the year	378.37	377.99	377.99	377.99	377.99
(A) Difference	0.00	0.00	52.10	83.35	83.35
Cumulative Repayment of the Loan	2722.57	3100.56	3530.65	3992.00	4453.34
Cumulative Depreciation/ Advance against Depreciation	850.52	1228.51	1606.50	2036.59	2497.93
(B) Difference	1872.05	1872.05	1924.15	1955.41	1955.41
Advance against Depreciation Minimum of (A) and (B)	0.00	0.00	52.10	83.35	83.35

OPERATION & MAINTENANCE EXPENSES

37. 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

38. The petitioner's entitlement to O & M expenses for ckt km and bays has been worked out as given hereunder:

(Rs. in lakh)

	132 kV S/C Nirjuli-Dikrong transmission line					400 kV D/C Ranganadi-Balipara transmission line					
	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007-08	2008-09	
O&M expenses for 22.99. ckt km line length	5.06	5.26	5.48	5.68	5.93	O&M expenses for 332.67 ckt-km line length	75.52	78.51	81.84	84.83	88.49
O&M expenses for 1 bay	28.12	29.25	30.42	31.63	32.90	O&M expenses for 2 bays	56.24	58.50	60.84	63.26	65.80
Total	33.18	34.51	35.90	37.31	38.83	Total	131.76	137.01	142.68	148.09	154.29

INTEREST ON WORKING CAPITAL

39. 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. Accordingly, the capital expenditure on the date of commercial operation is Rs. 794.26 lakh and Rs. 14216.02 lakh, respectively, which has been considered as the historical cost for the purpose of the present petition and maintenance spares have been worked out accordingly by escalating 1% of the historical cost @ 6% per annum. In this manner, the

value of maintenance spares works out as on 1.4.2004 are given hereunder:

(Rs. in lakh)		
Name of the assets	Date of commercial operation	Value of maintenance spares as on 1.4.2004
132 kV S/C Nirjuli-Dikrong transmission line	1.10.2001	9.19
400 kV D/C Ranganadi-Balipara transmission line	1.1.2003	152.90

(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 the respective year 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 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.

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

(Rs. in lakh)

	132 kV S/C Nirjuli-Dikrong transmission line					400 kV D/C Ranganadi-Balipara transmission line				
	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	9.19	9.74	10.33	10.95	11.60	152.95	162.13	171.85	182.17	193.10
O & M expenses	2.77	2.88	2.99	3.11	3.24	10.98	11.42	11.89	12.34	12.86
Receivables	26.10	25.67	25.24	24.82	24.42	370.89	362.18	362.15	357.53	347.37
Total	38.06	38.29	38.56	38.88	39.26	534.82	535.72	545.90	552.04	553.32
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	3.90	3.92	3.95	3.98	4.02	54.82	54.91	55.95	56.58	56.72

TRANSMISSION CHARGES

41. The transmission charges being allowed for the two transmission lines are summarised below:

(Rs in lakh)

	132 kV S/C Nirjuli-Dikrong transmission line					400 kV D/C Ranganadi-Balipara transmission line				
	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	27.23	27.23	27.23	27.23	27.23	378.37	377.99	377.99	377.99	377.99
Interest on Loan	36.72	32.74	28.77	24.80	20.83	665.93	609.26	550.31	485.28	417.97
Return on Equity	55.60	55.60	55.60	55.60	55.60	994.49	993.88	993.88	993.88	993.88
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.10	83.35	83.35
Interest on Working Capital	3.90	3.92	3.95	3.98	4.02	54.82	54.91	55.95	56.58	56.72
O & M Expenses	33.18	34.51	35.90	37.31	38.83	131.76	137.01	142.68	148.09	154.29
Total	156.62	154.00	151.45	148.92	146.51	2225.37	2173.05	2172.92	2145.18	2084.20

42. The petitioner has been paid UCPTT for the period up to 31.3.2007 based on various order of the Commission, and thereafter the transmission charges in accordance with the order dated 7.3.2008. The petitioner shall recover from the beneficiaries the additional transmission charges in three monthly instalments. The petitioner has also sought reimbursement of filing fee paid. The Commission by its separate general order dated 11.9.2008 in Petition No. 129/2005 has decided that the petitioner shall not be allowed reimbursement of the petition filing fee.

43. 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.

44. This order disposes of Petition No.84/2006.

Sd/-	sd/-	sd/-	sd/-
(V.S.VERMA)	(S.JAYARAMAN)	(R.KRISHNAMOORTHY)	(DR.PRAMOD DEO)
MEMBER	MEMBER	MEMBER	CHAIRPERSON

New Delhi dated the 19th August 2009

Annexure-I

Details of calculations in support of the weighted revised average rate of interest.

132 kV S/C Nirjuli-Dikrong transmission line

		(Rs. in lakh)				
	Details of Loan	2004-05	2005-06	2006-07	2007-08	2008-09
1	Bond-I (Issue-I)					
	Gross Loan opening	7.00	7.00	7.00	7.00	7.00
	Cumulative Repayment upto DOCO/previous year	7.00	7.00	7.00	7.00	7.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
2	Bond-I (Issue-II)					
	Gross Loan opening	6.00	6.00	6.00	6.00	6.00
	Cumulative Repayment upto DOCO/previous year	6.00	6.00	6.00	6.00	6.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
3	Bond-I (Issue-III)					
	Gross Loan opening	14.00	14.00	14.00	14.00	14.00
	Cumulative Repayment upto DOCO/previous year	14.00	14.00	14.00	14.00	14.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
4	Bond-II (Issue-I)					
	Gross Loan opening	26.00	26.00	26.00	26.00	26.00
	Cumulative Repayment upto DOCO/previous year	26.00	26.00	26.00	26.00	26.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
5	Bond-II (Issue-II)					
	Gross Loan opening	2.00	2.00	2.00	2.00	2.00
	Cumulative Repayment upto DOCO/previous year	2.00	2.00	2.00	2.00	2.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
6	Bond-III(Issue-I)					
	Gross Loan opening	2.00	2.00	2.00	2.00	2.00
	Cumulative Repayment upto DOCO/previous year	2.00	2.00	2.00	2.00	2.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
7	Bond-III (Issue-II)					
	Gross Loan opening	13.00	13.00	13.00	13.00	13.00
	Cumulative Repayment upto DOCO/previous year	13.00	13.00	13.00	13.00	13.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
8	UTI					
	Gross Loan opening	16.00	16.00	16.00	16.00	16.00
	Cumulative Repayment up to DOCO/previous year	16.00	16.00	16.00	16.00	16.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
9	GOI					
	Gross Loan opening	173.00	173.00	173.00	173.00	173.00
	Cumulative Repayment upto DOCO/previous year	0.00	10.00	23.00	39.00	56.00
	Net Loan-Opening	173.00	163.00	150.00	134.00	117.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	10.00	13.00	16.00	17.00	17.00
	Net Loan-Closing	163.00	150.00	134.00	117.00	100.00
	Average Loan	168.00	156.50	142.00	125.50	108.50
	Rate of Interest	14.59%	14.59%	14.59%	14.59%	14.59%
	Interest	24.51	22.83	20.72	18.31	15.83
	Total Loan					
	Gross Loan opening	259.00	259.00	259.00	259.00	259.00
	Cumulative Repayment upto DOCO/previous year	86.00	96.00	109.00	125.00	142.00
	Net Loan-Opening	173.00	163.00	150.00	134.00	117.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	10.00	13.00	16.00	17.00	17.00
	Net Loan-Closing	163.00	150.00	134.00	117.00	100.00
	Average Loan	168.00	156.50	142.00	125.50	108.50
	Rate of Interest	14.59%	14.59%	14.59%	14.59%	14.59%
	Interest	24.51	22.83	20.72	18.31	15.83

400 kV D/C Ranganadi-Balipara transmission line

						(Rs. in lakh)
	Details of Loan	2004-05	2005-06	2006-07	2007-08	2008-09
1	Bond-I (Issue-I)					
	Gross Loan opening	128.00	128.00	128.00	128.00	128.00
	Cumulative Repayment upto DOCO/previous year	128.00	128.00	128.00	128.00	128.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
2	Bond-I (Issue-II)					
	Gross Loan opening	107.00	107.00	107.00	107.00	107.00
	Cumulative Repayment upto DOCO/previous year	107.00	107.00	107.00	107.00	107.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
3	Bond-I (Issue-III)					
	Gross Loan opening	249.00	249.00	249.00	249.00	249.00
	Cumulative Repayment upto DOCO/previous year	249.00	249.00	249.00	249.00	249.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
4	Bond-II (Issue-I)					
	Gross Loan opening	457.00	457.00	457.00	457.00	457.00
	Cumulative Repayment upto DOCO/previous year	457.00	457.00	457.00	457.00	457.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
5	Bond-II (Issue-II)					
	Gross Loan opening	27.00	27.00	27.00	27.00	27.00
	Cumulative Repayment upto DOCO/previous year	27.00	27.00	27.00	27.00	27.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
6	Bond-III(Issue-I)					
	Gross Loan opening	37.00	37.00	37.00	37.00	37.00
	Cumulative Repayment upto DOCO/previous year	37.00	37.00	37.00	37.00	37.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
7	Bond-III (Issue-II)					
	Gross Loan opening	230.00	230.00	230.00	230.00	230.00
	Cumulative Repayment upto DOCO/previous year	230.00	230.00	230.00	230.00	230.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
8	UTI					
	Gross Loan opening	291.00	291.00	291.00	291.00	291.00
	Cumulative Repayment up to DOCO/previous year	291.00	291.00	291.00	291.00	291.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	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
	Rate of Interest					
	Interest	0.00	0.00	0.00	0.00	0.00
9	GOI					
	Gross Loan opening	3101.00	3101.00	3101.00	3101.00	3101.00
	Cumulative Repayment up to DOCO/previous year	0.00	180.00	422.00	711.00	1021.00
	Net Loan-Opening	3101.00	2921.00	2679.00	2390.00	2080.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	180.00	242.00	289.00	310.00	310.00
	Net Loan-Closing	2921.00	2679.00	2390.00	2080.00	1770.00
	Average Loan	3011.00	2800.00	2534.50	2235.00	1925.00
	Rate of Interest	14.59%	14.59%	14.59%	14.59%	14.59%
	Interest	439.30	408.52	369.78	326.09	280.86
	Total Loan					
	Gross Loan opening	4627.00	4627.00	4627.00	4627.00	4627.00
	Cumulative Repayment up to DOCO/previous year	1526.00	1706.00	1948.00	2237.00	2547.00
	Net Loan-Opening	3101.00	2921.00	2679.00	2390.00	2080.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	180.00	242.00	289.00	310.00	310.00

Net Loan-Closing	2921.00	2679.00	2390.00	2080.00	1770.00
Average Loan	3011.00	2800.00	2534.50	2235.00	1925.00
Rate of Interest	14.59%	14.59%	14.59%	14.59%	14.59%
Interest	439.30	408.52	369.78	326.09	280.86