

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

- 1. Shri. Bhanu Bhushan, Member**
- 2. Shri A.H. Jung, Member**

Petition No.136/2006

In the matter of

Approval of transmission tariff for 400 kV D/C Madurai-Thiruvananthapuram Transmission System in Southern Region for the period from 1.8.2005 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
-Respondents**

The following were present:

1. Shri P.C.Pankaj, PGCIL
2. Shri Rakesh Prasad, PGCIL
3. Shri U.K. Tyagi, DGM, PGCIL
4. Shri C.Kannan, PGCIL
5. Shri Harmeet Singh, PGCIL
6. Shri Johnson Jacob, KSEB

ORDER

(DATE OF HEARING: 23.1.2007)

The petition has been filed for approval of tariff for 400 kV D/C Madurai-Thiruvananthapuram Transmission System (the transmission system) in Southern Region for the period from 1.8.2005 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") after accounting for additional capitalization of Rs. 600.21 lakh during 2005-06. The petitioner has also prayed for the reimbursement of expenditure from the beneficiaries incurred towards publishing notices in newspapers and the petition filing fee.

2. The investment approval for the transmission system was accorded by the Board of Directors of the petitioner company under Memo dated 22.11.2000 at an estimated cost of Rs. 19597 lakh, which included IDC of Rs. 2371 lakh. Subsequently, the revised cost estimates were approved by the Board of Directors of the petitioner company as per Memorandum dated 30.1.2006 for Rs.26003 lakh, including IDC of Rs.3422 lakh.

3. The provisional transmission charges for the transmission system were approved by the Commission in its order dated 13.2.2006 in Petition No. 137/2005. The present petition is for approval of final tariff from the date of commercial operation.

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

(Rs. in lakh)

	2005-06 (Pro rata)	2006-07	2007-08	2008-09
Depreciation	446.29	677.99	677.99	677.99
Interest on Loan	955.70	1378.65	1294.15	1188.07
Return on Equity	645.35	980.63	980.63	980.63
Advance against Depreciation	0.00	185.75	328.97	801.89
Interest on Working Capital	60.37	94.70	97.78	106.36
O & M Expenses	302.02	471.39	489.80	509.79
Total	2409.73	3789.10	3869.32	4264.73

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

(Rs. in lakh)

	2005-06 (Pro rata)	2006-07	2007-08	2008-09
Maintenance Spares	243.33	253.07	268.25	284.35
O & M expenses	37.75	39.28	40.82	42.48
Receivables	602.43	631.52	644.89	710.79
Total	883.52	923.87	953.96	1037.62
Rate of Interest	10.25%	10.25%	10.25%	10.25%
Interest	60.37	94.70	97.78	106.36

6. The reply to the petition has been filed by Karnataka Power Transmission Corporation Ltd and Tamil Nadu Electricity Board. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003.

CAPITAL COST

7. 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.

8. The petitioner has claimed additional capitalization of Rs. 600.21 lakh on works for the period from 1.8.2005 to 31.3.2006 over the capital expenditure of Rs.24333.47 lakh as on the date of commercial operation.

Additional capitalization -2005-06

9. Clause (1) of Regulation 53 of the 2004 regulations provides-

“(1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission, subject to prudence check:

- (i) Deferred liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares in the original scope of works subject to the ceiling norm specified in regulation 52;
- (iv) Liabilities to meet award of arbitration or compliance of the order or decree of a court; and
- (v) On account of change in law:

Provided that original scope of work along with estimates of expenditure shall be submitted along with the application for provisional tariff:

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the transmission system.”

10. The details submitted by the petitioner in support of its claim for additional capital expenditure are given hereunder:

Year	Nature of expenditure
2005-06	Building and other Civil works = Rs. 169.63 lakh
	PLCC = Rs. 87.03 lakh
	Transmission line = Rs. 343.55 lakh
	Total = Rs. 600.21 lakh

11. The additional capital expenditure claimed is within the original scope of work and is found to be in order as it was against the committed liability. Accordingly, the additional capital expenditure of Rs. 600.21 lakh has been allowed.

Time Over run

12. The transmission system was scheduled to be commissioned by October 2003. However, it was declared under commercial operation on 1.8.2005. Thus, there is delay of about 21 months in the commissioning. The petitioner has explained that transmission line passes through the States of Tamil Nadu and Kerala, with approximate length of 142 kms in the State of Tamil Nadu and approximate length of 74 kms in the State of Kerala. All major activities in the Tamil Nadu portion was completed. As regards the Kerala portion, 86 foundations and 46 towers were erected out of total number of 221 by February 2002, when survey work was stopped in two villages, Kulathupuzha and Chithara, affecting

about 30 Kms of transmission line (around 100 locations). The villagers were demanding diversion of the transmission line from the non-forest land to the forest land. The matter was taken up by the petitioner with District Magistrate, Kollam. In May 2002. The villagers filed case in Kerala High Court. The District Magistrate and the High Court issued separate orders in July 2002 and December 2002 respectively allowing the petitioner to commence work. However, land owners of these villages formed an action council and again stopped the work. The petitioner took up the matter with Secretary, Power, Chief Secretary and Power Minister, Govt of Kerala. Thereafter, the concerned Minister, Govt of Kerala convened a meeting with MLAs, Village Panchayat leaders on 2 May 2003 to resolve the problem amicably. After detailed deliberations, a Govt. order dated 16.5.2003 was issued constituting a Committee to go into the questions. Upon submission of report by the Committee, Govt of Kerala issued order dated 23.8.2003 advising the petitioner to divert the route. The petitioner is said to have lodged its protest vide letter dated 27.8.2003 and finally Govt of Kerala issued an order dated 22.9.2003 granting approval to the route originally proposed by the petitioner, after which the work in these areas was resumed on 26.9.2003. The local public raised objections again and thereafter Deputy Collector, Kollam, convened a meeting on 6.11.2003 and the matter was resolved to mark the corridor before taking up work. However, the work was stopped again on 9.12.2003 by the public demanding compensation amount to be finalized first and distributed before resuming the work. The Minister for Power, Govt. of Kerala is stated to have convened a fresh meeting on 27.12.2003 and gave direction to District Collector, Thiruvananthapuram to finalize the rate for compensation for cash crops like rubber, coconut spices etc in consultation with Rubber Board, Agriculture Department and Spices Board as demanded by the public. During the meeting,

the Minister also concluded to pay user fee for the tower location area in line with the procedures followed by KSEB and in line with order of High Court of Kerala. It was also decided that the compensation needed to be finalized and trees were to be removed within three weeks from the date of preparation of Tree Enumeration. Subsequently, the villagers with the support of Action Council members of the affected villages stopped all the construction activities on 29.1.2004. The matter was again taken by the CMD, Powergrid with the Chief Minister, Kerala on 3.2.2004 and intimation was also sent to Secretary (Power), Government of India. Subsequently, a meeting was held on 23.2.2004 with Minister of Energy, Kerala. In the meeting the guidelines for fixing the compensation were approved so as to complete the work on urgent basis. The Action Council members were informed by the Minister that the construction work should be resumed immediately, all cooperation must be extended to complete the transmission line in a time bound manner in May 2004 itself and work should not be disrupted at any cost. Even after the above resolution, the work was not allowed to be resumed by the Action Council members who were demanding compensation amount before commencement of work. The officials of the petitioner reportedly met the Principal Secretary Power on 12.4.2004 and apprised him of the persisting ROW problems, hindering the progress of work. A request to deploy additional revenue staff for early assessment of the compensation amount was also made by the petitioner. The copies of communication exchanged between petition and authorities concerned have been placed on records by the petition.

13. The above factual background shows that the whole process of stoppage of work in February 2002 to the finalization of modalities for fixation of compensation in March 2004 has consumed more that two years time, due to which commissioning of the transmission system got delayed. Therefore, the

overall impact of the delay of 21 months with reference to investment approval is not attributable to the petitioner.

TOTAL CAPITAL COST

14. Against the above background, gross block of Rs. 24933.68 lakh as on 31.3.2006 has been worked out for the purpose of tariff over the gross block of Rs. 24333.47 lakh as on the date of commercial operation.

DEBT- EQUITY RATIO

15. Clause (2) of Regulation 54 of the 2004 regulations *inter alia* provides that,-

“(2) In case of the transmission system for which investment approval was accorded prior to 1.4.2004 and which are likely to be declared under commercial operation during the period 1.4.2004 to 31.3.2009, debt and equity in the ratio of 70:30 shall be considered:

Provided that where equity actually employed to finance the project is less than 30%, the actual debt and equity shall be considered for determination of tariff:

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

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

17. The petitioner has considered debt-equity ratio of 71.95:28.05 as actually deployed on the date of commercial operation. The petitioner has further considered entire amount of additional capitalization against loan. We have considered the debt-equity ratio of 71.95:28.05 on the date of commercial operation. The additional capitalisation on works of Rs. 600.21 lakh has been

segregated into debt and equity in the normative debt-equity ratio of 70:30 in view of Note 1 below Regulation 53. Accordingly, for the purpose of tariff, an amount of Rs. 6824.47 lakh has been considered as equity as on 1.8.2005 and Rs. 7004.53 lakh as on 1.4.2006.

RETURN ON EQUITY

18. As per clause (iii) of Regulation 56 of the 2004 regulations, return on equity shall be computed on the equity base determined in accordance with regulation 54 @ 14% per annum. Equity invested in foreign currency is to be allowed a return in the same currency and the payment on this account is made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

19. The petitioner has claimed return on equity of Rs. 6824.47 lakh. For the reasons recorded in para 17 above equity of Rs. 6824.47 lakh has been considered as on 1.8.2005 and from 1.4.2006 onwards, equity of Rs. 7004.53 lakh has been considered each year. However, tariff for the period 1.8.2005 to 31.3.2006 has been allowed on average equity of Rs. 6914.50 lakh. Accordingly, the petitioner shall be entitled to return on equity of Rs. 645.35 lakh during 2005-06 on pro rata basis and Rs. 980.63 lakh each year during 2006-09.

INTEREST ON LOAN

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

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

(b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan 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.”

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

(i) Gross loan opening has been considered from 2005-06.

(ii) Gross loans drawn for additional capital expenditure during 2005-06 has been added to the gross loan up to date of commercial operation.

(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) Weighted average rate of interest on loan for respective years as per above has been multiplied to arrive at interest on loan.

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

- (i) Gross amount of loan, repayment of instalments as per the loan allocation statement for 2005-06 has been prepared on the basis of loan allocation details submitted by the petitioner and rate of interest as given in the petition. The same is used to work out weighted average rate of interest on actual loan. The gross loan as per loan reconciliation has been considered as gross loan as on date of commercial operation.
- (ii) Notional loan arising out of additional capitalization during the year 2005-06 has been considered.
- (iii) Tariff has been worked out considering normative loan and normative repayments. Once the normative loan has been arrived at, it has been considered for all purposes in the tariff. Normative repayment has been 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) Moratorium in repayment of loan has been 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 has been considered as moratorium and depreciation during the year has been deemed as normative repayment of loan during the year.

- (v) 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.
- (vi) Bridge financing of loan from IOB having a floating rate of interest 5.90% was replaced with Bond XVII having a fixed rate of interest of 7.39%. Therefore, weighted average rate of interest has been arrived at before calculating the interest pertaining to this loan, subject to mutual settlement between the parties in case of any change/resetting of the interest rate during the tariff period.

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

(Rs. in lakh)

Details of loan	2005-06 (Pro rata)	2006-07	2007-08	2008-09
Interest on Loan				
Opening Gross Loan	17509.00	17929.15	17929.15	17929.15
Cumulative Repayment	288.82	735.11	1598.84	2606.15
Net Loan-Opening	17220.18	17194.04	16330.31	15323.00
Additions due to Additional Capitalisation	420.15			
Repayment during the year	446.29	863.73	1007.31	1508.71
Net Loan-Closing	17194.04	16330.31	15323.00	13814.28
Average Loan	17207.11	16762.17	15826.65	14568.64
Weighted Average Rate of Interest on Loan	8.24%	8.21%	8.16%	8.12%
Interest	945.73	1375.41	1290.89	1183.63

24. The detailed calculations in support of the weighted average rate of interest are contained in Annexure I attached.

DEPRECIATION

25. 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.

26. The petitioner has claimed the depreciation on the capital cost of Rs. 24777.37 lakh.

27. The gross depreciable value of the transmission system is $0.9 \times$ (Rs.24777.37 lakh-) = Rs. 22299.63 lakh.

28. Depreciation works out to Rs. 446.29 lakh for the period 1.8.2005 to 31.3.2006 on average gross block of Rs. 24633.58 and Rs. 677.99 lakh each year

for the period 1.4.2006 to 31.3.2009 on gross block of Rs. 24777.37 lakh by applying rate of depreciation of 2.7192% as shown below:

Details of Depreciation	(Rs. in lakh)			
	2005-06 (Pro rata)	2006-07	2007-08	2008-09
Gross block at the beginning of the period	24333.47	24933.68	24933.68	24933.68
Additional Capitalisation during the period	600.21			
	24933.68	24933.68	24933.68	24933.68
Gross Block at the end of the period	24333.47	24933.68	24933.68	24933.68
Rate of Depreciation	2.7192%	2.7192%	2.7192%	2.7192%
Depreciable Value (90%)	21772.90	22043.00	22043.00	22043.00
Balance Useful life of the asset	-	-	-	-
Remaining Depreciable Value	21772.90	21596.71	20732.97	19725.66
Depreciation	446.29	677.99	677.99	677.99

ADVANCE AGAINST DEPRECIATION

29. 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

30. 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.

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

(i) 1/10th of gross loan considered for tariff computation.

- (ii) Cumulative loan as well as repayment of notional loan considered during the year.
- (iii) Depreciation as claimed in the petition.

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

- (i) 1/10th of gross loan has been worked out from the gross notional loan as per para 23 above.
- (ii) Repayment of notional loan during the year has been considered as per para 23 above.
- (iii) Depreciation as worked out as per para 28 has been taken into account.

33. The details of Advance Against Depreciation allowed for the transmission scheme is given hereunder:

(Rs. in lakh)

Details of Advance Against Depreciation	2005-06	2006-07	2007-08	2008-09
1/10th of Gross Loan(s)	1750.90	1792.91	1792.91	1792.91
Repayment of Loan	446.29	863.73	1007.31	1508.71
Minimum of the above	446.29	863.73	1007.31	1508.71
Depreciation during the year	446.29	677.99	677.99	677.99
(A) Difference	0.00	185.75	329.32	830.72
Cumulative Repayment of the Loan	735.11	1598.84	2606.15	4114.86
Cumulative Depreciation/ Advance against Depreciation	446.29	1124.28	1988.01	2995.32
(B) Difference	288.82	474.56	618.14	1119.54
Advance Against Depreciation Minimum of (A) and (B)	0.00	185.75	329.32	830.72

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 432.3 ckt km and 12 bays, which have been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

(Rs. in lakh)

	Year			
	2005-06 (Pro rata)	2006-07	2007-08	2008-09
O&M expenses for 432.3 ckt kms line length	68.02	106.35	110.24	114.99
O&M expenses for 12 bays	234.00	365.04	379.56	394.80
Total	302.02	471.39	489.80	509.79

36. The petitioner has submitted that the wage revision of its employees is due with effect from 1.1.2007. Therefore, 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 from the date of commercial operation. In the present case, the capital expenditure on the date of commercial operation is Rs. 24333.47 lakh, 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 to Rs.243.33 lakh as on 1.8.2005.

(ii) O & M expenses

Regulation 56(v)(1)(a) of the 2004 regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of O&M expenses of the respective year as claimed in the petition. This has been considered in the working capital.

(iii) Receivables

As per Regulation 56(v)(1)(c) of the 2004 regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis 2 months' transmission charges.

(iv) Rate of interest on working capital

As per Regulation 56(v)(2) of the 2004 regulations, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2004 or on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation, whichever is later. The interest on working capital is payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 10.25%

based on SBI PLR as on 1.4.2005, 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 hereinbelow:

(Rs. in lakh)				
	2005-06 (Pro rata)	2006-07	2007-08	2008-09
Maintenance Spares	243.33	253.07	268.25	284.35
O & M expenses	37.75	39.28	40.82	42.48
Receivables	599.90	630.97	644.39	714.92
Total	880.99	923.32	953.46	1041.75
Rate of Interest	10.25%	10.25%	10.25%	10.25%
Interest	60.20	94.64	97.73	106.78

TRANSMISSION CHARGES

39. The capital cost and other relevant details are contained in the summary sheet attached as Annexure II. The transmission charges being allowed for the transmission system are summarised below:

(Rs. in lakh)				
	2005-06 (Pro rata)	2006-07	2007-08	2008-09
Depreciation	446.29	677.99	677.99	677.99
Interest on Loan	945.73	1375.41	1290.89	1183.63
Return on Equity	645.35	980.63	980.63	980.63
Advance against Depreciation	0.00	185.75	329.32	830.72
Interest on Working Capital	60.20	94.64	97.73	106.78
O & M Expenses	302.02	471.39	489.80	509.79
Total	2399.60	3785.80	3866.37	4289.55

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. .

41. The petitioner has sought approval for the reimbursement of expenditure of Rs. 1,27,224/- incurred on publication of notices in the newspapers. The

petitioner shall claim reimbursement of the said expenditure directly from the respondent in one installment. The petitioner has also sought reimbursement of filing fee of Rs.5 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 called for. The view taken on consideration of the comments received shall apply in the present case as regards reimbursement of filing fee.

42. The petitioner is already billing the respondents on provisional basis in accordance with the Commission's order dated 13.2.2006 in Petition No. 137/2005. The provisional billing of tariff shall be adjusted in the light of final tariff now approved by us.

43. This order disposes of Petition No. 136/2006.

Sd/
(A.H. JUNG)
MEMBER

sd/-
(BHANU BHUSHAN)
MEMBER

New Delhi dated the 6th February 2007

Annexure I

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(Rs. in Lakh)

	Details of Loan	2005-06	2006-07	2007-08	2008-09
1	Bond-IX				
	Gross Loan opening	112.00	112.00	112.00	112.00
	Cumulative Repayment upto DOCO/previous year	22.40	33.60	44.80	56.00
	Net Loan-Opening	89.60	78.40	67.20	56.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	11.20	11.20	11.20	11.20
	Net Loan-Closing	78.40	67.20	56.00	44.80
	Average Loan	84.00	72.80	61.60	50.40
	Rate of Interest	12.25%	12.25%	12.25%	12.25%
	Interest	10.29	8.92	7.55	6.17
	Repayment Schedule		10 Annual instalments from 22.8.2003		
2	Bond-X				
	Gross Loan opening	1066.00	1066.00	1066.00	1066.00
	Cumulative Repayment up to DOCO/previous year	177.67	177.67	266.50	355.33
	Net Loan-Opening	888.33	888.33	799.50	710.67
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	88.83	88.83	88.83
	Net Loan-Closing	888.33	799.50	710.67	621.83
	Average Loan	888.33	843.92	755.08	666.25
	Rate of Interest	10.90%	10.90%	10.90%	10.90%
	Interest	96.83	91.99	82.30	72.62
	Repayment Schedule		12 Annual instalments from 21.6.2004		
3	Bond-XI Option-I				
	Gross Loan opening	1052.00	1052.00	1052.00	1052.00
	Cumulative Repayment up to DOCO/previous year	0.00	87.67	175.33	263.00
	Net Loan-Opening	1052.00	964.33	876.67	789.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	87.67	87.67	87.67	87.67
	Net Loan-Closing	964.33	876.67	789.00	701.33
	Average Loan	1008.17	920.50	832.83	745.17
	Rate of Interest	9.80%	9.80%	9.80%	9.80%
	Interest	98.80	90.21	81.62	73.03
	Repayment Schedule		12 Annual instalments from 7.12.2005		
4	Bond-XII				
	Gross Loan opening	1874.00	1874.00	1874.00	1874.00
	Cumulative Repayment up to DOCO/previous year	0.00	156.17	312.34	468.50
	Net Loan-Opening	1874.00	1717.83	1561.66	1405.50
	Additions during the year	0.00	0.00	0.00	0.00

	Repayment during the year	156.17	156.17	156.17	156.17
	Net Loan-Closing	1717.83	1561.66	1405.50	1249.33
	Average Loan	1795.92	1639.75	1483.58	1327.41
	Rate of Interest	9.70%	9.70%	9.70%	9.70%
	Interest	174.20	159.06	143.91	128.76
	Repayment Schedule		12 Annual instalments from 28.3.2006		
5	Bond-XIII Option-I				
	Gross Loan opening	5000.00	5000.00	5000.00	5000.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	416.67	833.33
	Net Loan-Opening	5000.00	5000.00	4583.33	4166.67
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	416.67	416.67	416.67
	Net Loan-Closing	5000.00	4583.33	4166.67	3750.00
	Average Loan	5000.00	4791.67	4375.00	3958.33
	Rate of Interest	8.63%	8.63%	8.63%	8.63%
	Interest	431.50	413.52	377.56	341.60
	Repayment Schedule		12 Annual instalments from 31.7.2006		
6	Bond-XV				
	Gross Loan opening	1690.00	1690.00	1690.00	1690.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	140.83
	Net Loan-Opening	1690.00	1690.00	1690.00	1549.17
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	140.83	140.83
	Net Loan-Closing	1690.00	1690.00	1549.17	1408.33
	Average Loan	1690.00	1690.00	1619.58	1478.75
	Rate of Interest	6.68%	6.68%	6.68%	6.68%
	Interest	112.89	112.89	108.19	98.78
	Repayment Schedule		12 Annual instalments from 23-2-2008		
7	Bond- XVI				
	Gross Loan opening	4650.00	4650.00	4650.00	4650.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	4650.00	4650.00	4650.00	4650.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	465.00
	Net Loan-Closing	4650.00	4650.00	4650.00	4185.00
	Average Loan	4650.00	4650.00	4650.00	4417.50
	Rate of Interest	7.10%	7.10%	7.10%	7.10%
	Interest	330.15	330.15	330.15	313.64
	Repayment Schedule		10 Annual instalments from 18-2-2009		
8	Bond- XVII				
	Gross Loan opening	1000.00	1000.00	1000.00	1000.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	1000.00	1000.00	1000.00	1000.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	1000.00	1000.00	1000.00	1000.00
	Average Loan	1000.00	1000.00	1000.00	1000.00
	Rate of Interest	7.07%	7.07%	7.07%	7.07%
	Interest	70.71	70.71	70.71	70.71
	Repayment Schedule		10 Annual Instalments from 22.9.2009		
10	Bond- XVIII (For ACE) (Date of Drawal 09.03.2006)				

	Gross Loan opening	0.00	30.00	30.00	30.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	30.00	30.00	30.00
	Additions during the year	30.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	30.00	30.00	30.00	30.00
	Average Loan	15.00	30.00	30.00	30.00
	Rate of Interest	8.15%	8.15%	8.15%	8.15%
	Interest	1.22	2.45	2.45	2.45
	Repayment Schedule		12 annual instalments from 9.3.2010		
11	PNB-II				
	Gross Loan opening	581.00	581.00	581.00	581.00
	Cumulative Repayment up to DOCO/previous year	48.42	96.83	145.25	193.67
	Net Loan-Opening	532.58	484.17	435.75	387.33
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	48.42	48.42	48.42	48.42
	Net Loan-Closing	484.17	435.75	387.33	338.92
	Average Loan	508.38	459.96	411.54	363.13
	Rate of Interest	8.60%	8.60%	8.60%	8.60%
	Interest	43.72	39.56	35.39	31.23
	Repayment Schedule		12 Annual Instalments from 8.3.2005		
12	OBC				
	Gross Loan opening	484.00	484.00	484.00	484.00
	Cumulative Repayment up to DOCO/previous year	40.33	80.67	121.00	161.33
	Net Loan-Opening	443.67	403.33	363.00	322.67
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	40.33	40.33	40.33	40.33
	Net Loan-Closing	403.33	363.00	322.67	282.33
	Average Loan	423.50	383.17	342.83	302.50
	Rate of Interest	8.60%	8.60%	8.60%	8.60%
	Interest	36.42	32.95	29.48	26.02
	Repayment Schedule		12 Annual Instalments from 22.3.2005		
	Total Loan				
	Gross Loan opening	17509.00	17539.00	17539.00	17539.00
	Cumulative Repayment up to DOCO/previous year	288.82	632.60	1481.89	2472.00
	Net Loan-Opening	17220.18	16906.40	16057.11	15067.00
	Additions during the year	30.00	0.00	0.00	0.00
	Repayment during the year	343.79	849.28	990.12	1455.12
	Net Loan-Closing	16906.40	16057.11	15067.00	13611.88
	Average Loan	17063.29	16481.76	15562.06	14339.44
	Rate of Interest	8.24%	8.21%	8.16%	8.12%
	Interest	1406.74	1352.40	1269.31	1165.01

Annexure II

Summary Sheet					
Name of the Company:		PGCIL			
Name of the Element:		400 KV Sub-Station at Thiruvananthapuram and 400 KV D/C Madurai- Thiruvananthapuram Transmission Line			
Actual DOCO:		1.8.2005			
Petition No.:		136/2006			
Tariff setting Period:		2004-09			
(Rs.in lakh)					
1	Capital Cost of the Project as on DOCO				24333.47
2	Additional Capitalization				600.21
			For the year 2005-06	600.21	
			Total	600.21	
3	Total Capital Cost as on 1.4.2006 (1+2)				24933.68
4	Means of Finance :				
	As on DOCO			As on 1.4.2006	
	Debt	71.95%	17509.00	71.91%	17929.15
	Equity	28.05%	6824.47	28.09%	7004.53
	Total	100.00%	24333.47	100.00%	24933.68
5	Gross Loan:				
	As on DOCO				
	Notional Loan corresponding to ACE during 2005-06				
	As on 1.4.2006			17509.00	
				420.15	
	Up to DOCO		3826.04674	17929.15	
	From DOCO to 31.3.2009				
	Total			0.00	
6	Cumulative Repayment up to 31.3.2009 :			Dep	3826.05
				2480.25	3826.05
				3826.04674	
	From DOCO to 31.3.2009				
7	Balance Loan to be repaid beyond 31.3.2009 :		Total	AAD	Total
					14103.10
8	Depreciation recovered up to 31.3.2009 :			1345.79	3826.05
	Capital cost for the purpose of Depreciation				3826.05
	ACE during 2005-06				24333.47
9	Balance Depreciation to be recovered beyond 31.3.2009 :		Capital cost as 1.4.2006		18216.95
	Less: Land Cost			600.21	
				24933.68	
	90% of Capital Cost as above			441.46	
	Cum. Depreciation to be recovered up to 31.32.2009			24492.22	
	Balance Depreciation to be recovered beyond 31.3.2009			22043.00	
				3826.05	
				18216.95	