## CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Coram:

1. Shri. Bhanu Bhushan, Member

2. Shri A.H. Jung, Member

**Petition No.137/2006** 

In the matter of

Approval of transmission tariff for 2<sup>nd</sup> 400 kV D/C Kahalgaon-Biharshariff transmission line in Eastern Region for the period 1.12.2004 to 31.3.2009.

#### And in the matter of

Power Grid Corporation of India Ltd., Gurgaon

.... Petitioner

Vs

- 1. Bihar State Electricity Board, Patna
- 2. West Bengal State Electricity Board, Kolkata
- 3. Grid Corporation of Orissa Ltd., Bhubaneswar
- 4. Damodar Valley Corporation, Kolkata
- 5. Power Dept., Govt. of Sikkim, Gangtok
- 6. Jharkhand State Electricity Board, Ranchi

.....Respondents

#### The following were present:

- 1. Shri P.C.Pankaj, PGCIL
- 2. Shri U.K. Tyagi, DGM, PGCIL
- 3. Shri A.K.Nagpal, PGCIL
- 4. Shri C.Kannan, PGCIL
- 5. Shri Rakesh Prasad, PGCIL

# ORDER (DATE OF HEARING: 23.1.2007)

The petition has been filed for approval of tariff for 2<sup>nd</sup> 400 kV D/C Kahalgaon-Biharshariff transmission line (the transmission line) in Eastern Region for the period 1.12.2004 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") after accounting for additional capitalization of Rs. 402.55 lakh during 2004-05 and Rs. 49.59 lakh during 2005-06. The petitioner has also prayed for reimbursement of expenditure incurred towards publishing of notices in newspapers and the petition filing fee from the beneficiaries.

- 2. The investment approval for the transmission line was accorded by the Board of Directors of the petitioner company as per Memorandum dated 6.12.2001 at an estimated cost of Rs.13577 lakh, including IDC of Rs.1263 lakh, based on 2nd quarter 2001 price level. The date of commercial operation of the transmission line is 1.12.2004 with line length (for O & M purpose) of 414 ckt-kms.
- 3. The provisional transmission charges for the transmission line were decided by the Commission in its order dated 28.2.2006 in Petition No. 44/2005. 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)

	(101111)				
	2004-05 (Pro rata)	2005-06	2006-07	2007-08	2008-09
Depreciation	105.45	323.48	324.11	324.11	324.11
Interest on Loan	225.67	658.86	635.46	593.59	538.87
Return on Equity	155.48	474.89	474.89	474.89	474.89
Advance against Depreciation	0.00	0.00	0.00	385.80	385.80
Interest on Working Capital	13.88	41.99	42.52	49.46	49.54
O & M Expenses	50.07	156.20	162.68	168.83	175.92
Total	550.55	1655.42	1639.67	1996.68	1949.14

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

(Rs. in lakh)

	2004-05 (Pro rata)	2005-06	2005-06 2006-07		2008-09
Maintenance Spares	118.40	120.77	128.02	135.70	143.84
O & M expenses	12.52	13.02	13.56	14.07	14.66
Receivables	275.28	275.90	273.28	332.78	324.86
Total	406.20	409.69	414.85	482.55	483.36
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	13.88	41.99	42.52	49.46	49.54

6. The reply to the petition has been filed by Bihar State Electricity Board and West Bengal State 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 tariff after accounting for additional capitalization of Rs. 402.55 lakh on works for the period from 1.12.2004 to 31.3.2005 and Rs. 49.59 lakh for the period from 1.4.2005 to 31.3.2006 over the capital expenditure of Rs.11840.31 lakh as on the date of commercial operation.

#### Additional capitalization

- 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	Amount (Rs. in lakh)	Nature of expenditure	Э
2004-05	402.55	Sub-station PLCC Transmission line	= Rs. 92.15 lakh = Rs. 48.69 lakh = Rs. 261.71 lakh
2005-06	49.59	Transmission lines	

11. The additional capital expenditure claimed is within the original scope of work and found to be in order as it was against the balance payments. Accordingly, the additional capital expenditure of Rs. 402.55 lakh during 2004-05 and Rs. 49.59 lakh during 2005-06 as claimed has been allowed.

#### **Time Overrun**

12. The scheduled date of commissioning of the transmission line was June, 2004. The transmission line has, however, been declared under commercial operation on 1.12.2004. Thus, there is delay of about of 6 months in the commissioning. The petitioner has explained that the progress of the work was delayed due to law and order problems and intimidation of erection officials by miscreants. The matter was brought to the notice of the authorities concerned with maintenance of law and order in the State from time to time. The copies of communication exchanged between petitioner and authorities concerned have been placed on records by the petitioner.

13. There is satisfactory explanation for the entire delay of 6 months in completion of the transmission line. Therefore, the delay in commissioning of line is considered to be beyond the control of the petitioner.

#### **TOTAL CAPITAL COST**

14. Against the above background, gross block of Rs. 12242. 86 as on 1.4.2005 and Rs.12292.45 lakh as on 1.4.2006 have been worked out for the purpose of tariff over the gross block of Rs.11840.31 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 systems 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 then 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 petitioner has considered debt-equity ratio of 72.37:27.63 as actually deployed on the date of commercial operation. The petitioner has further considered the amount of additional capitalization during 2004-05 in the debt-equity ratio of 70:30 and the entire amount of additional capitalization during 2005-06 against loan. We have considered the debt-equity ratio of 72.37:27.63 on the date of commercial operation. The additional capitalisation of Rs. 402.55 lakh for the year 2004-05 and Rs. 49.59 lakh for the year 2005-06 has been segregated into

debt and equity in the normative ratio of 70:30. The net debt-equity ratio in this manner works out to 72.28:27.72. Accordingly, for the purpose of tariff, an amount of Rs. 3392.08 lakh has been considered as equity as on 1.4.2005 and Rs. 3406.95 lakh as on 1.4.2006. The necessary details in this regard are extracted hereunder:

(Rs. in lakh)

S.		Total	Debt-equity ratio	Debt	Equity
No.		(Rs. in lakh)		(Rs. in lakh)	(Rs. in lakh)
1.	Capital expenditure on date of commercial operation	11840.31	72.37:27.63	8569.00	3271.31
2.	Additional capital expenditure during 2004-05	402.55	70.00:30.00	281.79	120.77
3.	Capital expenditure as on 31.3.2005	12242.86	72.29:27.71	8850.79	3392.08
4.	Additional capital expenditure during 2005-06	49.59	70.00:30.00	34.71	14.88
5.	Capital Expenditure as on 31.3.2006	12292.45	72.28:27.72	8885.50	3406.95

## **RETURN ON EQUITY**

- 17. 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.
- 18. The petitioner has claimed return on equity of Rs. 3392.08 lakh, after considering the additional capitalisation for the year 2004-05 to have been financed out of debt and equity in the ratio of 70:30 and the entire additional capitalization for the year 2005-06 as debt.. For the reasons recorded in para 16 above equity of Rs.3271.31 lakh has been considered as on 1.12.2004, Rs. 3392.08 lakh as on 1.4.2005 and Rs. 3406.95 lakh as on 1.4.2006. However, tariff for the period 1.12.2004 to 31.3.2005 and 1.4.2005 to 313.2006 has been allowed on average equity for the respective year. Accordingly, the petitioner shall be entitled to return

on equity of Rs. 155.48 lakh during 2004-05, Rs. 475.93 lakh during 2005-06 and thereafter @ Rs. 476.97 lakh each year during 2006-09.

## **INTEREST ON LOAN**

- 19. 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 refinancing 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."

- The petitioner has claimed interest on loan in the following manner:
  - (i) Gross loan opening has been considered as on the date of commercial operation;

- (ii) Additional capital expenditure from the date of commercial operation to 31.3.2005 has been segregated in the notional debt-equity ratio of 70:30. However, additional capital expenditure during 2005-06 has been considered against loan.
- (iii) Loans corresponding to additional capital expenditure during from 1.12.2004 to 31.3.2005 and during 2005-06 have been added to the gross loan at (i) above.
- (iv) On the basis of actual rate of interest on actual average loan (including the loan corresponding to additional capital expenditure), the weighted average rate of interest on loan has been worked out for various years.
- (v) Gross loans calculated at (iii) above have been considered as notional loan and the weighted average rate of interest on loan for respective year as per above has been multiplied to arrive at interest on loan, considering the repayment on normative basis which has been arrived by considering proportionate repayment or depreciation whichever is higher.
- (vi) Bond XVIII loan w.e.f 9-3-2006 has been utilised for the purpose of additional capitalization during 2004-05 and 2005-06.
- 21. 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 up to 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.

(ii) Notional loan arising out of additional capitalization from 1.12.2004 to 31.3.2005 and during the year 2005-06 has been considered and added in loan amount as on 1.12.2004 to arrive at total notional loan.

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:

Actual repayment of actual loan during the year

------ X Opening balance of normative
Opening balance of actual loan during the year 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) OBC and PNB-II loans carry the floating rates of interest and rates of interest as applicable as on 1.12.2004 have been considered in the calculation, subject to mutual settlement between the parties in case of any change/resetting of the interest rate during the tariff period.

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

(Rs. in lakh)

Details of loan	2004-05 (Pro rata)	2005-06	2006-07	2007-08	2008-09
Interest on Loan					
Opening Gross Loan	8569.00	8850.79	8885.50	8885.50	8885.50
Cumulative Repayment	9.92	115.37	438.84	762.96	1471.57
Net Loan-Opening	8559.08	8735.42	8446.65	8122.54	7413.93
Additions due to Additional Capitalisation	281.79	34.71			
Repayment during the year	105.45	323.48	324.11	708.61	708.61
Net Loan-Closing	8735.42	8446.65	8122.54	7413.93	6705.32
Average Loan	8647.25	8591.04	8284.60	7768.23	7059.62
Weighted Average Rate of Interest on	7.7037%	7.6924%	7.6567%	7.6273%	7.6192%
Loan					
Interest	222.05	660.86	634.32	592.51	537.89

23. The detailed calculations in support of interest on loan are attached as Annexure `A` to this order.

#### **DEPRECIATION**

- 24. 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.
- 25. The petitioner has claimed the depreciation on the capital cost of Rs.11840.31 lakh as on 1.12.2004 and at the capital cost of Rs. 12292.45 lakh as on 1.4.2006 and the subsequent years.
- 26. The gross depreciable value of the transmission line is  $0.9 \times (Rs12292.45 \text{ lakh}) = Rs. 11063.21 \text{ lakh}$ .
- 27. Depreciation works out to Rs.105.45 lakh for the period 1.12.2004 to 31.3.2005 on average gross block of Rs. 12041.59 lakh and Rs. 323.48 lakh for the period 1.4.2005 to 31.3.2006 on the average gross block of Rs. 12267.658 lakh and Rs.324.11 lakh each year for the period 1.4.2006 to 31.3.2009 on gross block of Rs.12292.45 lakh as shown below:

(Rs. in lakh)

Details of Depreciation	2004-05 (Pro rata)	2005-06	2006-07	2007-08	2008-09
Gross block at the beginning of the	11840.31	12242.86	12292.45	12292.45	12292.45

period					
Additional Capitalisation during the	402.55	49.59	0.00	0.00	0.00
period					
	8269.70	8269.70	8269.70	8269.70	8269.70
Gross Block at the end of the period	12242.86	12292.45	12292.45	12292.45	12292.45
Rate of Depreciation	2.6272%	2.6368%	2.6367%	2.6367%	2.6367%
Depreciable Value (90%)	10837.43	11040.89	11063.21	11063.21	11063.21
Balance Useful life of the asset	-	-	-	-	-
Remaining Depreciable Value	10837.43	10935.44	10634.28	10310.16	9601.55
Depreciation	105.45	323.48	324.11	324.11	324.11

## **ADVANCE 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 1/10th 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. 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.

- 31. 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 22 above.
  - (ii) Repayment of notional loan during the year has been considered as per para 22 above.
  - (iii) Depreciation as worked out as per para 27 has been taken into account.
- 32. The details of Advance Against Depreciation allowed for the transmission scheme is given hereunder:

(Rs. in lakh)

Details of Advance Against	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation					
1/10th of Gross Loan(s)	856.90	885.08	888.55	888.55	888.55
Repayment of Loan	105.45	323.48	324.11	708.61	708.61
Minimum of the above	105.45	323.48	324.11	708.61	708.61
Depreciation during the year	105.45	323.48	324.11	324.11	324.11
(A) Difference	0.00	0.00	0.00	384.50	384.50
Cumulative Repayment of the Loan	115.37	438.84	762.96	1471.57	2180.18
Cumulative Depreciation/ Advance	105.45	428.93	753.04	1077.15	1785.77
against Depreciation					
(B) Difference	9.92	9.92	9.92	394.42	394.42
Advance Against Depreciation	0.00	0.00	0.00	384.50	384.50
Minimum of (A) and (B)					

#### **OPERATION & MAINTENANCE EXPENSES**

33. 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	

34. The petitioner has claimed O & M expenses for 414 ckt km and 2 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					
	2004-05 (Pro rata)	2005-06	2006-07	2007-08	2008-09	
O&M expenses for 414 ckt kms line length	31.33	97.70	101.84	105.57	110.12	
O&M expenses for 2 bays	18.75	58.50	60.84	63.26	65.80	
Total	50.07	156.20	162.68	168.83	175.92	

35. 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**

36. 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. 11840.31 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.118.40 lakh as on 1.12.2004.

#### (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 1.4.2004, which is in accordance with the 2004 regulations and has been allowed.

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

(Rs. in lakh)

	2004-05 (Pro rata)	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	118.40	120.77	128.02	135.70	143.84
O & M expenses	12.52	13.02	13.56	14.07	14.66
Receivables	273.44	276.42	273.44	332.73	324.82
Total	404.36	410.21	415.01	482.50	483.32
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	13.82	42.05	42.54	49.46	49.54

#### TRANSMISSION CHARGES

38. The capital cost and other relevant details are contained in the summary sheet attached. The transmission charges being allowed for the transmission line are summarised below:

(Rs.in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
	(Pro rata)				
Depreciation	105.45	323.48	324.11	324.11	324.11
Interest on Loan	222.05	660.86	634.32	592.51	537.89
Return on Equity	155.48	475.93	476.97	476.97	476.97
Advance against Depreciation	0.00	0.00	0.00	384.50	384.50
Interest on Working Capital	13.82	42.05	42.54	49.46	49.54
O & M Expenses	50.07	156.20	162.68	168.83	175.92
Total	546.87	1658.51	1640.63	1996.38	1948.93

39. 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. .

- 40. The petitioner has sought approval for the reimbursement of expenditure of Rs. 1, 41,673/- 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.
- 41. The petitioner is already billing the respondents on provisional basis in accordance with the Commission's order dated 28.2.2006 in Petition No. 44/2005. The provisional billing of tariff shall be adjusted in the light of final tariff now approved by us.
- 42. This order disposes of Petition No. 137/2006

Sd-/ (A.H. JUNG) MEMBER sd-/ (BHANU BHUSHAN) MEMBER

New Delhi dated the 6<sup>th</sup> February 2007

## Annexure `A`

## **CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN**

						Rs. in Lakh)
	Details of Loan	2004-05	2005-06	2006-07	2007-08	2008-09
1	Bond-X					
	Gross Loan opening	119.00	119.00	119.00	119.00	119.00
	Cumulative Repayment up to	9.92	9.92	19.83	29.75	39.67
	DOCO/previous year					
	Net Loan-Opening	109.08	109.08	99.17	89.25	79.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	9.92	9.92	9.92	9.92
	Net Loan-Closing	109.08	99.17	89.25	79.33	69.42
	Average Loan	109.08	104.13	94.21	84.29	74.38
	Rate of Interest	10.90%	10.90%	10.90%	10.90%	10.90%
	Interest	11.89	11.35	10.27	9.19	8.11
	Repayment Schedule	12 Annual i	nstalments fr	om 21-6-200	4	
2	Bond- XI Option 1					
	Gross Loan opening	127.00	127.00	127.00	127.00	127.00
	Cumulative Repayment upto	0.00	0.00	10.58	21.17	31.75
	DOCO/previous year					
	Net Loan-Opening	127.00	127.00	116.42	105.83	95.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	10.58	10.58	10.58	10.58
	Net Loan-Closing	127.00	116.42	105.83	95.25	84.67
	Average Loan	127.00	121.71	111.13	100.54	89.96
	Rate of Interest	9.80%	9.80%	9.80%	9.80%	9.80%
	Interest	12.45	11.93	10.89	9.85	8.82
	Repayment Schedule	12 Annual i 2005	nstalments fr	om 07-12-		
3	Bond- XII					
	Gross Loan opening	885.00	885.00	885.00	885.00	885.00
	Cumulative Repayment upto	0.00	0.00	73.75	147.50	221.25
	DOCO/previous year					
	Net Loan-Opening	885.00	885.00	811.25	737.50	663.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	73.75	73.75	73.75	73.75
	Net Loan-Closing	885.00	811.25	737.50	663.75	590.00
	Average Loan	885.00	848.13	774.38	700.63	626.88
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	85.85	82.27	75.11	67.96	60.81
	Repayment Schedule		nstalments fr			22.21
4	Bond- XIII Option 1					
-	Gross Loan opening	2560.00	2560.00	2560.00	2560.00	2560.00
	Cumulative Repayment upto	0.00	0.00	0.00	213.33	426.67

Net Loan-Opening	1 1	DOCO/previous year					
Additions during the year			2560.00	2560.00	2560.00	2346.67	2133.33
Repayment during the year   0.00   0.00   213.33   213.33   123   215.00   2560.00   2346.67   2133.33   123   240.00   202   2453.33   2240.00   2455.00   4750.0							0.00
Net Loan-Closing							213.33
Retar of Interest   1.63%							1920.00
Rate of Interest   8.63%   4.750.00   4750							2026.67
Interest							8.63%
Repayment Schedule							174.90
Send- XV							174.50
Gross Loan opening	5		12 amaan		711 31 7 2000	,	
Cumulative Repayment up to DOCO/previous year   Net Loan-Opening   4750.00   4750.00   4750.00   4750.00   4750.00   4350.00   4750.00   4750.00   4750.00   4350.00   4750.00	٦		4750.00	4750.00	4750.00	4750.00	4750.00
DOCO/previous year   Net Loan-Opening							395.83
Net Loan-Opening		DOCO/previous year	0.00	0.00	0.00	0.00	333.03
Additions during the year   0.00   0.00   0.00   0.00   395.83   38			4750.00	4750.00	4750.00	4750.00	4354.17
Repayment during the year   0.00   0.00   0.00   395.83   38							0.00
Net Loan-Closing							395.83
Average Loan							3958.33
Rate of Interest							
Interest Repayment Schedule							4156.25 6.68%
Repayment Schedule							
Bond-XVIII (For ACE) (Date of Drawal 09.03.2006)   Gross Loan opening   0.00   0.00   60.00							277.64
Drawal 09.03.2006)   Gross Loan opening   0.00			ı∠ annual I	nataiments fr T	UIII 23-2-200 I	О	
Gross Loan opening	ь						
Cumulative Repayment up to DOCO/previous year   Net Loan-Opening   0.00   0.00   60.			0.00	0.00	00.00	00.00	00.00
DOCO/previous year   Net Loan-Opening   0.00   0.00   60.00							60.00
Net Loan-Opening			0.00	0.00	0.00	0.00	0.00
Additions during the year   0.00   60.00   0.00   0.00   0.00   Net Loan-Closing   0.00   60			0.00	0.00	00.00	00.00	00.00
Repayment during the year   0.00							60.00
Net Loan-Closing							0.00
Average Loan							0.00
Rate of Interest   10,00   2,45   4,89   4,89   4,89   Repayment Schedule   12 annual inatalments from 09.03.2010							60.00
Interest   Repayment Schedule   12 annual inatalments from 09.03.2010   PNB-II   Gross Loan opening   70.00							60.00
Repayment Schedule							8.15%
PNB-II   Gross Loan opening							4.89
Gross Loan opening	_	Repayment Schedule	12 annuai i	nataiments fr	om 09.03.20	10	
Cumulative Repayment up to DOCO/previous year         0.00         5.83         11.67         17.50         2           Net Loan-Opening         70.00         64.17         58.33         52.50         4           Additions during the year         0.00         0.00         0.00         0.00         0.00           Repayment during the year         5.83         5.83         5.83         5.83         5.83           Net Loan-Closing         64.17         58.33         52.50         46.67         4           Average Loan         67.08         61.25         55.42         49.58         4           Rate of Interest         8.60%         8.60%         8.60%         8.60%         8           Interest         5.77         5.27         4.77         4.26         4.26           Repayment Schedule         12 Annual Instalments from 08.3.2005         5         5           OBC         12 Annual Instalments from 08.3.2005         5         6           OBC         12 Annual Instalments from 08.3.2005         1         1           OCO/previous year         0.00         58.00         58.00         58.00         58.00         58.00         58.00         58.00         58.00         58.00         58.00<	′		70.00	70.00	70.00	70.00	70.00
Net Loan-Opening   70.00   64.17   58.33   52.50   24							70.00
Net Loan-Opening			0.00	5.83	11.67	17.50	23.33
Additions during the year			70.00	C4 47	F0 22	F0 F0	40.07
Repayment during the year   S.83   S.84							46.67
Net Loan-Closing         64.17         58.33         52.50         46.67         4           Average Loan         67.08         61.25         55.42         49.58         4           Rate of Interest         8.60%         8.60%         8.60%         8           Interest         5.77         5.27         4.77         4.26           Repayment Schedule         12 Annual Instalments from 08.3.2005           OBC         58.00         58.00         58.00         58.00           Cumulative Repayment upto DOCO/previous year         0.00         4.83         9.67         14.50         14.50           Net Loan-Opening Additions during the year         58.00         53.17         48.33         43.50         3           Additions during the year         4.83         4.83         4.83         4.83           Net Loan-Closing Average Loan         55.58         50.75         45.92         41.08         3           Rate of Interest Repayment Schedule         8.60%         8.60%         8.60%         8.60%         8.60%         8.60%           Repayment Schedule         12 Annual Installments from 22.03.2005         4.78         4.36         3.95         3.53							0.00
Average Loan         67.08         61.25         55.42         49.58         4           Rate of Interest         8.60%         8.60%         8.60%         8           Interest         5.77         5.27         4.77         4.26           Repayment Schedule         12 Annual Instalments from 08.3.2005           OBC         Toross Loan opening         58.00		)					5.83
Rate of Interest         8.60%         8.60%         8.60%         8.60%         8           Interest         5.77         5.27         4.77         4.26           Repayment Schedule         12 Annual Instalments from 08.3.2005           OBC           Gross Loan opening         58.00							40.83
Interest   S.77   S.27   4.77   4.26     Repayment Schedule   12 Annual Instalments from 08.3.2005     OBC							43.75
Repayment Schedule         12 Annual Instalments from 08.3.2005           OBC         58.00 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>8.60%</td>							8.60%
Bobs         Section opening							3.76
Gross Loan opening         58.00 <td></td> <td></td> <td>12 Anr</td> <td>nuai instaime</td> <td>nts from 08.3</td> <td>3.2005</td> <td></td>			12 Anr	nuai instaime	nts from 08.3	3.2005	
Cumulative Repayment upto DOCO/previous year         0.00         4.83         9.67         14.50 <td>8</td> <td></td> <td>50.00</td> <td>50.00</td> <td>50.00</td> <td>50.00</td> <td>50.00</td>	8		50.00	50.00	50.00	50.00	50.00
DOCO/previous year         Second State         Second							58.00
Net Loan-Opening         58.00         53.17         48.33         43.50         33           Additions during the year         0.00         0.00         0.00         0.00         0.00           Repayment during the year         4.83         4.83         4.83         4.83           Net Loan-Closing         53.17         48.33         43.50         38.67         3           Average Loan         55.58         50.75         45.92         41.08         3           Rate of Interest         8.60%         8.60%         8.60%         8.60%         8           Interest         4.78         4.36         3.95         3.53           Repayment Schedule         12 Annual Installments from 22.03.2005			0.00	4.83	9.67	14.50	19.33
Additions during the year         0.00         0.00         0.00         0.00           Repayment during the year         4.83         4.83         4.83         4.83           Net Loan-Closing         53.17         48.33         43.50         38.67         38.67           Average Loan         55.58         50.75         45.92         41.08         38.60           Rate of Interest         8.60%         8.60%         8.60%         8.60%         8.60%           Interest         4.78         4.36         3.95         3.53           Repayment Schedule         12 Annual Installments from 22.03.2005		. ,	50.00	50.45	40.00	40.50	66.67
Repayment during the year       4.83       4.83       4.83       4.83         Net Loan-Closing       53.17       48.33       43.50       38.67       3         Average Loan       55.58       50.75       45.92       41.08       3         Rate of Interest       8.60%       8.60%       8.60%       8.60%       8         Interest       4.78       4.36       3.95       3.53         Repayment Schedule       12 Annual Installments from 22.03.2005							38.67
Net Loan-Closing         53.17         48.33         43.50         38.67         33.43.50           Average Loan         55.58         50.75         45.92         41.08         33.43.50           Rate of Interest         8.60%							0.00
Average Loan       55.58       50.75       45.92       41.08       3         Rate of Interest       8.60%       8.60%       8.60%       8         Interest       4.78       4.36       3.95       3.53         Repayment Schedule       12 Annual Installments from 22.03.2005							4.83
Rate of Interest         8.60%         8.60%         8.60%         8.60%         8           Interest         4.78         4.36         3.95         3.53           Repayment Schedule         12 Annual Installments from 22.03.2005							33.83
Interest         4.78         4.36         3.95         3.53           Repayment Schedule         12 Annual Installments from 22.03.2005							36.25
Repayment Schedule 12 Annual Installments from 22.03.2005							8.60%
							3.12
Total Loan			12 Ann	<u>ual Installme</u>	nts from 22.0	3.2005	
		Total Loan					
Gross Loan opening 8569.00 8569.00 8629.00 8629.00 862		Gross Loan opening	8569.00	8569.00	8629.00	8629.00	8629.00

Cumulative Repayment upto	9.92	20.58	125.50	443.75	1157.83
DOCO/previous year					
Net Loan-Opening	8559.08	8548.42	8503.50	8185.25	7471.17
Additions during the year	0.00	60.00	0.00	0.00	0.00
Repayment during the year	10.67	104.92	318.25	714.08	714.08
Net Loan-Closing	8548.42	8503.50	8185.25	7471.17	6757.08
Average Loan	8553.75	8525.96	8344.38	7828.21	7114.13
Rate of Interest	7.7037%	7.6924%	7.6567%	7.6273%	7.6192%
Interest	658.96	655.85	638.90	597.08	542.04

Name of the Company:				
Actual DOCO:	PGCIL			
Petition No.:   137/2006				
Capital Cost of the Project as on DOCO				
Capital Cost of the Project as on DOCO				
Capital Cost of the Project as on DOCO				
Additional Capitalisation   2(a+b)   2004-05   402.55   b)   2005-06   49.59   Total   452.14	Rs.in lakh)			
a)   2004-05   402.55   b)   2005-06   49.59   Total   452.14    3a) Total Capital Cost as on 1.4.2005   452.14    3 b) Total Capital Cost as on 1.4.2006    Means of Finance :    As on DOCO	11840.31			
B)	452.14			
Total				
Total Capital Cost as on 1.4.2005				
Total Capital Cost as on 1.4.2006   Means of Finance :				
Means of Finance :	12242.86			
As on DOCO	12292.45			
Debt   72.37%   8569.00   72.29%   8850.79   72.28%   8885.50     Equity   27.63%   3271.31   27.71%   3392.08   27.72%   3406.95     Total   100.00%   11840.31   100.00%   12242.86   100.00%   12292.45     5   Gross Loan:				
Equity   27.63%   3271.31   27.71%   3392.08   27.72%   3406.95     Total   100.00%   11840.31   100.00%   12242.86   100.00%   12292.45     5   Gross Loan:				
Total 100.00% 11840.31 100.00% 12242.86 100.00% 12292.45  5 Gross Loan:  As on DOCO 8569.00  Notional Loan corresponding to ACE 281.79  during 2004-05  As on 1.4.2005 8850.79  Notional Loan corresponding to ACE during 2005-06  As on 1.4.2006 8885.50  Cumulative Repayment up to 31.3.2009 :  Up to DOCO 9.92  From DOCO to 31.3.2009 2170.27  Total 2180.18  Perciation recovered up to 31.3.2009 :  Belance Loan to be repaid beyond 31.3.2009 :  Belance Loan to be repaid beyond 31.3.2009 :  Perciation recovered up to 31.3.2009 :				
5         Gross Loan:         As on DOCO         8569.00           Notional Loan corresponding to ACE during 2004-05         281.79           As on 1.4.2005         8850.79           Notional Loan corresponding to ACE during 2005-06         34.71           As on 1.4.2006         8885.50           6         Cumulative Repayment up to 31.3.2009 :           From DOCO         9.92           From DOCO to 31.3.2009         2170.27           Total         2180.18           7         Balance Loan to be repaid beyond 31.3.2009 :           Bepreciation recovered up to 31.3.2009 :         Dep         AAD         Total           From DOCO to         1401.27         769.00         2170.27				
As on DOCO   8569.00     Notional Loan corresponding to ACE   281.79     during 2004-05   8850.79     Notional Loan corresponding to ACE   34.71     during 2005-06   8885.50     As on 1.4.2006   8885.50     Gumulative Repayment up to 31.3.2009 :				
Notional Loan corresponding to ACE   281.79				
during 2004-05   8850.79     As on 1.4.2005   8850.79     Notional Loan corresponding to ACE during 2005-06   8885.50     As on 1.4.2006   8885.50     Gumulative Repayment up to 31.3.2009 :				
Notional Loan corresponding to ACE   34.71				
during 2005-06   8885.50				
6				
Up to DOCO   9.92				
Up to DOCO   9.92	2180.18			
Total   2180.18				
7 Balance Loan to be repaid beyond 31.3.2009 :  8 Depreciation recovered up to 31.3.2009 :    Dep   AAD   Total     From DOCO to   1401.27   769.00   2170.27				
8 Depreciation recovered up to 31.3.2009 :    Dep				
Dep   AAD   Total	6705.32			
From DOCO to 1401.27 769.00 2170.27	2170.27			
Total   2170.27				
9 Balance Depreciation to be recovered beyond 31.3.2009 :	8892.94			

Capital cost for the purpose of Depreciation	11840.31
ACE during 2004-05	402.55
ACE during 2005-06	49.59
Capital cost as 1.4.2006	12292.45
Less: Land Cost	0.00
	12292.45
90% of Capital Cost as above	11063.21
Cum. Depreciation to be recovered up to 31.3.2009	2170.27
Balance Depreciation to be recovered beyond 31.3.2009	8892.94

------