# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Coram:

- 1. Shri Bhanu Bhushan, Member
- 2. Shri R.Krishnamoorthy, Member

Petition No.31/2007

#### In the matter of

Determination of final transmission tariff of the assets covered under Bihar Grid Strengthening Scheme except extension of Biharshariff sub-station with 400/220 kV, 1 No. 315 MVA transformer with associated bays from 1.11.2004 to 31.3.2009. (ii) final tariff for additional capitalization for extension of Biharshariff sub-station with 400/220 kV, 1 No. 315 MVA transformer with associated bays from 1.4.2004 to 31.3.2009 (assets covered under petition No. 73/2005), under Bihar Grid Strengthening Scheme in Eastern Region.

#### And in the matter of

Power Grid Corporation of India Limited

..Petitioner

Vs

- 1. Bihar State Electricity Board, Patna
- 2. West Bengal State Electricity Board, Kolkata
- 3. Grid Corporation of Orissa Ltd., Bhubaneshwar
- 4. Damodar Valley Corporation, Calcutta
- 5. Power Department, 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, PGCIL
- 3. Shri B.C.Pant, PGCIL
- 4. Shri C.Kannan, PGCIL
- 5. Shri A.K.Nagpal, PGCIL
- 6. Shri R.B.Sharma, Advocate, BSEB & GRIDCO
- 7. Shri Shiba Shankar Nayak, GRIDCO

# ORDER (DATE OF HEARING: 14.8.2007)

The petition has been filed for approval of tariff in respect of (a) the assets covered under Bihar Grid Strengthening Scheme except extension of Biharshariff sub-station with 400/220 kV, 1 No. 315 MVA transformer with associated bays (hereinafter referred to as "the Transmission Asset-I") and (b) for additional capitalization in respect of extension of Biharshariff sub-station with 400/220 kV, 1

No. 315 MVA transformer with associated bays (hereinafter referred to as "the Transmission Asset-II") under Bihar Grid Strengthening Scheme (hereinafter referred to as "the transmission scheme") in Eastern Region for the period up 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"). In both the cases capitalization of expenditure incurred during 2004-05 and 2005-06 after the date of commercial operation has been claimed. The petitioner has also prayed for the reimbursement of expenditure incurred towards publication of notices in the newspapers and the petition filing fee by the beneficiaries.

2. The investment approval for the transmission scheme was accorded by the Board of Directors of the petitioner company vide letter dated 22.8.2001 at an estimated cost of Rs.16288 lakh, including IDC of Rs. 1627 lakh. The dates of commercial operation of the respective transmission asset are as stated below:

Name of the transmission assets	Date of commercial operation
Transmission Asset-I	1.11.2004
Transmission Asset-II	1.4.2004

- 3. The provisional transmission charges for the Transmission Asset-I were approved by the Commission in its order dated 9.5.2006 in Petition No. 73/2005.
- 4. The Commission by its said order dated 9.5.2006 had also allowed tariff for the Transmission Asset-II for the period 1.4.2004 to 31.3.2009. The Commission, in its said order dated 9.5.2006 had not considered the capital expenditure beyond the date of commercial operation. The tariff was worked out on the basis of gross block of Rs.933.08 lakh as on 1.4.2004. The petitioner now seeks approval for additional tariff on capital expenditure incurred from the date of commercial operation to 31.3.2006.

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

# **Transmission Asset-I**

(Rs. in lakh)

	2004-05 (pro rata)	2005-06	2006-07	2007-08	2008-09
Depreciation	128.18	329.64	341.17	341.17	341.17
Interest on Loan	273.36	672.87	678.78	631.01	574.38
Return on Equity	112.36	292.39	302.51	302.51	302.51
Advance against Depreciation	0.00	0.00	89.71	311.35	352.23
Interest on Working Capital	20.73	51.80	55.22	59.68	60.94
O & M Expenses	289.39	722.40	751.48	781.11	812.73
Total	824.03	2069.10	2218.88	2426.83	2443.95

# **Transmission Asset-II (Additional)**

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	0.03	0.77	1.49	1.49	1.49
Interest on Loan	0.05	1.30	2.36	2.16	1.94
Return on Equity	0.03	0.90	1.74	1.74	1.74
Advance against Depreciation	0.00	0.20	0.62	0.95	0.95
Interest on Working Capital	0.00	0.06	0.11	0.11	0.11
O & M Expenses	0.00	0.00	0.00	0.00	0.00
Total	0.11	3.23	6.33	6.45	6.23

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

# **Transmission Asset-I**

				\ -	
	2004-05 (Pro rata)	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	97.85	100.30	106.32	112.69	119.46
O & M expenses	57.88	60.20	62.62	65.09	67.73
Receivables	329.61	344.85	369.81	404.47	407.33
Total	485.34	505.35	538.75	582.26	594.51
Rate of interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	20.73	51.80	55.22	59.68	60.94

# **Transmission Asset-II (Additional)**

(Rs.in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
O & M expenses	0.00	0.00	0.00	0.00	0.00
Receivables	0.02	0.54	1.05	1.08	1.04
Total	0.02	0.54	1.05	1.08	1.04
Rate of interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	0.00	0.06	0.11	0.11	0.11

7. The reply to the petition has been filed by Bihar 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**

- 8. 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.
- 9. The petitioner has claimed additional capitalisation for the years 2004-05 and 2005-06. The capital expenditure on the date of commercial operation and additional capitalization claimed for tariff purposes are given hereunder:

(Rs. in lakh)

Name of the transmission assets	Capital Expenditure on the date of commercial operation	Additional capital expenditure during 2004-05	Additional capital expenditure during 2005-06	Total Capital expenditure
Transmission Asset-I	9785.15	600.50	707.45	11093.10
Transmission Asset-II	933.08@	1.53	39.97	974.58
Total	10718.23	602.03	747.42	12067.68

@ As per order dated 9.5.2006 in Petition No. 73/2005.

# **Additional capitalization**

- 10. 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."

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

#### Transmission Asset-I

Year	Nature of expenditure		
2004-05	Land	=	Rs. 1.21 lakh
	Buildings	=	Rs. 147.89 lakh
	Transmission line	=	Rs. 52.50 lakh
	Sub-station	=	Rs. 293.21 lakh
	PLCC	=	Rs. 105.69 lakh
	Total	=	Rs. 600.50 lakh
2005-06	Buildings	=	Rs. 63.88 lakh
	Transmission line	=	Rs. 120.74 lakh
	Sub-station	=	Rs. 522.83 lakh
	Total	=	Rs. 707.45 lakh

#### Transmission Asset-II (Additional)

Year	Nature of expenditure		
2004-05	Sub-station	=	Rs. 1.53 lakh
2005-06	Sub-station	=	Rs. 39.97 lakh
	Total	=	Rs. 41.50 lakh

12. 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 as claimed for the respective transmission asset has been allowed.

#### **TIME OVER-RUN**

- 13. As per the original approval, the transmission scheme was scheduled to be commissioned by March 2004. The Transmission Asst-I was declared under commercial operation on 1.11.2004, with a delay of about 8 months. The petitioner has explained the delay in commissioning of the Transmission Asset-I as under:
  - (i) Law and order problem: It has been stated that anti-social elements created severe problems which resulted in stoppage of construction work. There were instances of killing of officials of the contractor engaged by the petitioner and L&T supervisor, kidnapping and threat from miscreants. The matter was said to have been taken up at different levels, including at the level of Chief Secretary of Bihar. The construction work is stated to have suffered by about 14 months on this account.
  - (ii) ROW problem and hindrances in work by local people: There were stated to be serious right-of-way problems during the construction of Sasaram-Agra-Khagaul transmission line. The work could not proceed despite best efforts to settle the issues. On account of hindrances by the land owners, construction was adversely affected for about 1 month, it has been stated.
  - (iii) Shortage of concrete for construction work: The work was also said to have been affected for about 3 months during June to September, 2002

due to shortage of stone supply on account of State Government order for closure of crushers. Due to this the work is said to have been affected for about 3 months.

- 14. The petitioner has further submitted that for the above reasons, the work suffered for about 18 months. However, cumulative delay in commissioning of the Transmission Asset-I was reduced to about 8 months.
- 15. In view of the above, it has been submitted that delay in completion of the project was beyond the control of the petitioner.
- 16. BSEB in it reply stated that the problems given by petitioner for delay were of general nature normally faced by all transmission licensees and the same are required to be tackled in the normal course of the project completion for which due provision is always made in the completion schedule.
- 17. We have considered the matter in right earnest. There is satisfactory explanation from the petitioner for the entire delay in completion of the transmission line. The delay is accordingly condoned.

#### **INITIAL SPARES**

18. The total value of the initial spares of the transmission scheme indicated by the petitioner is Rs. 244.19 lakh ( Rs 230.82 lakh + Rs 14.04 lakh), which is about 2.02% of the original project cost (i.e. Rs 12,067.68 lakh; Expenditure as on 31.3.2006). This is more than the ceiling norm of 1.5%. The Commission vide its order dated 14.8.2007 had directed the petitioner to explain reasons for higher amount of initial spares. The petitioner has submitted that there is marginal increase from the allowed percentage of initial spares, However, the petitioner has failed to provide any logical explanation. Therefore, the value of initial spares

has been restricted to 1.5% of original project cost as per Regulation 52 of the 2004 regulations.

19. The capital cost as on 31.3.2006, inclusive of 1.5% of initial spares is calculated as follows:

Capital cost as on 31.3.2006 = Rs.12,067.68 lakh - Rs.244.19 lakh (without initial spares) = Rs. 11823.49 lakh

Original project cost (i.e. cost as on 31.3.2006), inclusive of initial spares equivalent to 1.5% of capital cost =  $\frac{11823.49}{1.5}$ 

0.985

= Rs.12003.54 lakh

Thus, the original project cost (as on 31.3.2006), inclusive of initial spares equivalent to 1.5% is Rs.12003.54 lakh. The value of initial spares is restricted upto 1.5% of Rs 12003.54 lakh i.e. Rs 180.05 lakh.

The break up of claimed initial spares (i.e. Rs 244.19 lakh) in the project is as follows:

Rs 230.15 lakh in case of the Transmission Asset-I and Rs 14.04 lakh in case of the Transmission Asset-II. The value of allowable initial spares for the transmission scheme are of the value of Rs 180.05 lakh only. Since the tariff for the Transmission Asset-II has already been awarded with initial spares of Rs.14.04 lakh, the initial spares allowed in case of the Transmission Asst-I are of the value of Rs. 166.01 lakh (Rs. 180.05 lakh-Rs. 14.04 lakh).

20. Accordingly, the gross block on the date of commercial operation for the Transmission Asset-I for the purpose of tariff shall be Rs. 9721.01 lakh (Rs.9785.15 lakh – Rs.230.15 lakh + Rs.166.01 lakh ).

- 21. Accordingly, the tariff in case of the Transmission Asset-I is being allowed based on the gross block of Rs. 9721.01 lakh on date of commercial operation (1.11.2004), Rs. 10321.51 lakh as on 1.4.2005, and Rs. 11028.96 lakh as on 1.4.2006. The reduction in the cost of initial spares has been reflected under the head "sub-station".
- 22. The additional tariff in case of Transmission Asset-II is being approved for additional capital expediture of Rs.1.53 lakh during 2004-05 and Rs.39.97 lakh during 2005-06.

#### **TOTAL CAPITAL COST**

23. Based on the above, capital cost for the purpose of tariff for each of the transmission assets works out as under:

(Rs. in lakh)

Name of the transmission assets	Capital cost on the date of commercial operation	Capital expenditure from the date of commercial operation to 31.3.2005	Capital cost on 1.4.2005	Capital expenditure from 1.4.2005 to 31.3.2006	Capital cost on 1.4.2006
Transmission Asset-I	9721.01	600.50	10321.51	707.45	11028.96
Transmission Asset-II (Additional)	933.08@	1.53	934.61	39.77	974.58

<sup>@</sup> As per order dated 9.5.2006 in Petition No.73/2005.

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

- 24. 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 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."

- 25. 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 det-equity ratio specified in Regulation 54.
- 26. For the Transmission Asset-I, the petitioner has considered debt and equity as actually deployed on the date of commercial operation which is 81.24:18.76. The petitioner has further considered the additional capital expenditure in respect of both the transmission assets in the debt-equity ratio of 70:30. For the Transmission Asset-I, the petitioner has claimed equity of Rs 1836.15 lakh as on the date of commercial operation against the capital cost of Rs. 9785.15 lakh. Further, notional equity considered against additional capitalization for 2004-05 is Rs. 180.15 lakh, being 30% of the additional capital expenditure incurred during that year. For the year 2005-06, additional equity considered is Rs. 144.15 lakh. For Transmission Asset-II, the petitioner has considered notional equity on account of additional capitalization for 2004-05 of Rs. 0.46 lakh and for 2005-06 of Rs. 11.99 lakh.
- 27. It is pointed out that in case of the Transmission Asset-I, the petitioner has considered equity of Rs. 1836.15 lakh against the capital cost of Rs. 9785.15 lakh as on the date of commercial operation. However, we have considered the capital cost of Rs. 9721.01 lakh on the date of commercial operation. Accordingly, equity has also been proportionately restricted to Rs. 1824.11 lakh by applying debt-equity ratio of 81.24:18.76 lakh as considered by the petitioner. Additional capital expenditure approved has been apportioned between debt and equity in the ratio of 70:30. The necessary details are tabulated below:

	Equity as on	Notional	Equity as on	Average	Notional	Average	Equity as on
	the date of	equity on	31.3.2005	equity for	equity from	equity for	31.3.2006
	commercial	additional		2004-05	1.4.2005 to	2005-06	
	operation	capitalisation			31.3.2005		
		from the					
		date of commercial					
		operation to					
		31.3.2005					
Transmission	1824.11	180.15	2004.16	1914.19	144.45	2148.71	2148.71
Asset-I	. 32		_300				

28. In respect of the Transmission Asset-II, the details of additions in equity are under:

(Rs. in lakh)

	2004-05	2005-06	Total
Transmission	0.46	11.99	12.45
Asset-II			

# **RETURN ON EQUITY**

- 29. 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.
- 30. For the reasons already recorded, equity as given in the tables under that paras 27 and 28 has been considered. However, tariff or additional tariff, as the case may be, for the years 2004-05 and 2005-06 has been allowed pro rata on average equity/additional equity. Accordingly, return on equity allowed each year during the tariff period is given hereunder:

Name of the transmission assets	Return on equity				
	2004-05 (Pro rata)	2005-06	2006-09		
Transmission Asset-I	111.66	290.71	300.82		
Transmission Asset-II (Additional)	0.03	0.90	1.74		

#### **INTEREST ON LOAN**

- 31. 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."

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

#### **Transmission Asset-I**

(i) Gross loan opening has been considered for 2004-05;

- (ii) 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.
- (iii) Bond XVI from18.2.2005 and Bond XVII from 22.9.2005 have been considered for the purpose of additional capitalization during 2004-05 and 2005-06 respectively;
- (iv) To the total gross loan of 2004-05, notional loan amounting to Rs. 420.35 lakh corresponding to additional capital expenditure has been added. Further, notional loan amount to Rs. 563.00 lakh corresponding to additional capital expenditure for the year 2005-06 has been added during that year. This resulting amount has been considered as notional loan and the weighted average rate of interest on loan for respective years has been multiplied to arrive at interest on loan. Deprecation + Advance Against Deprecation has been considered as repayment;

# Transmission Asset-II (Additional)

- 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;
- (ii) Notional loan corresponding to additional capital expenditure for the year 2004-05 and 2005-06 have been considered during the respective year and the weighted average rate of interest on loan for respective years has been multiplied to arrive at interest on loan. Deprecation + Advance Against Deprecation has been considered as repayment.

- 33. In our calculation, the interest on loan has been worked out as detailed below:
  - (i) Gross amount of loan (corresponding to capital cost of Rs. 9721.01 lakh for the Transmission Asset-I), repayment of instalments and rate of interest as per the loan reconciliation statements of 2004-05 and 2005-06 have been used to work out weighted average rate of interest on actual loan.
    - (ii) Notional loan arising out of additional capitalization has been added in loan amount as on date of commercial operation to arrive at total notional loan. The adjusted gross loan has been considered as normative loan for tariff calculations.
    - (iii) For the Transmission Asset-II, as the tariff is being worked out on additional capital expenditure only, therefore, the opening gross loan has been assumed nil.
    - (iv) Tariff has been worked out considering normative loan and normative repayments. Once the normative loan is arrived at, it is considered for all purposes in the tariff. Normative repayment has been worked out by the following formula:

Actual repayment of actual loan during the year

Opening balance of actual loan during the year

X Opening balance of normative loan during the year

(v) 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 is considered as moratorium and depreciation during the year is 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 notional average loan during the year to arrive at the interest on loan.
- 34. Based on the above, the year-wise details of interest worked out are given hereunder:

# **Transmission Asset-I**

(Rs. in lakh)

				(110. 111 141	· · · /
Interest on Loan	2004-05 (Pro rata)	2005-06	2006-07	2007-08	2008-09
Opening gross Loan	7896.90	8317.25	8880.25	8880.25	8880.25
Cumulative Repayment	22.43	149.65	476.98	905.41	1554.20
Net Loan-Opening	7874.46	8167.59	8403.26	7974.84	7326.05
Addition due to Additional Capitalization	420.35	563.00			
Repayment during the year	127.22	327.33	428.43	648.79	689.44
Net Loan-Closing	8167.59	8403.26	7974.84	7326.05	6636.61
Average Loan	8021.03	8285.43	8189.05	7650.44	6981.33
Weighted Average Rate of Interest on Loan	8.41%	8.32%	8.24%	8.20%	8.18%
Interest	281.22	689.75	674.87	627.37	571.07

# **Transmission Asset-II (Additional)**

(Rs. in lakh)

					,
Interest on Loan	2004-05	2005-06	2006-07	2007-08	2008-09
Opening gross Loan	0.00	1.07	29.05	29.05	29.05
Cumulative Repayment	0.00	0.00	0.77	2.91	5.37
Net Loan-Opening	0.00	1.07	28.28	26.14	23.68
Addition due to Additional Capitalization	1.07	27.98			
Repayment during the year	0.00	0.77	2.13	2.46	2.46
Net Loan-Closing	1.07	28.28	26.14	23.68	21.22
Average Loan	0.54	14.67	27.21	24.91	22.45
Weighted Average Rate of Interest on Loan	8.80%	8.78%	8.75%	8.73%	8.72%
Interest	0.05	1.29	2.38	2.18	1.96

35. The detailed calculations in support of interest on loan are attached as Annexure I and II to this order.

#### <u>DEPRECIATION</u>

- 36. 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.
- 37. For Transmission Asset-I, deprecation has been considered on the capital expenditure and for the Transmission Asset-II, deprecation corresponding to additional capital expenditure has been considered. The calculations in support of depreciation allowed are appended below:

#### **Transmission Asset-I**

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
	(Pro rata)				
Gross Block	9721.01	10321.51	11028.96	11028.96	11028.96
Addition due to Additional	600.50	707.45			
Capitalisation					
Gross Block	10321.51	11028.96	11028.96	11028.96	11028.96
Rate of Depreciation	3.0469%	3.0662%	3.0725%	3.0725%	3.0725%
Depreciable Value	8942.31	9530.34	9848.69	9848.69	9848.69
Balance Useful life of the asset	-	-	-	-	-
Remaining Depreciable Value	8942.31	9403.12	9394.14	8965.72	8316.93
Depreciation	127.22	327.33	338.86	338.86	338.86

# **Transmission Asset-II (Additional)**

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Block	0.00	1.53	41.50	41.50	41.50
Addition due to Additional	1.53	39.97			
Capitalisation					
Gross Block	1.53	41.50	41.50	41.50	41.50
Rate of Depreciation	3.6000%	3.6000%	3.6000%	3.6000%	3.6000%
Depreciable Value	0.69	19.36	37.35	37.35	37.35
Balance Useful life of the asset	-	-	-	-	-
Remaining Depreciable Value	0.69	19.34	36.55	34.44	31.98
Depreciation	0.03	0.77	1.49	1.49	1.49

# **ADVANCE AGAINST DEPRECIATION**

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

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

39. 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.

- 40. The petitioner has claimed Advance Against Depreciation in the following manner:
  - (i) 1/10<sup>th</sup> of gross loan is worked out from the gross notional loan.
  - (ii) Cumulative loan as well as repayment of notional loan during the year have been considered.
  - (iii) Depreciation as claimed in the petition.
- 41. In our calculation, the Advance Against Depreciation has been worked out as under:
  - (i) 1/10<sup>th</sup> of gross loan is worked out from the gross notional loan as per para 34 above.
  - (ii) Repayment of cumulative loan as well as repayment of notional loan during the year have been considered as per para 34 above.
  - (iii) Depreciation worked out in para 37 above has been considered.
- 42. The details of Advance Against Depreciation allowed for transmission scheme are given hereunder:

#### Transmission Asset-I

	2004-05	2005-06	2006-07	2007-08	2008-09
1/10 <sup>th</sup> of Gross Loan(s)	789.69	831.72	888.02	888.02	888.02
Repayment of the Loan	127.22	327.33	428.43	648.79	689.44
Minimum of the above	127.22	327.33	428.43	648.79	689.44
Depreciation during the year	127.22	327.33	338.86	338.86	338.86
(A) Difference	0.00	0.00	89.56	309.93	350.57
Cumulative Repayment of the Loan	149.65	476.98	905.41	1554.20	2243.63
Cumulative Depreciation/ Advance against Depreciation	127.22	454.55	793.41	1221.84	1870.63
(B) Difference	22.43	22.43	111.99	332.36	373.00
Advance against Depreciation Minimum of (A) and (B)	0.00	0.00	89.56	309.93	350.57

# **Transmission Asset-II (Additional)**

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
1/10 <sup>th</sup> of Gross Loan(s)	0.00	0.11	2.91	2.91	2.91
Repayment of the Loan	0.00	0.77	2.13	2.46	2.46
Minimum of the above	0.00	0.11	2.13	2.46	2.46
Depreciation during the year	0.03	0.77	1.49	1.49	1.49
(A) Difference	-0.03	-0.67	0.64	0.97	0.97
Cumulative Repayment of the Loan	0.00	0.77	2.91	5.37	7.83
Cumulative Depreciation/ Advance against Depreciation	0.03	0.80	2.30	4.40	6.86
(B) Difference	-0.03	-0.03	0.61	0.97	0.97
Advance against Depreciation Minimum of (A) and (B)	0.00	0.00	0.61	0.97	0.97

# **OPERATION & MAINTENANCE EXPENSES**

43. 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	

44. Accordingly, the petitioner's entitlement to O & M expenses in respect of Transmission Asset-I has been worked out as given hereunder:

		2004-05 (Pro rata)	2005-06	2006-07	2007-08	2008-09
Transmission	Allowable O &	31.62	78.90	82.24	85.25	88.93
Asset-I	M expenses for 334.314 Ckt km					
	line length					
	Allowable O & M expenses for 22 bays	257.77	643.50	669.24	695.86	723.80
	Total	289.39	722.40	751.48	781.11	812.73

- 45. There is no change in O & M expenses approved under order dated 9.5.2006 in respect of the Transmission Asset-II.
- 46. The petitioner has submitted that the wage revision of its employees is due with effect from 1.1.2007. Therefore, according to the petitioner, O & M expenses

should be subject to revision on account of revision of employee cost from that date. In the alternative, it has been prayed that the increase in employee cost due to wage revision be allowed as per actuals for extra cost to be incurred consequent to wage revision. We are not expressing any view, as this issue does not arise for consideration at this stage. The petitioner may approach for a relief in this regard at an appropriate stage in accordance with law.

# **INTEREST ON WORKING CAPITAL**

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

Date of Commercial Operation	Capital Expenditure (Rs. in lakh) on the date of commercial operation	Spares Cost (Rs. in lakh)
1.11.2004	9721.01	97.21

#### (ii) O & M expenses

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

#### (iii) Receivables

As per Regulation 56(v)(1)© of the 2004 regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis 2 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.

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

#### **Transmission Asset-I**

2004-05	2005-06	2006-07	2007-08	2008-09

	(Pro rata)				
Maintenance Spares	97.21	99.64	105.62	111.96	118.67
O & M expenses	57.88	60.20	62.62	65.09	67.73
Receivables	332.12	347.02	368.43	402.92	405.79
Total	487.21	506.86	536.68	579.97	592.19
Rate of interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	20.81	51.95	55.01	59.45	60.70

# **Transmission Asset-II (Additional)**

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
O & M expenses	0.00	0.00	0.00	0.00	0.00
Receivables	0.02	0.50	1.06	1.08	1.04
Total	0.02	0.50	1.06	1.08	1.04
Rate of interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	0.00	0.05	0.11	0.11	0.11

# **TRANSMISSION CHARGES**

49. The transmission charges being allowed for the transmission assets covered under transmission scheme are summarized below:

#### **Transmission Asset-I**

(Rs. in lakh)

	2004-05 2005-06 2006-07 200			2007-08	2008-09
	(Pro rata)				
Depreciation	127.22	327.33	338.86	338.86	338.86
Interest on Loan	281.22	689.75	674.87	627.37	571.07
Return on Equity	111.66	290.71	300.82	300.82	300.82
Advance against Depreciation	0.00	0.00	89.56	309.93	350.57
Interest on Working Capital	20.81	51.95	55.01	59.45	60.70
O & M Expenses	289.39	722.40	751.48	781.11	812.73
Total	830.30	2082.13	2210.61	2417.54	2434.75

# **Transmission Asset-II (Additional)**

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	0.03	0.77	1.49	1.49	1.49
Interest on Loan	0.05	1.29	2.38	2.18	1.96
Return on Equity	0.03	0.90	1.74	1.74	1.74
Advance against Depreciation	0.00	0.00	0.61	0.97	0.97
Interest on Working Capital	0.00	0.05	0.11	0.11	0.11
O & M Expenses	0.00	0.00	0.00	0.00	0.00
Total	0.11	3.02	6.34	6.49	6.27

50. In addition to the transmission charges, the petitioner shall be entitled to other charges like income-tax, incentive, surcharge and other cess and taxes in

accordance with the 2004 regulations. These transmission charges shall be

included in the regional transmission tariff for Eastern Region and shall be shared

by the regional beneficiaries in accordance with the 2004 regulations.

51. The petitioner has sought approval for the reimbursement of expenditure

of Rs.1,68,163-/ incurred on publication of notices in the newspapers.

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.

52. The petitioner is already billing the respondents on provisional basis in

accordance with the order dated 9.5.2006 in Petition No. 73/2005 in respect of

the Transmission Asset-I. The provisional billing of tariff shall be adjusted in the

light of final tariff now approved by us. In case of the Transmission Asset-II, the

additional transmission charges as now approved shall also be claimed. The

excess amount shall be recovered from the respondents in 3 monthly instalments.

53. This order disposes of Petition No.31/2007.

Sd/-

(R.KRISHNAMOORTHY) MEMBER

New Delhi dated the 23rd May 2008

sd/-

(BHANU BHUSHAN)

**MEMBER** 

- 23 -

Assets covered under Bihar Grid Strengthening Scheme except extension of Biharshariff sub-station with 400/220 kV, 1 No. 315 MVA transformer with associated bays

	Details of Loan	2004-05	2005-06	2006-07	2007-08	2008-09
1	Bond-X					
	Gross Loan opening	271.00	271.00	271.00	271.00	271.00
	Cumulative Repayment	22.58	22.58	45.16	67.74	90.32
	upto DOCO/previous year					
	Net Loan-Opening	248.42	248.42	225.84	203.26	180.68
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the	0.00	22.58	22.58	22.58	22.58
	year					
	Net Loan-Closing	248.42	225.84	203.26	180.68	158.10
	Average Loan	248.42	237.13	214.55	191.97	169.39
	Rate of Interest	10.90%	10.90%	10.90%	10.90%	10.90%
	Interest	27.08	25.85	23.39	20.92	18.46
	Repayment Schedule		12 Annual ins	stalments from	21.06.2004	
2	Bond-XI Option-I					
	Gross Loan opening	290.00	290.00	290.00	290.00	290.00
	Cumulative Repayment	0.00	0.00	24.17	48.33	72.50
	upto DOCO/previous year					
	Net Loan-Opening	290.00	290.00	265.83	241.67	217.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the	0.00	24.17	24.17	24.17	24.17
	year	0.00		2		2
	Net Loan-Closing	290.00	265.83	241.67	217.50	193.33
	Average Loan	290.00	277.92	253.75	229.58	205.42
	Rate of Interest	9.80%	9.80%	9.80%	9.80%	9.80%
	Interest	28.42	27.24	24.87	22.50	20.13
	Repayment Schedule		12 Annual ins	stalments from	07.12.2005	
3	Bond-XII					
	Gross Loan opening	2745.00	2745.00	2745.00	2745.00	2745.00
	Cumulative Repayment	0.00	0.00	228.75	457.50	686.25
	upto DOCO/previous year					
	Net Loan-Opening	2745.00	2745.00	2516.25	2287.50	2058.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the	0.00	228.75	228.75	228.75	228.75
	year	0.00				
	Net Loan-Closing	2745.00	2516.25	2287.50	2058.75	1830.00
	Average Loan	2745.00	2630.63	2401.88	2173.13	1944.38
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	266.27	255.17	232.98	210.79	188.60
	Repayment Schedule		12 Annual ins	stalments from	28.03.2006	
4	Bond-XIII Option-I					
_	Gross Loan opening	1650.00	1650.00	1650.00	1650.00	1650.00
	Cumulative Repayment	0.00	0.00	0.00	137.50	275.00
	upto DOCO/previous year					
	Net Loan-Opening	1650.00	1650.00	1650.00	1512.50	1375.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the	0.00	0.00	137.50	137.50	137.50
	year		3.33			
	Net Loan-Closing	1650.00	1650.00	1512.50	1375.00	1237.50
	Average Loan	1650.00	1650.00	1581.25	1443.75	1306.25
	Rate of Interest	8.63%	8.63%	8.63%	8.63%	8.63%

	Interest	142.40	142.40	136.46	124.60	112.73
	Repayment Schedule		12 Annual ins	talments from		
5	Bond-XV					
	Gross Loan opening	2700.00	2700.00	2700.00	2700.00	2700.00
	Cumulative Repayment	0.00	0.00	0.00	0.00	225.00
	upto DOCO/previous year					
	Net Loan-Opening	2700.00	2700.00	2700.00	2700.00	2475.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the	0.00	0.00	0.00	225.00	225.00
	year					
	Net Loan-Closing	2700.00	2700.00	2700.00	2475.00	2250.00
	Average Loan	2700.00	2700.00	2700.00	2587.50	2362.50
	Rate of Interest	6.68%	6.68%	6.68%	6.68%	6.68%
	Interest	180.36	180.36	180.36	172.85	157.82
	Repayment Schedule		12 Annual ins	talments from	23-02-2008	
6	Bond- XVI (For ACE					
	during 2004-05)					
	Gross Loan opening	0.00	415.00	415.00	415.00	415.00
	Cumulative Repayment	0.00	0.00	0.00	0.00	0.00
	upto DOCO/previous year					
	Net Loan-Opening	0.00	415.00	415.00	415.00	415.00
	Additions during the year	415.00	0.00	0.00	0.00	0.00
	Repayment during the	0.00	0.00	0.00	0.00	41.50
	year	445.00	115.00	115.00	445.00	070.50
	Net Loan-Closing	415.00	415.00	415.00	415.00	373.50
	Average Loan	207.50	415.00	415.00	415.00	394.25
	Rate of Interest	7.10%	7.10%	7.10%	7.10%	7.10%
	Interest	14.73	29.47	29.47	29.47	27.99
	Repayment Schedule		10 Annual ins	talments from	18-02-2009	
7	Bond- XVII (For ACE during 2005-06)					
	Gross Loan opening	0.00	0.00	563.00	563.00	563.00
	Cumulative Repayment	0.00	0.00	0.00	0.00	0.00
	upto DOCO/previous year					
	Net Loan-Opening	0.00	0.00	563.00	563.00	563.00
	Additions during the year	0.00	563.00	0.00	0.00	0.00
	Repayment during the	0.00	0.00	0.00	0.00	0.00
	year					
	Net Loan-Closing	0.00	563.00	563.00	563.00	563.00
	Average Loan	0.00	281.50	563.00	563.00	563.00
	Rate of Interest	7.39%	7.39%	7.39%	7.39%	7.39%
	Interest	0.00	20.80	41.61	41.61	41.61
	Repayment Schedule		10 Annual Ins	stalments from	22.09.2009	
8	PNB-II					
	Gross Loan opening	160.00	160.00	160.00	160.00	160.00
	Cumulative Repayment	0.00	13.33	26.67	40.00	53.33
	upto DOCO/previous year					
	Net Loan-Opening	160.00	146.67	133.33	120.00	106.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the	13.33	13.33	13.33	13.33	13.33
	year Net Loan-Closing	146.67	133.33	120.00	106.67	93.33
	Average Loan	153.33	140.00	126.67	113.33	100.00
	Rate of Interest	8.60%	8.60%	8.60%	8.60%	8.60%
	Interest	13.19	12.04	10.89	9.75	8.60
	miorest	13.18	12.04	10.09	9.13	0.00

	Repayment Schedule		12 Annual Ins	stalments from	08.3.2005	
9	OBC					
	Gross Loan opening	133.00	133.00	133.00	133.00	133.00
	Cumulative Repayment upto DOCO/previous year	0.00	11.08	22.17	33.25	44.33
	Net Loan-Opening	133.00	121.92	110.83	99.75	88.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	11.08	11.08	11.08	11.08	11.08
	Net Loan-Closing	121.92	110.83	99.75	88.67	77.58
	Average Loan	127.46	116.38	105.29	94.21	83.13
	Rate of Interest	8.60%	8.60%	8.60%	8.60%	8.60%
	Interest	10.96	10.01	9.06	8.10	7.15
	Repayment Schedule		12 Annual Ins	stalments from	22.03.2005	
	Total Loan					
	Gross Loan opening	7949.00	8364.00	8927.00	8927.00	8927.00
	Cumulative Repayment upto DOCO/previous year	22.58	47.00	346.91	784.33	1446.74
	Net Loan-Opening	7926.42	8317.00	8580.09	8142.67	7480.26
	Additions during the year	415.00	563.00	0.00	0.00	0.00
	Repayment during the year	24.42	299.92	437.41	662.41	703.91
	Net Loan-Closing	8317.00	8580.09	8142.67	7480.26	6776.35
	Average Loan	8121.71	8448.55	8361.38	7811.47	7128.30
	Rate of Interest	8.41%	8.32%	8.24%	8.20%	8.18%
	Interest	683.40	703.32	689.08	640.58	583.09

# **Annexure-II**

# Additional tariff in respect of extension of Bihar shariff sub-station with 400/220 kV, 1 No. 315 MVA transformer with associated bays

# CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

	Details of Loan	2004-05	2005-06	2006-07	2007-08	2008-09
1	Bond-X					
•	Gross Loan opening	39.00	39.00	39.00	39.00	39.00
	Cumulative Repayment upto DOCO/previous year	0.00	3.25	6.50	9.75	13.00
	Net Loan-Opening	39.00	35.75	32.50	29.25	26.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	3.25	3.25	3.25	3.25	3.25
	Net Loan-Closing	35.75	32.50	29.25	26.00	22.75
	Average Loan	37.38	34.13	30.88	27.63	24.38
	Rate of Interest	10.90%	10.90%	10.90%	10.90%	10.90%
	Interest	4.07	3.72	3.37	3.01	2.66
	Repayment Schedule		12 Annual 21.6.2004	instalments	from	
2	Bond-XI Option-I					
	Gross Loan opening	41.00	41.00	41.00	41.00	41.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	3.42	6.84	10.26
	Net Loan-Opening	41.00	41.00	37.58	34.16	30.74
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	3.42	3.42	3.42	3.42
	Net Loan-Closing	41.00	37.58	34.16	30.74	27.32
	Average Loan	41.00	39.29	35.87	32.45	29.03
	Rate of Interest	9.80%	9.80%	9.80%	9.80%	9.80%
	Interest	4.02	3.85	3.52	3.18	2.84
	Repayment Schedule		12 Annual 7.12.2005	instalments	from	
3	Bond-XII					
	Gross Loan opening	178.00	178.00	178.00	178.00	178.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	14.83	29.66	44.49
	Net Loan-Opening	178.00	178.00	163.17	148.34	133.51
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	14.83	14.83	14.83	14.83
	Net Loan-Closing	178.00	163.17	148.34	133.51	118.68
	Average Loan	178.00	170.59	155.76	140.93	126.10
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	17.27	16.55	15.11	13.67	12.23
	Repayment Schedule		12 Annual 28.3.2006	instalments	from	
4	Bond-XIII Option-I					
	Gross Loan opening	350.00	350.00	350.00	350.00	350.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	29.17	58.34
	Net Loan-Opening	350.00	350.00	350.00	320.83	291.66
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	29.17	29.17	29.17
	Net Loan-Closing	350.00	350.00	320.83	291.66	262.49
	Average Loan	350.00	350.00	335.42	306.25	277.08

Inte Rep	te of Interest	8.63%	8.63%	8.63%	8.63%	8.63%
	erest	30.21	30.21	28.95	26.43	23.91
	payment Schedule			nstalments		
			31.7.2006			
	nd-XV					
	oss Loan opening	100.00	100.00	100.00	100.00	100.00
	mulative Repayment upto	0.00	0.00	0.00	0.00	8.33
DO	OCO/previous year					
	t Loan-Opening	100.00	100.00	100.00	100.00	91.67
	ditions during the year	0.00	0.00	0.00	0.00	0.00
	payment during the year	0.00	0.00	0.00	8.33	8.33
	t Loan-Closing	100.00	100.00	100.00	91.67	83.34
	erage Loan	100.00	100.00	100.00	95.84	87.51
Rat	te of Interest	6.68%	6.68%	6.68%	6.68%	6.68%
Inte	erest	6.68	6.68	6.68	6.40	5.85
Rep	payment Schedule		12 Annual i 02-2008	nstalments	from 23-	
6 PN	B-II					
	oss Loan opening	23.00	23.00	23.00	23.00	23.00
	mulative Repayment upto	0.00	1.92	3.84	5.76	7.68
DO	OCO/previous year					
Net	t Loan-Opening	23.00	21.08	19.16	17.24	15.32
	ditions during the year	0.00	0.00	0.00	0.00	0.00
	payment during the year	1.92	1.92	1.92	1.92	1.92
	t Loan-Closing	21.08	19.16	17.24	15.32	13.40
	erage Loan	22.04	20.12	18.20	16.28	14.36
	te of Interest	8.60%	8.60%	8.60%	8.60%	8.60%
<b>—</b>	erest	1.90	1.73	1.57	1.40	1.23
	payment Schedule			Instalments		
			08.3.2005			
7 OB	3C					
	oss Loan opening	19.00	19.00	19.00	19.00	19.00
	mulative Repayment upto CO/previous year	0.00	1.58	3.16	4.74	6.32
Net	t Loan-Opening	19.00	17.42	15.84	14.26	12.68
	ditions during the year	0.00	0.00	0.00	0.00	0.00
	payment during the year	1.58	1.58	1.58	1.58	1.58
	t Loan-Closing	17.42	15.84	14.26	12.68	11.10
l inei	erage Loan	18.21	16.63		13.47	11.89
	-		10.03	15.05	13.47	11.00
Ave	te of Interest	8.60%	8.60%	8.60%	8.60%	8.60%
Ave Rat	te of Interest erest					
Ave Rat Inte		8.60%	8.60% 1.43	8.60%	8.60% 1.16	8.60%
Ave Rat Inte	erest payment Schedule	8.60%	8.60% 1.43	8.60% 1.29 Instalments	8.60% 1.16	8.60%
Ave Rat Inte Rep	erest payment Schedule tal Loan	8.60% 1.57	8.60% 1.43 12 Annual 22.03.2005	8.60% 1.29 Instalments	8.60% 1.16 from	8.60% 1.02
Ave Rat Inte	payment Schedule  tal Loan  oss Loan opening	8.60% 1.57 750.00	8.60% 1.43 12 Annual 22.03.2005 750.00	8.60% 1.29 Instalments 750.00	8.60% 1.16 from 750.00	8.60% 1.02 750.00
Ave Rat Inte	erest payment Schedule tal Loan	8.60% 1.57	8.60% 1.43 12 Annual 22.03.2005	8.60% 1.29 Instalments	8.60% 1.16 from	8.60% 1.02
Ave Rat Inte	erest payment Schedule  tal Loan pss Loan opening mulative Repayment upto	8.60% 1.57 750.00	8.60% 1.43 12 Annual 22.03.2005 750.00	8.60% 1.29 Instalments 750.00	8.60% 1.16 from 750.00	8.60% 1.02 750.00
Ave Rat Inte Rep Tot Gro	erest payment Schedule  tal Loan pss Loan opening mulative Repayment upto OCO/previous year	750.00 0.00	8.60% 1.43 12 Annual 22.03.2005 750.00 6.75	8.60% 1.29 Instalments 750.00 31.75	8.60% 1.16 from 750.00 85.92	750.00 148.42
Ave Rat Inter Rep Tot Gro	erest payment Schedule  tal Loan oss Loan opening mulative Repayment upto OCO/previous year t Loan-Opening	750.00 750.00	8.60% 1.43 12 Annual 22.03.2005 750.00 6.75	8.60% 1.29 Instalments 750.00 31.75 718.25	8.60% 1.16 from 750.00 85.92 664.08	750.00 148.42 601.58
Ave Rat Interest Report	erest payment Schedule  tal Loan pass Loan opening mulative Repayment upto DCO/previous year t Loan-Opening ditions during the year	750.00 0.00 750.00 0.00	8.60% 1.43 12 Annual 22.03.2005 750.00 6.75 743.25 0.00	8.60% 1.29 Instalments 750.00 31.75 718.25 0.00	8.60% 1.16 from 750.00 85.92 664.08 0.00	750.00 148.42 601.58 0.00
Ave Rat Interest Rep Property Rep Property Rep	erest payment Schedule  tal Loan pass Loan opening mulative Repayment upto pcO/previous year t Loan-Opening ditions during the year payment during the year	750.00 0.00 750.00 0.00 6.75	8.60% 1.43 12 Annual 22.03.2005 750.00 6.75 743.25 0.00 25.00	8.60% 1.29 Instalments 750.00 31.75 718.25 0.00 54.17	8.60% 1.16 from 750.00 85.92 664.08 0.00 62.50	750.00 148.42 601.58 0.00 62.50
Ave Rat Interest Report	payment Schedule  tal Loan  oss Loan opening mulative Repayment upto OCO/previous year t Loan-Opening ditions during the year payment during the year t Loan-Closing	750.00 0.00 750.00 0.00 6.75 743.25	8.60% 1.43 12 Annual 22.03.2005 750.00 6.75 743.25 0.00 25.00 718.25	750.00 31.75 718.25 0.00 54.17 664.08	8.60% 1.16 from 750.00 85.92 664.08 0.00 62.50 601.58	750.00 148.42 601.58 0.00 62.50 539.08