# CENTRAL ELECTRICITY REGULATORY COMMISSION <br> NEW DELHI 

Petition No. 291/2009
Coram:

1. Dr. Pramod Deo, Chaiperson
2. Shi S.J ayaraman, Member
3. Shri V.S.Verma, Member

DATE OF HEARING: 12.1.2010
DATE OF ORDER 3.2.2010

## In the matter of

Revision of transmission tariff due to additional capital expenditure incurred during 2008-09 for 400 kV Madurai-Trivendrum Transmission system in Southem Region.

And in the matter of
Power Grid Corporation of India Limited, Gurgaon
..Petitioner
Vs
1.Ka mataka Power Transmission Coporation Limited, Bangalore
2. Transmission Corporation of Andhra Pradesh Ltd., Hyderabad
3.Kerala State Electric ity Board, Thiruvanatha puram
4.Tamil Nadu Electric ity Board, Chennai
5.Elec tricity Department, Govt. of Pondichemy, Pondichemy
6. Eastem Power Distribution Company of Andhra Pradesh Limited,

Vishakhapatnam
7. Southem Power Distribution Company of And hra Pradesh Limited, Tirupati
8. Central Power Distribution Company of And hra Pradesh Limited, Hyderabad
9. Northem Power Distribution Company of Andhra Pradesh Limited, Warangal
10. Bangalore Electricity Supply Company Ltd., Ba ngalore
11. Gulbarga Electricity Supply Company Ltd. Gulburga
12. Hubli Electric ity Supply Company Ltd., Hubli
13. MESC OM Corporate office, Mangalore
14.Chamundeswari Elec tric ity Supply Corporation Ltd., Mysore. .Respondents

## The following were present

1. Shri U.K.Tya gi, PG CIL
2. Shri M.M.Mondal, PGCIL
3. Shri Mohd. Mohsin, PGCIL
4. Shri Prashant Sha rma, PGCIL

## ORDER

This petition has been filed for revision of transmission tariff on account of additional capital expenditure in respect of 400 kV MaduraiTrivendrum Transmission system along with Trivendrum sub-station and bays at Madurai (the transmission asset) in Southem Region during the period from 1.4.2008 to 31.3.2009, based on the Central Electricity Regulatory Commission (Tems and Conditions of Ta riff) Regulations, 2004, (hereinafter referred to as "the 2004 regulations"). The petitioner has also prayed for reimbursement of the petition filing fee and other expenditure in connection with the filing of the petition.
2. The investment approval for the transmission system was accorded by Board of Directors of the petitioner company vide Memorandum dated 22.11.2000 at an estimated cost of Rs. 19597 lakh, which included IDC of Rs. 2371 lakh. Subsequently, approval for the revised cost estimate was accorded by Board of Directors of the petitioner company vide letter dated 30.1.2006 for an estimated cost of Rs. 26003 lakh, which included IDC of Rs. 3422 lakh. The transmission line was declared under commercial operation on 1.8.2005.
3. The transmission charges for the transmission asset were approved by the Commission in its order dated 6.2.2007 in Petition No. 136/2006 for the period 1.8.2005 to 31.3.2009 after accounting for additional capital expenditure of Rs. 600.21 lakh incurred up to 31.3.2006. To correct the inadvertent mathematic al errors, the transmission charges were revised by the Commission in its order dated 7.6.2007 in I.A.No. 19/2007 in Petition No.

136/2006. The transmission charges for the transmission assets due to additional capital expenditure for the year 2006-07 and 2007-08 were revised by the Commission vide its order dated 17.6.2009 in Petition No. $45 / 2009$ for the period from 1.4.2006 to 31.3.2009. The summary of the revised transmission charges approved by the said order dated 17.6.2009 is extracted hereunder.
(Rs. in lakh)

|  | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ | $\mathbf{2 0 0 8 - 0 9}$ |
| :--- | ---: | ---: | ---: |
| Depreciation | 682.90 | 689.09 | 690.37 |
| Interest on Loan | 1390.22 | 1319.99 | 1216.23 |
| Retum on Equity | 988.46 | 998.34 | 1000.39 |
| Advance against Depreciation | 180.84 | 319.83 | 798.88 |
| Interest on Working Capital | 95.03 | 98.57 | 107.35 |
| O \& M Expenses | 471.39 | 489.80 | 509.79 |
| Total | $\mathbf{3 8 0 8 . 8 4}$ | $\mathbf{3 9 1 5 . 6 2}$ | $\mathbf{4 3 2 3 . 0 1}$ |

4. The relevant details of the capital expenditure of the transmission assets claimed by the petitioner are as under.
(Rs. in lakh)

| Capital Expenditure as on <br> 1.4 .2008 | Additional Capital <br> Expenditure during 2008-09 | Capital expenditure <br> as on 1.4.2009 |
| :---: | :---: | :---: |
| 25404.09 | 99.60 | 25503.69 |
| (Asperorder dated 17.6.2009) |  |  |

5. Based on the above additional capital expenditure, the petitioner has
claimed the revised transmission charges for the year 2008-09 a s under:
(Rs. in lakh)

|  | 2008-09 |
| :--- | ---: |
| Depreciation | 691.54 |
| Interest on Loan | 1219.07 |
| Retum on Equity | 1002.48 |
| Advance against Depreciation | 797.70 |
| Interest on Working Capital | 107.44 |
| O \& M Expenses | 509.79 |
| Total | $\mathbf{4 3 2 8 . 0 2}$ |

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

|  | 2008-09 |
| :--- | ---: |
| Maintenance Spares | 284.53 |
| O \& M expenses | 42.48 |
| Receivables | 721.34 |
| Total | 1048.17 |
| Rate of Interest | $10.25 \%$ |
| Interest | $\mathbf{1 0 7 . 4 4}$ |

7. The reply to the petition has been filed by Tamil Nadu Electricity Board (TNEB), which was received on 12.1.2010. TNEB vide its reply has contended that as per clause (4) of the regulations 53 of the 2004 regulations, impact of additional capitalization may be considered only twice in a tariff period and therefore, the present petition is not maintainable. TNEB however, has not indicated the two instances when tariff was revised during the period 2004-09 for considering the impact of additional capital expenditure. We find from the records that impact of additional capital expenditure on tariff revision was considered only once in the past vide order dated 17.6 .2009 in Petition No. 45/2009. Accordingly, the objection of the respondent is not tenable. TNEB has also objected to considering wage revision under $O \& M$ expenses and reimbursement of the petition filing fee. These concems have been taken care of in the order.

## CAPITALCOST

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

| Year | Amount <br> (Rs. in lakh) | Nature and details <br> of expenditure |
| :---: | :--- | :--- |
| 2008-09 | Land, Building and <br> Transmission line <br> Total | Compensation <br> and <br> Balance/retention <br> payments |

9. It is found that the additional capital expenditure claimed is in respect of committed liabilities. These are part of the deferred liabilities relating to works/services which have since materialised, and are within the original scope of work. Therefore, the additional expenditure sought to be capitalised is allowed under clauses (1) and (2) of Regulation 53 of the 2004 regulations.

## IOTALCAPITALCOST

10. Based on the above, capital cost for the purpose of tariff for the tra nsmission a ssets as on 31.3.2009 works out as under:
(Rs. in lakh)

| Capital <br> expenditure as <br> on 1.4.2008 | Additional <br> expenditure <br> $2008-09$ | capital <br> during |
| :--- | :--- | :--- |
| 25404.00 |  | Capital expenditure as <br> on 1.4.2009 |

## DEBT- EQUITY RATIO

11. The petitioner has considered the amount of additional capitalization in the debt-equity ratio of $70: 30$. This has been found to be in order. Accordingly, for the purpose of ta riff, equity considered for the tra nsmission a ssets is as under:
(Rs. in lakh)

| Equity as on <br> 1.4 .2008 | Notional additional <br> equity during 2008- <br> 09 | Total <br> considered <br> 31.3 .2009 | equity <br> as on | Average equity <br> for2008-09 |
| :--- | :--- | :--- | :--- | :--- |
| 7145.66 | 29.88 |  | 7175.54 | 7160.60 |

## REIURN ON EQUITY

12. As per clause (iii) of Regulation 56 of the 2004 regulations, retum on equity shall be computed on the equity base detemined in accordance with regulation 54 @ $14 \%$ per annum. Equity invested in foreign curency is to be allowed a retum in the same curency and the payment on this account is made in Indian Rupees based on the exchange rate prevailing on the due date of billing.
13. Equity as given in the table under para 11 above has been considered. The tariff for the year 2008-09 has been allowed on average equity. Accordingly, revised retum on equity of Rs. 1002.48 lakh has been a llowed for the year 2008-09.

## INIERESTON LOAN

14. Clause (1) of Regulation 56 of the 2004 regulations inter alia provides that,-
"(a) Interest on loan capital shall be computed loan wise on the loans a mived 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 bome by the beneficiaries.
(d) The changes to the loan tems 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 refinancing 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 a ny profit on account of re-fina ncing 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 lic ensee:

Provided that the beneficiaries shall be liable to pay interest for the loans initially contracted, whether on floating or fixed rate of interest."
15. In our calculation, the interest on loan has been worked out as detailed below:
(a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual loan have been considered asper the petition.
(b) Notional loan a rising out of additional capita lization for the year 2008-09 has been added in loan amount as on date of commercial operation to a mive at total notional loan. This adjusted gross loan has been considered as nomative loan for ta riff calculations.
(c) Tariff has been worked out considering nomative loan and nomative repayments. Nomative repayments have been worked out by the following formula:
(d) Moratorium in repayment of loan has been considered with reference to nomative loan and if the nomative repayment of loan during the year is less than the depreciation during the year, it has been considered asmoratorium and depreciation during the year has been deemed as normative repayment of loan during the year.
(e) Weighted average rate of interest on actual loan worked out as per (a) above has been applied on the average loan during the year to a mive at the interest on loan.
16. Based on above, revised interest on loan for the year 2008-09 has been worked out as under:

| Details | (Rs. in lakh) |
| :--- | ---: |
| Gross Normative Loan-Opening | 18258.43 |
| Cumulative Repayment up to Previous Year/date of <br> commerc ial operation | 2607.77 |
| Net Loan-Opening | 15650.66 |
| Addition due to Additional Capitalisation | 69.72 |
| Repayment during the year | 1489.25 |
| Net Loan-Closing | 14231.13 |
| Average Loan | 14940.90 |
| Weighted Average Rate of Interest on Loan | $8.16 \%$ |
| Interest | $\mathbf{1 2 1 9 . 0 7}$ |

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

## DEPRECIATION

18. Sub-clause (a) of clause (ii) of Regulation 56 of the 2004 regulations provides for computation of depreciation in the following manner, namely:
(a) The value base for the purpose of depreciation shall be the historic al cost of the a sset.
(b) Depreciation shall be calculated annually based on straight line method over the useful life of the asset and at the rates prescribed in Appendix II to these regulations. The residual value of the asset shall be considered as $10 \%$ and depreciation shall be allowed up to maximum of $90 \%$ of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing $90 \%$ of the historical cost of the asset. The historical capital cost of the asset shall include additional capitalisation on account of Foreign Exchange Rate Variation up to 31.3.2004 already allowed by the Central Govemment/Commission.
(c) On repayment of entire loan, the remaining depreciable value shall be spread overthe balance useful life of the asset.
(d) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro rata basis.
19. Depreciation allowed has been worked out as below:
(Rs. in lakh)

|  | 2008-09 |
| :--- | ---: |
| Gross block ason 1 |  |
| st April of the year | 25404.09 |
| Gross Block | 99.60 |
| Rate of Depreciation | 25503.69 |
| Depreciable Value | $2.7168 \%$ |
| Balance Useful life of the asset | 22491.29 |
| Remaining Depreciable Value | - |
| Depreciation | 20172.34 |

## ADVANCE AGAINSTDEPRECIATION

20. 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 ma nner given hereunder:
$A A D=$ Loan repayment amount as per regulation 56 (i) subject to a ceiling of $1 / 10$ th of loan amount as per regulation 54 minus depreciation as per sc hedule
21. 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.
22. Accordingly, in our calculation the Advance Against Depreciation has been worked as detailed below:
(a) $1 / 10$ th of gross loan is worked out from the Gross Notional Loan asperpara 16 above.
(b) Repayment of notional loan during the year is considered as perpara 16 above.
(c) Depreciation is worked out as per para 19 above.
(d) In the calculation of Advance Against Depreciation, cumulative depreciation/Advance Against Depreciation up to the preceding year along with the depreciation of the current year have been considered.
23. Details of revised Advance Against Depreciation allowed are given hereunder:
(Rs. in lakh)

|  | $\mathbf{2 0 0 8 - 0 9}$ |
| :--- | ---: |
| l/10th of G ross Loan(s) | 1825.84 |
| Repayment of the Loan | 1489.25 |
| Minimum of the above | 1489.25 |
| Deprec iation during the year | 691.54 |
| (A) Difference | 797.71 |
| Cumulative Repayment of the Loan | 4097.02 |
| Cumulative Deprec iation/ Adva nce aga inst Depreciation | 3010.49 |
| (B) Difference | 1086.53 |
| Advance against Depreciation Minimum of (A) and (B) | $\mathbf{7 9 7 . 7 1}$ |

## OPERATION \& MAINIENANCE EXPENSES

24. In accordance with clause (iv) of Regulation 56 the 2004 regulations, the following noms are prescribed for $O \& M$ expenses:

|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 0 4 - 0 5}$ | $\mathbf{2 0 0 5 - 0 6}$ | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ | 2008-09 |
| O\&M expenses (Rs in la kh per ckt-km) | 0.227 | 0.236 | 0.246 | 0.255 | 0.266 |
| O\&M expenses (Rs in la kh per bay) | 28.12 | 29.25 | 30.42 | 31.63 | 32.90 |

25. $O \& M$ expenses as taken for the tariff calculations as per order dated 6.2.2007 in Petition No. 136/2007 have been considered, since line length and number of bays rema in unchanged.

## INIERESTON WORKING CAPITAL

26. 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. The petitioner has claimed maintenance spares after accounting for additional capital expenditure. For the purpose of computation of maintenance spares, the historic al cost is being taken as the cost on the date of commercial operation. Maintenance spares on additional capital expenditure are not being considered for the present. Therefore, the petitioner's claim in this regard is not being allowed. Accordingly, maintenance spares have been worked out on the historical cost and providing escalation from the date of commercial operation.

## (ii) $0 \& M$ 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. O\&M expenses as considered in the order dated 6.2.2007 in Petition No. 136/2007 have been considered.

## (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. Accordingly, in the tariff being allowed, receivables have been worked out on the basis of 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 nomative 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 nomative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ $10.25 \%$ based on SBI PLR as on 1.4.2005, which is in accordance with the 2004 regulations and has been allowed.
27. The necessary computations in support of revised interest on working capital, as revised, are appended herein below:
(Rs. in lakh)

|  | 2008-09 |
| :--- | ---: |
| Maintenance Spares | 284.53 |
| O \&M expenses | 42.48 |
| Receivables | 721.34 |
| Total | 1048.17 |
| Rate of Interest | $10.25 \%$ |
| Interest | $\mathbf{1 0 7 . 4 4}$ |

## IRANSMISSION CHARGES

28. The revised transmission charges being allowed for the transmission assets for the year 2008-09 are summarised below:
(Rs. in lakh)

|  | 2008-09 |
| :--- | ---: |
| Deprec iation | 691.54 |
| Interest on Loan | 1219.07 |
| Retum on Equity | 1002.48 |
| Advance against Depreciation | 797.71 |
| Interest on Working Capital | 107.44 |
| O \& M Expenses | 509.79 |
| Total | $\mathbf{4 3 2 8 . 0 2}$ |

29. The petitioner shall recover from the respondent the additional transmission charges in one instalment and these charges shall be shared in accordance with the 2004 regulations.
30. The petitioner has also sought reimbursement of filing fee paid. The Commission by its separate general order dated 11.9.2008 in Petition No. 129/2005 (Suo-motu) has decided that the petitioner shall not be allowed reimbursement of the petition filing fee.
31. 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.
32. This order disp oses of Petition No. 291/2009.

Sd/-
(V.S.VERMA)

MEMBER
sd/-
(S.J AYARAMAN) MEMBER
sd/-
(DR.PRAMOD DEO) CHAIRPERSON

Annexure

|  |  | (Rs. in lakh) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Details of Loan | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| 1 | Bond IX |  |  |  |  |
|  | Gross Loan opening | 112.00 | 112.00 | 112.00 | 112.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 22.40 | 33.60 | 44.80 | 56.00 |
|  | Net Loan-Opening | 89.60 | 78.40 | 67.20 | 56.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 11.20 | 11.20 | 11.20 | 11.20 |
|  | Net Loan-Closing | 78.40 | 67.20 | 56.00 | 44.80 |
|  | Average Loan | 84.00 | 72.80 | 61.60 | 50.40 |
|  | Rate of Interest | 12.25\% | 12.25\% | 12.25\% | 12.25\% |
|  | Interest | 10.29 | 8.92 | 7.55 | 6.17 |
|  | Repayment Schedule | 10 Annual instalments from 22.08.2003 |  |  |  |
| 2 | Bond X |  |  |  |  |
|  | Gross Loan opening | 1066.00 | 1066.00 | 1066.00 | 1066.00 |
|  | Cumulative Repayment upto up to the date of commercial operation /previous year | 177.67 | 177.67 | 266.50 | 355.33 |
|  | Net Loan-Opening | 888.33 | 888.33 | 799.50 | 710.67 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 88.83 | 88.83 | 88.83 |
|  | Net Loan-Closing | 888.33 | 799.50 | 710.67 | 621.84 |
|  | Average Loan | 888.33 | 843.92 | 755.09 | 666.26 |
|  | Rate of Interest | 10.90\% | 10.90\% | 10.90\% | 10.90\% |
|  | Interest | 96.83 | 91.99 | 82.30 | 72.62 |
|  | Repayment Schedule | 12 Annual instalments from 21.06.2004 |  |  |  |
| 3 | Bond XI Option-I |  |  |  |  |
|  | Gross Loan opening | 1052.00 | 1052.00 | 1052.00 | 1052.00 |
|  | Cumulative Repayment upto up to the date of commercial operation/previous year | 0.00 | 87.67 | 175.34 | 263.01 |
|  | Net Loan-Opening | 1052.00 | 964.33 | 876.66 | 788.99 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 87.67 | 87.67 | 87.67 | 87.67 |
|  | Net Loan-Closing | 964.33 | 876.66 | 788.99 | 701.32 |
|  | Average Loan | 1008.17 | 920.50 | 832.83 | 745.16 |
|  | Rate of Interest | 9.80\% | 9.80\% | 9.80\% | 9.80\% |
|  | Interest | 98.80 | 90.21 | 81.62 | 73.03 |
|  | Repayment Schedule | 12 Annual instalments from 7.12.2005 |  |  |  |
| 4 | Bond XII |  |  |  |  |
|  | Gross Loan opening | 1874.00 | 1874.00 | 1874.00 | 1874.00 |
|  | Cumulative Repayment upto up to the date of commercial operation /previous year | 0.00 | 156.17 | 312.34 | 468.51 |
|  | Net Loan-Opening | 1874.00 | 1717.83 | 1561.66 | 1405.49 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 156.17 | 156.17 | 156.17 | 156.17 |
|  | Net Loan-Closing | 1717.83 | 1561.66 | 1405.49 | 1249.32 |
|  | Average Loan | 1795.92 | 1639.75 | 1483.58 | 1327.41 |
|  | Rate of Interest | 9.70\% | 9.70\% | 9.70\% | 9.70\% |
|  | Interest | 174.20 | 159.06 | 143.91 | 128.76 |
|  | Repayment Schedule | 12 Annual instalments from 28.03.2006 |  |  |  |


| 5 | Bond XIII Option-I |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross Loan opening | 5000.00 | 5000.00 | 5000.00 | 5000.00 |
|  | Cumulative Repayment upto up to the date of commercial operation /previous year | 0.00 | 0.00 | 416.67 | 833.34 |
|  | Net Loan-Opening | 5000.00 | 5000.00 | 4583.33 | 4166.66 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 416.67 | 416.67 | 416.67 |
|  | Net Loan-Closing | 5000.00 | 4583.33 | 4166.66 | 3749.99 |
|  | Average Loan | 5000.00 | 4791.67 | 4375.00 | 3958.33 |
|  | Rate of Interest | 8.63\% | 8.63\% | 8.63\% | 8.63\% |
|  | Interest | 431.50 | 413.52 | 377.56 | 341.60 |
|  | Repayment Schedule | 12 Annual instalments from 31.07.2006 |  |  |  |
| 6 | Bond XV |  |  |  |  |
|  | Gross Loan opening | 1690.00 | 1690.00 | 1690.00 | 1690.00 |
|  | Cumulative Repayment upto up to the date of commercial operation /previous year | 0.00 | 0.00 | 0.00 | 140.83 |
|  | Net Loan-Opening | 1690.00 | 1690.00 | 1690.00 | 1549.17 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 140.83 | 140.83 |
|  | Net Loan-Closing | 1690.00 | 1690.00 | 1549.17 | 1408.34 |
|  | Average Loan | 1690.00 | 1690.00 | 1619.59 | 1478.76 |
|  | Rate of Interest | 6.68\% | 6.68\% | 6.68\% | 6.68\% |
|  | Interest | 112.89 | 112.89 | 108.19 | 98.78 |
|  | Repayment Schedule | 12 Annual instalments from 23-02-2008 |  |  |  |
| 7 | Bond XVI |  |  |  |  |
|  | Gross Loan opening | 4650.00 | 4650.00 | 4650.00 | 4650.00 |
|  | Cumulative Repayment up to up to the date of commercial operation/previous year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 4650.00 | 4650.00 | 4650.00 | 4650.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 465.00 |
|  | Net Loan-Closing | 4650.00 | 4650.00 | 4650.00 | 4185.00 |
|  | Average Loan | 4650.00 | 4650.00 | 4650.00 | 4417.50 |
|  | Rate of Interest | 7.10\% | 7.10\% | 7.10\% | 7.10\% |
|  | Interest | 330.15 | 330.15 | 330.15 | 313.64 |
|  | Repayment Schedule | 10 Annual instalments from 18-02-2009 |  |  |  |
| 8 | IOB / Bond XVII |  |  |  |  |
|  | Gross Loan opening | 1000.00 | 1000.00 | 1000.00 | 1000.00 |
|  | Cumulative Repayment up to up to the date of commercial operation /previous year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 1000.00 | 1000.00 | 1000.00 | 1000.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 1000.00 | 1000.00 | 1000.00 | 1000.00 |
|  | Average Loan | 1000.00 | 1000.00 | 1000.00 | 1000.00 |
|  | Rate of Interest | 7.07\% | 7.39\% | 7.39\% | 7.39\% |
|  | Interest | 70.70 | 73.90 | 73.90 | 73.90 |
|  | Repayment Schedule | 10 Annual Instalments from 22.9.2009 |  |  |  |
| 9 | OBC |  |  |  |  |
|  | Gross Loan opening | 484.00 | 484.00 | 484.00 | 484.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 40.33 | 80.66 | 120.99 | 161.32 |


|  | Net Loan-Opening | 443.67 | 403.34 | 363.01 | 322.68 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 40.33 | 40.33 | 40.33 | 40.33 |
|  | Net Loan-Closing | 403.34 | 363.01 | 322.68 | 282.35 |
|  | Average Loan | 423.51 | 383.18 | 342.85 | 302.52 |
|  | Rate of Interest | 8.60\% | 8.60\% | 8.60\% | 8.60\% |
|  | Interest | 36.42 | 32.95 | 29.48 | 26.02 |
|  | Repayment Schedule | 12 Annual Instalments from 22.3.2005 |  |  |  |
| 10 | PNB - II |  |  |  |  |
|  | Gross Loan opening | 581.00 | 581.00 | 581.00 | 581.00 |
|  | Cumulative Repayment up to the date of commercial operation /previous year | 48.42 | 96.84 | 145.26 | 193.68 |
|  | Net Loan-Opening | 532.58 | 484.16 | 435.74 | 387.32 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 48.42 | 48.42 | 48.42 | 48.42 |
|  | Net Loan-Closing | 484.16 | 435.74 | 387.32 | 338.90 |
|  | Average Loan | 508.37 | 459.95 | 411.53 | 363.11 |
|  | Rate of Interest | 8.60\% | 8.60\% | 8.60\% | 8.60\% |
|  | Interest | 43.72 | 39.56 | 35.39 | 31.23 |
|  | Repayment Schedule | 12 Annual Instalments from 8.3.2005 |  |  |  |
| 11 | Bond XVIII (ADDCAP FOR 2005-06) |  |  |  |  |
|  | Gross Loan opening | 0.00 | 30.00 | 30.00 | 30.00 |
|  | Cumulative Repayment up to the date of commercial operation /previous year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 30.00 | 30.00 | 30.00 |
|  | Additions during the year | 30.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 30.00 | 30.00 | 30.00 | 30.00 |
|  | Average Loan | 15.00 | 30.00 | 30.00 | 30.00 |
|  | Rate of Interest | 8.15\% | 8.15\% | 8.15\% | 8.15\% |
|  | Interest | 1.22 | 2.45 | 2.45 | 2.45 |
|  | Repayment Schedule | 12 annual inatalments from 9.3.2010 |  |  |  |
| 12 | Bond XIX (ADDCAP FOR 2006-07) |  |  |  |  |
|  | Gross Loan opening | 0.00 | 0.00 | 110.00 | 110.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 | 110.00 | 110.00 |
|  | Additions during the year | 0.00 | 110.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 110.00 | 110.00 | 110.00 |
|  | Average Loan | 0.00 | 55.00 | 110.00 | 110.00 |
|  | Rate of Interest | 0.00\% | 9.25\% | 9.25\% | 9.25\% |
|  | Interest | 0.00 | 5.09 | 10.18 | 10.18 |
|  | Repayment Schedule | 12 Annual instalments from 24-07-2010 |  |  |  |
| 13 | Bond XXII (ADDCAP FOR 2006-07) |  |  |  |  |
|  | Gross Loan opening | 0.00 | 0.00 | 115.00 | 115.00 |
|  | Cumulative Repayment up to the date of commercial operation /previous year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 0.00 | 115.00 | 115.00 |
|  | Additions during the year | 0.00 | 115.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 115.00 | 115.00 | 115.00 |


| Average Loan | 0.00 | 57.50 | 115.00 | 115.00 |
| :---: | :---: | :---: | :---: | :---: |
| Rate of Interest | 0.00\% | 8.68\% | 8.68\% | 8.68\% |
| Interest | 0.000 | 4.99 | 9.98 | 9.98 |
| Repayment Schedule | 12 Annual instalments from 7-12-2010 |  |  |  |
| Gross Loan opening | 17509.00 | 17539.00 | 17764.00 | 17764.00 |
| Cumulative Repayment up to the date of commercial operation /previous year | 288.82 | 632.61 | 1481.90 | 2472.02 |
| Net Loan-Opening | 17220.18 | 16906.39 | 16282.10 | 15291.98 |
| Additions during the year | 30.00 | 225.00 | 0.00 | 0.00 |
| Repayment during the year | 343.79 | 849.29 | 990.12 | 1455.12 |
| Net Loan-Closing | 16906.39 | 16282.10 | 15291.98 | 13836.86 |
| Average Loan | 17063.29 | 16594.25 | 15787.04 | 14564.42 |
| Rate of Interest | 8.244\% | 8.230\% | 8.188\% | 8.159\% |
| Interest | 1406.73 | 1365.66 | 1292.65 | 1188.35 |

