# CENTRAL ELECTRICITY REGULATORY COMMISSION <br> NEW DELHI 

Petition No. 236/ 2009

## Coram:

1. Dr. Pramod Deo, Chaiperson
2. Shri S.J a yaraman, Member
3. Shri V.S.Verma, Member

DATE OF HEARING: 14.1.2010
DATE OF ORDER 15.2.2010

## In the matter of

Revision of transmission tariff due to additional capital expenditure inc urred during 2008-09 for Riha nd Sta ge-II Transmission System in Northem Region.

## And in the matter of

Power Grid Comoration of India Limited, Gurgaon ..Petitioner

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, J aipur
2. Ajmer Vidyut Vita ran Nigam Ltd., J a ipur
3. J a ipur Vidyut Vita ran Nigam Ltd, J aipur
4. J odhpur Vidyut Vita ran Nigam Ltd, J aipur
5. Himac hal Pradesh State Elec tric ity Boa rd, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Power Purchase Centre, Panchkula
8. Power Development Department, Govt. of J \&K, J a mmu
9. Uttar Pradesh Power Comoration Ltd., Lucknow
10. Delhi Transco Ltd, New Delhi
11. BSES Yamuna Power Limited, New Delhi
12. BSES Rajdhani Power Ltd., New Delhi
13. North Delhi Power Ltd., New Delhi
14. Chief Engineer, Chandigarh Administration, Chandigarh
15. Uttarakhand Power Coporation Ltd, Dehradun
16. North Central Railway, Alla habad
17. New Delhi Municipal Council, New Delhi .....Respondents

## The following were present

1. Shri U.K.Tyagi, PGCIL
2. Shri Rakesh Prasad, PGCIL
3. Shri M.M.MondaI, PGCIL
4. Shri S.K.Niranjan, PGCIL
5. Shri Mohd. Mohsin, PGCIL

## ORDER

This petition has been filed for revision of transmission tariff due to additional capital expenditure incured in respect of transmission elements given in the table below, together with their dates of commercial operation under Rihand Stage-II Transmission System (the transmission system) in Northem Region for the period from 1.4.2008 to 31.3.2009, based on the Central Electricity Regulatory Commission (Tems and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as "the 2004 regulations:

| S.No. | Name of Asset | Date of the commercial operation |
| :---: | :---: | :---: |
| 1. | 400 kV D/C Rihand-Allahabad-Mainpuri-Ballabgarh transmission lines with associated bays (Asset-I) | 1.6.2005 |
| 2. | ICT-I at Patiala sub-station, ULO of Nalagarh-Hissar transmission line at Kaithal, 400 kV S/C Patiala-Malerkotla transmission line \& ICT-III at Abdullapur sub-station with associated bays (Asset-II) | 1.10.2005 |
| 3. | ICT- I \& II at Kaithal and 4 no 220 kV line bays at Kaithal substation (Asset-III) | 1.11.2005 |
| 4. | ICT-II at Patiala sub-station and ULO of one ckt ( 400 kV ) of Nalagarh-Hissar transmission line at Patiala sub-station with associated bays (Asset-IV) | 1.12.2005 |
| 5. | 315 MVA, 400/220 Kv ICT-I \& ICT-II along with associated bays and four nos 220 kV line bays at Mainpuri sub-station (Asset-V) | 1.1.2006 |
| 6 | 400 kV S/C Dadri-Panipat transmission line with associated bays (Asset-VI) | 1.4.2006 |
| 7. | 2 nos of 220 kV bays at Abdullapur sub-station (Asset-VII) | 1.11.2006 |

2. The petitioner has also prayed for reimbursement of the petition filing fee, licence fee and other expenditure in connection with the filing of the petition
3. The investment approval for the transmission system was accorded by the Central Govemment in Ministry of Power under letter dated 9.12.2002 at an estimated cost of Rs. 104444 lakh (2nd quarter 2002 price level), including IDC of Rs. 15749 lakh.
4. The transmission charges for the Asset-I, Asset-II, Asset-IV and Asset-VI were approved by the Commission vide its order dated 27.9.2007 in Petition No 2/2007.

Transmission charges for Asset-III, Asset-V and Asset-VII were initially approved vide order dated 3.2.2009 in Petition Nos. 68/2008 and subsequently revised vide order dated 7.9.2009 in Petition No. 70/2009 due to additional capital expenditure incurred during 2006-07 and 2007-08. The summary of the revised transmission charges approved by the said order dated 7.9.2009 is extracted hereunder:

| (Rs. in la kh) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Asset.I |  |  | Asset-l\| |  |  | Asset.III |  |  | Asset-IV |  |  |
|  | $\begin{gathered} 2006- \\ 07 \end{gathered}$ | $\begin{aligned} & \hline 2007- \\ & 08 \end{aligned}$ | $\begin{aligned} & \hline 2008- \\ & 09 \end{aligned}$ | $\begin{gathered} 2006- \\ 07 \end{gathered}$ | $\begin{aligned} & 2007- \\ & 08 \end{aligned}$ | $\begin{aligned} & 2008- \\ & 09 \end{aligned}$ | $\begin{gathered} 2006- \\ 07 \end{gathered}$ | $\begin{aligned} & \hline 2007- \\ & 08 \end{aligned}$ | $\begin{aligned} & 2008- \\ & 09 \end{aligned}$ | $\begin{gathered} \hline 2006- \\ 07 \end{gathered}$ | $\begin{aligned} & 2007- \\ & 08 \end{aligned}$ | $\begin{aligned} & 2008- \\ & 09 \end{aligned}$ |
| Depreciation | 1596.47 | 1604.72 | 1606.56 | 321.64 | 324.29 | 324.29 | 125.72 | 132.75 | 134.59 | 120.10 | 128.91 | 130.89 |
| Interest on Loan | 2889.89 | 2787.62 | 2605.18 | 533.16 | 516.15 | 489.80 | 180.60 | 184.48 | 177.70 | 196.24 | 203.25 | 197.43 |
| Retum on Equity | 2497.44 | 2510.02 | 2512.32 | 470.45 | 474.52 | 474.52 | 151.13 | 160.41 | 162.56 | 147.84 | 159.12 | 161.90 |
| Advance against Depreciation | 0.00 | 140.08 | 1878.42 | 0.00 | 0.00 | 103.41 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Interest on Working Capital | 205.13 | 210.74 | 242.80 | 42.43 | 43.24 | 45.62 | 17.31 | 18.10 | 18.51 | 16.07 | 16.92 | 17.30 |
| O \& M Expenses | 736.48 | 764.40 | 796.43 | 335.25 | 348.48 | 362.57 | 243.36 | 253.04 | 263.20 | 188.15 | 195.61 | 203.48 |
| Total | 7925.41 | 8017.58 | 9641.70 | 1702.93 | 1706.68 | 1800.21 | 718.13 | 748.78 | 756.56 | 668.39 | 703.81 | 711.01 |

(Rs. in lakh)

|  | Asset-V |  |  | Asset-VI |  |  | Asset-VII |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | $2006-07$ | $2007-08$ | $2008-09$ | $2006-07$ | $2007-08$ | $2008-09$ | $2006-07$ | $2007-08$ |  |
|  |  |  |  |  | $2008-09$ |  |  |  |  |
| Depreciation | 124.91 | 129.28 | 131.62 | 154.04 | 158.51 | 158.63 | 5.77 | 14.98 |  |
| Interest on Loan | 179.77 | 179.15 | 174.89 | 292.66 | 290.67 | 276.64 | 7.99 | 20.23 |  |
| Retum on Equity | 156.99 | 163.43 | 167.48 | 219.63 | 226.20 | 226.40 | 8.06 | 20.65 |  |
| Advance against Depreciation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 92.40 | 0.00 | 0.00 |  |
| Interest on Working Capital | 17.81 | 18.45 | 18.97 | 19.65 | 20.24 | 22.07 | 1.19 | 3.00 |  |
| O \& M Expenses | 243.36 | 253.04 | 263.20 | 89.54 | 93.01 | 96.83 | $\mathbf{2 5 . 3 5}$ | 6.00 |  |
| Total | $\mathbf{7 2 2 . 8 3}$ | $\mathbf{7 4 3 . 3 4}$ | $\mathbf{7 5 6 . 1 6}$ | $\mathbf{7 7 5 . 5 2}$ | $\mathbf{7 8 8 . 6 3}$ | $\mathbf{8 7 2 . 9 7}$ | $\mathbf{4 8 . 3 6}$ | $\mathbf{1 2 2 . 1 2}$ |  |

5. Through this petition, the petitioner has not claimed additional capital expenditure in respect of transmission asset-II. The relevant details of the capital expenditure on the remaining six transmission assets claimed by the petitioner are as under:
(Rs. in lakh)

|  | Capital cost as on 1.4.2008 <br> (As per order dated <br> $7.9 .2009)$ | Additional <br> Capital <br> Expend iture <br> during 2008-09 | Capital cost <br> as on 1.4.2009 |
| :---: | :---: | :---: | :---: |
| Asset-I | 60870.63 | 172.81 | 61043.44 |
| Asset-II | 11139.76 | - | 11139.76 |
| Asset-III | 3908.01 | 71.27 | 3979.28 |
| Asset-IV | 4121.10 | 20.29 | 4141.39 |
| Asset-V | 3929.80 | 63.49 | 3993.29 |
| Asset-VI | 5813.11 | 25.53 | 5838.64 |
| Asset-VII | 418.84 | 5.75 | 424.59 |

6. The petitioner has claimed the transmission charges a s under:

|  | (Rs.in lakh) |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Asset- I | Asset-III | Asset- IV | Asset-V | Asset- VI | Asset- VI |
|  | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ |
| Deprec iation |  |  |  |  |  |  |
| Interest on Loan | 2609.09 | 135.47 | 131.16 | 132.77 | 159.09 | 15.52 |
| Retum on Equity | 2515.49 | 179.53 | 197.96 | 176.48 | 277.30 | 19.84 |
| Advance against Deprec iation | 1875.89 | 164.06 | 162.32 | 168.81 | 226.93 | 21.29 |
| Interest on Working Capital | 242.94 | 18.58 | 0.00 | 0.00 | 91.94 | 0.00 |
| O \& M Expenses | 796.43 | 263.20 | 203.32 | 19.04 | 22.10 | 3.10 |
| Total | $\mathbf{9 6 4 9 . 7 9}$ | $\mathbf{7 6 0 . 8 4}$ | $\mathbf{7 1 2 . 2 4}$ | $\mathbf{7 6 0 . 3 0}$ | $\mathbf{8 7 4 . 8 3}$ | 65.80 |

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

|  | Asset- I | Asset-III | Asset- IV | Asset-V | Asset- VI | Asset- VI |
| :--- | ---: | ---: | :---: | ---: | ---: | ---: |
|  | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ |
| Ma intenance Spares | 695.45 | 32.52 | 33.35 | 37.12 | 61.80 | 3.87 |
| O \& M expenses | 66.37 | 21.93 | 16.96 | 21.93 | 8.07 | 5.48 |
| Receivables | 1608.30 | 126.81 | 118.71 | 126.72 | 145.70 | 20.93 |
| Total | 2370.12 | 181.26 | 169.02 | 185.77 | 215.57 | 30.28 |
| Rate of Interest | $10.25 \%$ | $10.25 \%$ | $10.25 \%$ | $10.25 \%$ | $10.25 \%$ | $10.25 \%$ |
| Interest | $\mathbf{2 4 2 . 9 4}$ | $\mathbf{1 8 . 5 8}$ | $\mathbf{1 7 . 3 2}$ | $\mathbf{1 9 . 0 4}$ | $\mathbf{2 2 . 1 0}$ | $\mathbf{3 . 1 0}$ |

8. The reply to the petition has been filed by Jodhpur Vidyut Vitran Nigam Limited (J dVVNL) under affidavit dated 27.11.2009. JdVVNL in its reply has submitted that the payments to the tune of Rs. 830 lakh are still pending to the
contractors engaged in construction activities or to the suppliers who supplied the material and equipments. JdVVNL has requested the petitioner to give the order-wise details of the payment made and yet to be made. As regards the previsions of the 2004 regulation under which the additional capital expenditure is to be considered, it is seen that the respondent has not questioned the admissibility of additional capital expenditure. Therefore, the additional capital expenditure is being a llowed as per the 2004 regulations.

## CAPITALCOST

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

| Asset-I |  |  | Asset-III |  |  | Asset-IV |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Amount (Rs. in lakh) | Nature and details of expenditure | Year | Amount (Rs. in lakh) | Nature and details of expenditure | Year | Amount (Rs. in lakh) | Nature and details of expenditure |
| $\begin{gathered} 2008- \\ 09 \end{gathered}$ | $\begin{aligned} & \text { Transmission } \\ & \text { line }=\text { Rs. } \\ & 111.44 \\ & \text { sub-station = } \\ & \text { Rs. } 61.37 \text { lakh } \end{aligned}$ | Balance/ retention payments | 2008-09 | Freehold land= Rs. 22.67 lakh Sub-station= Rs. 48.60 la kh | Balance/ retention payments | 2008-09 | ```Building =Rs. }11.0 lakh sub-station = Rs.9.23 lakh``` | Balance/ retention payments |
| Total | $\begin{aligned} & \text { Rs. } 172.81 \\ & \text { lakh } \end{aligned}$ |  |  | Rs. 71.27 lakh |  |  | Rs. 20.29 lakh |  |


| Asset-V |  |  | Asset-VI |  |  | Asset-VII |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Year | Amount <br> (Rs. in lakh) | Nature and <br> details of <br> expenditure | Year | Amount <br> (Rs. in lakh) | Nature and <br> details of <br> expenditure | Year | Amount <br> (Rs. in lakh) |
| Nature and <br> details of <br> expenditure |  |  |  |  |  |  |  |
| 2008-09 | Sub-station =Rs. <br> 63.49 lakh | Balance/ <br> retention <br> payments | 2008-09 | Sub-station= <br> Rs. 25.53 lakh | Balance/ <br> retention <br> payments | 2008-09 | Sub-station = <br> Rs. 5.75 lakh |
| Balance/ <br> retention <br> payments |  |  |  |  |  |  |  |
| Total | Rs. 63.49 lakh |  | Rs. 25.53 lakh |  |  | Rs. 5.75 lakh |  |

10. The additional capital expenditure claimed is within the original scope of work and mainly on account of retention/balance payments. Besides the balance estimated expenditure amounting to Rs. 827.06 lakh reported by the petitioner has not been considered for the purpose of revision of tariff. Thus, the concem expressed by JdVVNL has been taken care of. The additional -5 -
expenditure sought to be capitalised is allowed under Regulations 53 of the 2004 regulations.

## Initial spares

11. The value of initial spares corresponding to the expenditure up to date of commercial operation for the transmission assets taken together is within $1.5 \%$ of the expenditure.

## IOTALCAPITALCOST

12. Based on the above, capital cost for the purpose of ta riff in respect of each of the transmission a ssets except asset-II as on 31.3.2009 works out as under:
(Rs. in lakh)

|  | Capital cost as on <br> 1.4 .2008 <br> (Asperorderdated <br> $7.9 .2009)$Additional <br> Capital <br> Expenditure <br> during 2008-09 | Capital costason <br> 1.4 .2009 |  |
| :---: | :---: | :---: | :---: |
| Asset-I | 60870.63 | 172.81 | 61043.44 |
| Asset-III | 3908.01 | 71.27 | 3979.28 |
| Asset-IV | 4121.10 | 20.29 | 4141.39 |
| Asset-V | 3929.80 | 63.49 | 3993.29 |
| Asset-VI | 5813.11 | 25.53 | 5838.64 |
| Asset-VII | 418.84 | 5.75 | 424.59 |

## DEBT- EQUITY RATIO

13. The petitioner has considered the a mount of additional capital expenditure in the debt-equity ratio of 70:30. This has been found to be in order. Accordingly, for the purpose of tariff, equity considered for the transmission a ssets is a s under:
(Rs. in lakh)

|  | Equity as on <br> 1.4 .2008 | Notional <br> additional <br> equity during <br> $2008-09$ | Total equity <br> considered as <br> on 31.3 .2009 | Average <br> equity for <br> $2008-09$ |
| :---: | :---: | :---: | :---: | :---: |
| Asset-I | 17945.15 | 51.84 | 17996.99 | 17971.07 |
| Asset-III | 1161.15 | 21.38 | 1182.53 | 1171.84 |
| Asset-IV | 1156.40 | 6.09 | 1162.49 | 1159.44 |
| Asset-V | 1196.25 | 19.05 | 1215.30 | 1205.77 |
| Asset-VI | 1617.12 | 7.66 | 1624.78 | 1620.95 |
| Asset-VII | 151.19 | 1.73 | 152.92 | 152.05 |

## REIURN ON EQUITY

14. As per clause (iii) of Regulation 56 of the 2004 regulations, retum on equity shall be computed on the equity base determined in accordance with regulation 54 @ $14 \%$ per annum. Equity invested in foreign curency is to be allowed a retum 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.
15. Equity as given in the table under para 13 above has been considered. However, ta riff for the 2008-09 has been allowed on average equity. Accordingly, retum on equity allowed for the year 2008-09 is given a s under:
(Rs. in lakh)

| Name of the asset |  |
| :--- | ---: |
|  | $2008-09$ |
| Asset-III | 2515.95 |
| Asset-III | 164.06 |
| Asset-IV | 162.32 |
| Asset-V | 168.81 |
| Asset-VI | 226.93 |
| Asset-VII | 21.29 |

## INIERESTON LOAN

16. 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 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 nomative 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 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."
17. In our calculation, the interest on loan has been worked out as detailed below:
(i) Gross a mount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual loan as per earlier orders dated 27.9.2007, 3.2.2009 and 7.9.2009 in Petition Nos. 2/2007 68/2008 a nd 70/2009, respectively have been considered. There is no addition of a ctual loans during the year 2008-09.
(ii) Notional loan arising out of additional capital expenditure for the years 2008-09 has been added to the loan a mount as on 31.3.2008 to a mive at total notional loans. This adjusted Gross loan is considered as normative loans for ta riff calculations.
(iii) Tariff is worked out considering nomative loan and nomative repayments. Once the nomative loan is armived at, it is considered for all purposes in the tariff. Nomative repayment is worked out by the following formula:

Actual repayment of actual loan during the year --------------------------------------------------- X Opening balance of normative
(iv) Moratorium in repayment of loan is 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 is considered as moratorium and depreciation during the year is deemed as nomative repayment of loan during the year.
(v) Weighted average rate of interest on actual loan worked out as per (i) above is applied on the notional average loan during the year to a mive at the interest on loan.
18. Based on the above, the details of interest worked out are given hereunder:
(Rs. in lakh)

| Details | Asset- I | Asset-III | Asset- IV | Asset-V | Asset-VI | Asset- VII |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ |
| Gross Normative Loan | 42925.49 | 2746.86 | 2964.70 | 2733.55 | 4195.99 | 267.65 |
| Cumulative Repayment up <br> to Previous Year/date of <br> Commercial operation | 4655.13 | 304.26 | 283.09 | 283.25 | 312.56 | 20.75 |
| Net Loan-Opening | 38270.36 | 2442.60 | 2681.61 | 2450.30 | 3883.43 | 246.90 |
| Addition due to Additional <br> Capitalisation | 120.97 | 49.89 | 14.20 | 44.44 | 17.87 | 4.03 |
| Repayment during the year | 3484.98 | 135.47 | 131.16 | 132.77 | 251.03 | 15.52 |
| Net Loan-Closing | 34906.35 | 2357.02 | 2564.66 | 2361.98 | 3650.27 | 235.40 |
| Average Loan | 36588.35 | 2399.81 | 2623.14 | 2406.14 | 3766.85 | 241.15 |
| Weighted Average Rate of <br> Interest on Loan | $7.13 \%$ | $7.4810 \%$ | $7.5466 \%$ | $7.3345 \%$ | $7.3615 \%$ | $8.2278 \%$ |
| Interest (Pro rata) | $\mathbf{2 6 0 9 . 4 9}$ | $\mathbf{1 7 9 . 5 3}$ | $\mathbf{1 9 7 . 9 6}$ | $\mathbf{1 7 6 . 4 8}$ | $\mathbf{2 7 7 . 3 0}$ | $\mathbf{1 9 . 8 4}$ |

19. The detailed calculations in support of the weighted average rate of interest for Asset-I, Asset-III, Asset-IV, Asset-V, Asset-VI and Asset-VII are contained in Annexure-I, Annexure-II, Annexure-III, Annexure-IV Annexure-V and Annexure-VI, respectively atta ched.

## DEPRECIATION

20. 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 historic al cost of the a sset.
(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. La nd 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.
(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."
21. Depreciation allowed has been worked out as below:

| Details | Asset- I | Asset- III | Asset- IV lakh) | Asset- V | Asset-VI | Asset- VII |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ |
| Gross block a s on the date of <br> commercial operation | 60870.63 | 3908.01 | 4121.10 | 3929.80 | 5813.11 | 418.84 |
| Additional Ca pita lisation <br> during 2008-09 | 172.81 | 71.27 | 20.29 | 63.49 | 25.53 | 5.75 |
| Gross Block at the end of the <br> year | 61043.44 | 3979.28 | 4141.39 | 3993.29 | 5838.64 | 424.59 |
| Rate of Depreciation | $2.6397 \%$ | $3.4351 \%$ | $3.1748 \%$ | $3.3514 \%$ | $2.7308 \%$ | $3.6813 \%$ |
| Depreciable Value | 54799.44 | 3539.08 | 3718.12 | 3440.73 | 5243.29 | 379.54 |
| Ba lance Useful life of the asset | - | - | - | - | - | - |
| Rema ining Depreciable Value | 50148.64 | 3234.82 | 3435.04 | 3157.48 | 4930.73 | 358.79 |
| Depreciation | $\mathbf{1 6 0 9 . 0 9}$ | $\mathbf{1 3 5 . 4 7}$ | $\mathbf{1 3 1 . 1 6}$ | $\mathbf{1 3 2 . 7 7}$ | $\mathbf{1 5 9 . 0 9}$ | $\mathbf{1 5 . 5 2}$ |

## ADVANCE AGAINSTDEPRECIATION

22. 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 $1 / 10$ th of loan amount as per regulation 54 minus depreciation as per schedule
23. 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.
24. Accordingly, in our calculation the Advance Against Depreciation has been worked asdetailed below:
(a) 1/10th of gross loan is worked out from the Gross Notional Loan as per para 18 above.
(b) Repayment of notional loan during the year is considered as per para 18 above.
(c) Depreciation is worked out asperpara 21 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 curent year have been considered for working out the Advance Against Depreciation
25. Petitioner has claimed Advance Against Depreciation in respect of Asset-I and Asset-VI only. The details of Advance Against Depreciation allowed are given hereunder:
(Rs. in lakh)

|  | Asset-I | Asset-VI |
| :--- | ---: | ---: |
|  | $2008-09$ | $2008-09$ |
| 1/10th of Gross Loan (s) | 4292.55 | 419.60 |
| Repayment of the Loan | 3484.98 | 251.03 |
| Minimum of the above | 3484.98 | 251.03 |
| Depreciation during the year | 1609.09 | 159.09 |
| (A) Difference | 814.89 | 91.94 |
| Cumulative Repayment of the Loan | 6259.89 | 563.58 |
| Cumulative Depreciation/ Advance against <br> Deprec iation | 1880.22 | 91.65 |
| (B) Difference | $\mathbf{1 8 7 5 . 8 9}$ | $\mathbf{9 1 . 9 4}$ |
| Advance against Depreciation Minimum of <br> (A) and (B) |  |  |

## OPERATION \& MAINIENANCE EXPENSES

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

|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| O\&M expenses (Rs in lakh per ckt- <br> 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 |

27. O\&M expenses as taken for the tariff calculations as per orders dated 27.9.2007 and 3.2.2009 in Petition Nos. $2 / 2007$ and 68/2008, respectively have been considered, since line length and number of bays remain unchanged.

## INIERESTON WORKING CAPITAL

28. 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 historical 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. 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 $56(\mathrm{v})(1)(\mathrm{a})$ 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 orders dated 27.9.2007 and 3.2.2009 in Petition Nos. 2/2007 and 68/2008, respectively 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 a vailability level. Accordingly, 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 nomative basis and shall be equal to the shortterm 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 1.4.2008, which is in accordance with the 2004 regulations and has been allowed.
29. The necessary computations in support of interest on working capital are appended herein below:
(Rs. in lakh)

|  | Asset- I | Asset-III | Asset- IV | Asset-V | Asset-VI | Asset- VII |
| :--- | ---: | ---: | :---: | ---: | ---: | ---: |
|  | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ |
| Maintenance Spares | 695.45 | 32.52 | 33.35 | 37.12 | 61.80 | 3.87 |
| O \& M expenses | 66.37 | 21.93 | 16.96 | 21.93 | 8.07 | 5.48 |
| Receivables | 1608.30 | 126.81 | 118.71 | 126.72 | 145.70 | 20.93 |
| Total | 2370.12 | 181.26 | 169.02 | 185.77 | 215.57 | 30.28 |
| Rate of Interest | $10.25 \%$ | $10.25 \%$ | $10.25 \%$ | $10.25 \%$ | $10.25 \%$ | $10.25 \%$ |
| Interest | $\mathbf{2 4 2 . 9 4}$ | $\mathbf{1 8 . 5 8}$ | $\mathbf{1 7 . 3 2}$ | $\mathbf{1 9 . 0 4}$ | $\mathbf{2 2 . 1 0}$ | $\mathbf{3 . 1 0}$ |

## IRANSMISSION CHARGES

30. The transmission charges being allowed for the six transmission assets are summarised below:

|  | (Rss.in lakh) |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | $2008-09$ | Asset-III | Asset IV | Asset-V | Asset-VI | Asset- VII |  |
|  | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ | $2008-09$ |  |  |
| Depreciation | 1609.09 | 135.47 | 131.16 | 132.77 | 159.09 | 15.52 |  |
| Interest on Loan | 2609.49 | 179.53 | 197.96 | 176.48 | 277.30 | 19.84 |  |
| Retum on Equity | 2515.95 | 164.06 | 162.32 | 168.81 | 226.93 | 21.29 |  |
| Advance <br> Depreciation | 1875.89 | 0.00 | 0.00 | 0.00 | 91.94 | 0.00 |  |
| Interest on Working Capital | 242.94 | 18.58 | 17.32 | 19.04 | 22.10 | 3.10 |  |
| O \& M Expenses | 796.43 | 263.20 | 203.48 | 263.20 | 96.83 | 65.80 |  |
| Total | $\mathbf{9 6 4 9 . 7 8}$ | $\mathbf{7 6 0 . 8 3}$ | $\mathbf{7 1 2 . 2 5}$ | $\mathbf{7 6 0 . 2 9}$ | $\mathbf{8 7 4 . 1 8}$ | $\mathbf{1 2 5 . 5 6}$ |  |

31. The petitioner shall recover from the beneficiaries the additional transmission charges in three instalments and these charges shall be shared in accordance with the 2004 regulations.
32. 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.
33. 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.
34. This order disp oses of Petition No. 236/2009.
Sd/-
(V.S.VERMA) MEMBER
sd/-
(S.J AYARAMAN) MEMBER
sd/-
(DRPRAMOD DEO) CHAIRPERSON

Asset-I

|  | Details of Loan | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Bond XIII Option-I |  |  |  |  |
|  | Gross Loan opening | 4551.00 | 4551.00 | 4551.00 | 4551.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 0.00 | 0.00 | 379.25 | 758.50 |
|  | Net Loan-Opening | 4551.00 | 4551.00 | 4171.75 | 3792.50 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 379.25 | 379.25 | 379.25 |
|  | Net Loan-Closing | 4551.00 | 4171.75 | 3792.50 | 3413.25 |
|  | Average Loan | 4551.00 | 4361.38 | 3982.13 | 3602.88 |
|  | Rate of Interest | 8.63\% | 8.63\% | 8.63\% | 8.63\% |
|  | Interest | 392.75 | 376.39 | 343.66 | 310.93 |
|  | Repayment Schedule | 12 Annual insta Iments from 31.07.2006 |  |  |  |
| 2 | Bond XIV |  |  |  |  |
|  | Gross Loan opening | 52.00 | 52.00 | 52.00 | 52.00 |
|  | Cumulative Repayment up to the date of commercial operation/previousyear | 4.33 | 8.66 | 12.99 | 17.32 |
|  | Net Loan-Opening | 47.67 | 43.34 | 39.01 | 34.68 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 4.33 | 4.33 | 4.33 | 4.33 |
|  | Net Loan-Closing | 43.34 | 39.01 | 34.68 | 30.35 |
|  | Average Loan | 45.51 | 41.18 | 36.85 | 32.52 |
|  | Rate of Interest | 6.10\% | 6.10\% | 6.10\% | 6.10\% |
|  | Interest | 2.78 | 2.51 | 2.25 | 1.98 |
|  | Repayment Schedule | 12 Annual instalments from 17.7.2004 |  |  |  |
| 3 | Bond XV |  |  |  |  |
|  | Gross Loan opening | 17940.00 | 17940.00 | 17940.00 | 17940.00 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 0.00 | 1495.00 |
|  | Net Loan-Opening | 17940.00 | 17940.00 | 17940.00 | 16445.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 1495.00 | 1495.00 |
|  | Net Loan-Closing | 17940.00 | 17940.00 | 16445.00 | 14950.00 |
|  | Average Loan | 17940.00 | 17940.00 | 17192.50 | 15697.50 |
|  | Rate of Interest | 6.68\% | 6.68\% | 6.68\% | 6.68\% |
|  | Interest | 1198.39 | 1198.39 | 1148.46 | 1048.59 |
|  | Repayment Schedule | 12 Annual insta Iments from 23.02.2008 |  |  |  |
| 4 | BOND XVI |  |  |  |  |
|  | Gross Loan opening | 18661.00 | 18661.00 | 18661.00 | 18661.00 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 18661.00 | 18661.00 | 18661.00 | 18661.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 1866.10 |
|  | Net Loan-Closing | 18661.00 | 18661.00 | 18661.00 | 16794.90 |
|  | Average Loan | 18661.00 | 18661.00 | 18661.00 | 17727.95 |



|  | Cumulative Repayment up to the date of <br> commercial operation /previousyear | 4.33 | 8.66 | 392.24 | 2270.82 |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | Net Loan-Opening | 41574.67 | 42894.93 | 43000.87 | 41122.29 |
|  | Additions during the year | 1324.59 | 489.52 | 0.00 | 0.00 |
|  | Repayment during the year | 4.33 | 383.58 | 1878.58 | 3744.68 |
|  | Net Loa n-C losing | 42894.93 | 43000.87 | 41122.29 | 37377.61 |
|  | Average Loan | 42234.80 | 42947.90 | 42061.58 | 39249.95 |
|  | Rate of Interest | $\mathbf{7 . 1 0 1 \%}$ | $\mathbf{7 . 1 2 4 \%}$ | $\mathbf{7 . 1 2 9 \%}$ | $\mathbf{7 . 1 3 2 \%}$ |
|  | Interest | $\mathbf{2 9 9 9 . 0 4}$ | 3059.62 | $\mathbf{2 9 9 8 . 4 2}$ | $\mathbf{2 7 9 9 . 3 1}$ |

Asset-III

|  | Details of Loan | 2005-06 | $\begin{aligned} & \text { 2006- } \\ & 07 \end{aligned}$ | $\begin{aligned} & \text { 2007- } \\ & 08 \end{aligned}$ | $\begin{aligned} & \text { 2008- } \\ & 09 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Bond XIII Option-I |  |  |  |  |
|  | Gross Loan opening | 62.00 | 62.00 | 62.00 | 62.00 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 5.17 | 10.33 |
|  | Net Loan-Opening | 62.00 | 62.00 | 56.83 | 51.67 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 5.17 | 5.17 | 5.17 |
|  | Net Loan-Closing | 62.00 | 56.83 | 51.67 | 46.50 |
|  | Average Loan | 62.00 | 59.42 | 54.25 | 49.08 |
|  | Rate of Interest | 8.63\% | 8.63\% | 8.63\% | 8.63\% |
|  | Interest | 5.35 | 5.13 | 4.68 | 4.24 |
|  | Repayment Schedule | 12 Annual instalments from <br> 31.07.2006 |  |  |  |
| 2 | Bond XV |  |  |  |  |
|  | Gross Loan opening | 798.00 | 798.00 | 798.00 | 798.00 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 0.00 | 66.50 |
|  | Net Loan-Opening | 798.00 | 798.00 | 798.00 | 731.50 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 66.50 | 66.50 |
|  | Net Loan-Closing | 798.00 | 798.00 | 731.50 | 665.00 |
|  | Average Loan | 798.00 | 798.00 | 764.75 | 698.25 |
|  | Rate of Interest | 6.68\% | 6.68\% | 6.68\% | 6.68\% |
|  | Interest | 53.31 | 53.31 | 51.09 | 46.64 |
|  | Repayment Schedule | 12 Annual instalments from 23.02.2008 |  |  |  |
| 3 | BOND XVI |  |  |  |  |
|  | Gross Loan opening | 853.00 | 853.00 | 853.00 | 853.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 853.00 | 853.00 | 853.00 | 853.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 85.30 |
|  | Net Loan-Closing | 853.00 | 853.00 | 853.00 | 767.70 |
|  | Average Loan | 853.00 | 853.00 | 853.00 | 810.35 |
|  | Rate of Interest | 7.10\% | 7.10\% | 7.10\% | 7.10\% |
|  | Interest | 60.56 | 60.56 | 60.56 | 57.53 |
|  | Repayment Schedule | 10 Annual instalments from18.02.2009 |  |  |  |
| 4 | BOND XVII |  |  |  |  |
|  | Gross Loan opening | 275.00 | 275.00 | 275.00 | 275.00 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 275.00 | 275.00 | 275.00 | 275.00 |
|  | 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 | 275.00 | 275.00 | 275.00 | 275.00 |
|  | Average Loan | 275.00 | 275.00 | 275.00 | 275.00 |
|  | Rate of Interest | 7.39\% | 7.39\% | 7.39\% | 7.39\% |



| (Rs. in la kh) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Details of Loan | 2005-06 | 2006-07 | 2007-08 | $\begin{aligned} & \text { 2008- } \\ & 09 \\ & \hline \end{aligned}$ |
| 1 Bond XIII Option-I |  |  |  |  |  |
|  | Gross Loan opening | 51.00 | 51.00 | 51.00 | 51.00 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 4.25 | 8.50 |
|  | Net Loan-Opening | 51.00 | 51.00 | 46.75 | 42.50 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 4.25 | 4.25 | 4.25 |
|  | Net Loan-Closing | 51.00 | 46.75 | 42.50 | 38.25 |
|  | Average Loan | 51.00 | 48.88 | 44.63 | 40.38 |
|  | Rate of Interest | 8.63\% | 8.63\% | 8.63\% | 8.63\% |
|  | Interest | 4.40 | 4.22 | 3.85 | 3.48 |
|  | Repayment Schedule | 12 Annual instalments from 31.7.2006 |  |  |  |
| 2 | Bond XV |  |  |  |  |
|  | Gross Loan opening | 660.00 | 660.00 | 660.00 | 660.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 0.00 | 0.00 | 0.00 | 55.00 |
|  | Net Loan-Opening | 660.00 | 660.00 | 660.00 | 605.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 55.00 | 55.00 |
|  | Net Loan-Closing | 660.00 | 660.00 | 605.00 | 550.00 |
|  | Average Loan | 660.00 | 660.00 | 632.50 | 577.50 |
|  | Rate of Interest | 6.68\% | 6.68\% | 6.68\% | 6.68\% |
|  | Interest | 44.09 | 44.09 | 42.25 | 38.58 |
|  | Repayment Schedule | 12 Annual instalments from 23.02.2008 |  |  |  |
| 3 | BOND XVI |  |  |  |  |
|  | Gross Loan opening | 706.00 | 706.00 | 706.00 | 706.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 706.00 | 706.00 | 706.00 | 706.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 70.60 |
|  | Net Loan-Closing | 706.00 | 706.00 | 706.00 | 635.40 |
|  | Average Loan | 706.00 | 706.00 | 706.00 | 670.70 |
|  | Rate of Interest | 7.10\% | 7.10\% | 7.10\% | 7.10\% |
|  | Interest | 50.13 | 50.13 | 50.13 | 47.62 |
|  | Repayment Schedule | 10 Annual instalments from 18.02.2009 |  |  |  |
| 4 | BOND XVII |  |  |  |  |
|  | Gross Loan opening | 700.00 | 700.00 | 700.00 | 700.00 |
|  | Cumulative Repayment up to the date of commercial operation/previous year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 700.00 | 700.00 | 700.00 | 700.00 |
|  | 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 | 700.00 | 700.00 | 700.00 | 700.00 |
|  | Average Loan | 700.00 | 700.00 | 700.00 | 700.00 |
|  | Rate of Interest | 7.39\% | 7.39\% | 7.39\% | 7.39\% |


|  | Interest | 51.73 | 51.73 | 51.73 | 51.73 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Repayment Schedule | 10 Annual instalments from 22.09.2009 |  |  |  |
| 5 | BOND XVIII (ADDCAP FOR 2005-06) |  |  |  |  |
|  | Gross Loan opening | 0.00 | 673.51 | 673.51 | 673.51 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 673.51 | 673.51 | 673.51 |
|  | Additions during the year | 673.51 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 673.51 | 673.51 | 673.51 | 673.51 |
|  | Average Loan | 336.76 | 673.51 | 673.51 | 673.51 |
|  | Rate of Interest | 8.15\% | 8.15\% | 8.15\% | 8.15\% |
|  | Interest | 27.45 | 54.89 | 54.89 | 54.89 |
|  | Repayment Schedule | 12 Annual instalments from 09.03.2010 |  |  |  |
| 6 | Bond XXII (add cap for 2006-07) |  |  |  |  |
|  | Gross Loan opening | 0.00 | 0.00 | 405.53 | 405.53 |
|  | 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 | 405.53 | 405.53 |
|  | Additions during the year | 0.00 | 405.53 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 0.00 | 405.53 | 405.53 | 405.53 |
|  | Average Loan | 0.00 | 202.77 | 405.53 | 405.53 |
|  | Rate of Interest | 8.68\% | 8.68\% | 8.68\% | 8.68\% |
|  | Interest | 0.00 | 17.60 | 35.20 | 35.20 |
|  | Repayment Schedule | 12 Annual instalments from 07-12-2010 |  |  |  |
|  | Gross Loan opening | 2117.00 | 2790.51 | 3196.04 | 3196.04 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 4.25 | 63.50 |
|  | Net Loan-Opening | 2117.00 | 2790.51 | 3191.79 | 3132.54 |
|  | Additions during the year | 673.51 | 405.53 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 4.25 | 59.25 | 129.85 |
|  | Net Loan-Closing | 2790.51 | 3191.79 | 3132.54 | 3002.69 |
|  | Average Loan | 2453.76 | 2991.15 | 3162.17 | 3067.62 |
|  | Rate of Interest | 7.246\% | 7.444\% | 7.528\% | 7.547\% |
|  | Interest | 177.79 | 222.65 | 238.05 | 231.50 |

Asset-V


|  | Gross Loan opening | 0.00 | 367.53 | 367.53 | 367.53 |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | Cumulative Repayment up to the date of <br> commercial operation /previous year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 367.53 | 367.53 | 367.53 |
|  | Additions during the year | 367.53 | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Net Loan-C losing | 367.53 | 367.53 | 367.53 | 367.53 |
|  | Average Loan | 183.77 | 367.53 | 367.53 | 367.53 |
|  | Rate of Interest | $8.15 \%$ | $8.15 \%$ | $8.15 \%$ | $8.15 \%$ |
|  | Interest | 14.98 | 29.95 | 29.95 | 29.95 |
|  | Repayment Schedule | Annual instalments from 9.3 .2010 |  |  |  |
| $\mathbf{6}$ | Bond XXII (addcap for 2006-07) | 0.00 | 0.00 | 114.01 | 114.01 |
|  | Gross Loan opening | 0.00 | 0.00 | 0.00 | 0.00 |
|  | Cumulative Repayment up to the date of |  |  |  |  |
| commercial operation /previous year |  |  |  |  |  |


|  |  |  | (Rs. in lakh) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Details of Loan | 2006-07 | 2007-08 | 2008-09 |
| 1 | BOND XIII OPION I |  |  |  |
|  | Gross Loan opening | 107.00 | 107.00 | 107.00 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 8.92 | 17.83 |
|  | Net Loan-Opening | 107.00 | 98.08 | 89.17 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 8.92 | 8.92 | 8.92 |
|  | Net Loan-Closing | 98.08 | 89.17 | 80.25 |
|  | Average Loan | 102.54 | 93.63 | 84.71 |
|  | Rate of Interest | 8.63\% | 8.63\% | 8.63\% |
|  | Interest | 8.85 | 8.08 | 7.31 |
|  | Repayment Schedule | $\begin{aligned} & \text { 12 Annua } \\ & 31.7 .2006 \end{aligned}$ | instalme | nts from |
| 2 | BOND XV |  |  |  |
|  | Gross Loan opening | 1363.00 | 1363.00 | 1363.00 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 113.58 |
|  | Net Loan-Opening | 1363.00 | 1363.00 | 1249.42 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 113.58 | 113.58 |
|  | Net Loan-Closing | 1363.00 | 1249.42 | 1135.83 |
|  | Average Loan | 1363.00 | 1306.21 | 1192.63 |
|  | Rate of Interest | 6.68\% | 6.68\% | 6.68\% |
|  | Interest | 91.05 | 87.25 | 79.67 |
|  | Repayment Schedule | $\begin{aligned} & \hline \text { 12 Annua } \\ & \text { 23.2.2008 } \end{aligned}$ | instalme | nts from |
| 3 | BOND XVI |  |  |  |
|  | Gross Loan opening | 1457.00 | 1457.00 | 1457.00 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 1457.00 | 1457.00 | 1457.00 |
|  | Additions during the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 145.70 |
|  | Net Loan-Closing | 1457.00 | 1457.00 | 1311.30 |
|  | Average Loan | 1457.00 | 1457.00 | 1384.15 |
|  | Rate of Interest | 7.10\% | 7.10\% | 7.10\% |
|  | Interest | 103.45 | 103.45 | 98.27 |
|  | Repayment Schedule | $\begin{aligned} & \text { 10 Annua } \\ & \text { 18.2.2009 } \end{aligned}$ | instalme | nts from |
|  | BOND XVIII (Including add cap for 2006-07) |  |  |  |
|  | Gross Loan opening | 1050.00 | 1353.49 | 1353.49 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 0.00 |


| Net Loan-Opening | 1050.00 | 1353.49 | 1353.49 |
| :---: | :---: | :---: | :---: |
| Additions during the year | 303.49 | 0.00 | 0.00 |
| Repayment during the year | 0.00 | 0.00 | 0.00 |
| Net Loan-Closing | 1353.49 | 1353.49 | 1353.49 |
| Average Loan | 1201.75 | 1353.49 | 1353.49 |
| Rate of Interest | 8.15\% | 8.15\% | 8.15\% |
| Interest | 97.94 | 110.31 | 110.31 |
| Repayment Sc hedule | $\begin{aligned} & \hline 12 \text { Annua } \\ & 9.3 .2010 \\ & \hline \end{aligned}$ | instalments from |  |
| Gross Loan opening | 3977.00 | 4280.49 | 4280.49 |
| Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 8.92 | 131.42 |
| Net Loan-Opening | 3977.00 | 4271.57 | 4149.07 |
| Additions during the year | 303.49 | 0.00 | 0.00 |
| Repayment during the year | 8.92 | 122.50 | 268.20 |
| Net Loan-Closing | 4271.57 | 4149.07 | 3880.87 |
| Average Loan | 4124.29 | 4210.32 | 4014.97 |
| Rate of Interest | 7.3052\% | 7.3413\% | 7.3615\% |
| Interest | 301.29 | 309.09 | 295.56 |

Annexure-VI
Asset-VII
CALC ULATION OF WEGGHIED AVERAGE RATE OF INIERESTON LOAN

| CALC UATION OF WEGGHIED AVERAGE RATE OF INIERESTON LOAN |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | (Rs. in lakh) |  |  |
|  | Details of Loan | 2006-07 | 2007-08 | 2008-09 |
| 1 | BOND XVIII |  |  |  |
|  | Gross Loan opening | 223.62 | 223.62 | 223.62 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 223.62 | 223.62 | 223.62 |
|  | Additionsduring the year | 0.00 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 223.62 | 223.62 | 223.62 |
|  | Average Loan | 223.62 | 223.62 | 223.62 |
|  | Rate of Interest | 8.15\% | 8.15\% | 8.15\% |
|  | Interest | 18.23 | 18.23 | 18.23 |
|  | Repayment Schedule | 12 annual ina | talments from | 9-3-2010 |
| 2 | BOND XXII ( ADDCAP FOR 2006-07) |  |  |  |
|  | Gross Loan opening | 0.00 | 38.45 | 38.45 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 0.00 | 38.45 | 38.45 |
|  | Additions during the year | 38.45 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 38.45 | 38.45 | 38.45 |
|  | Average Loan | 19.23 | 38.45 | 38.45 |
|  | Rate of Interest | 8.68\% | 8.68\% | 8.68\% |
|  | Interest | 1.67 | 3.34 | 3.34 |
|  | Repayment Schedule | 12 Annual insta Iments from 7.12.2010 |  |  |
|  | Gross Loan opening | 223.62 | 262.07 | 262.07 |
|  | Cumulative Repayment up to the date of commercial operation / previous year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Opening | 223.62 | 262.07 | 262.07 |
|  | Additions during the year | 38.45 | 0.00 | 0.00 |
|  | Repayment during the year | 0.00 | 0.00 | 0.00 |
|  | Net Loan-Closing | 262.07 | 262.07 | 262.07 |
|  | Average Loan | 242.85 | 262.07 | 262.07 |
|  | Rate of Interest | 8.1920\% | 8.2278\% | 8.2278\% |
|  | Interest | 19.89 | 21.56 | 21.56 |

