# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI 

Coram:

1. Shri Bhanu Bhushan, Member
2. Shri Rakesh Nath, Member
I.A.No. 72/2006 in

Petition No. $127 / 2005$

## In the matter of

Approval of transmission tariff for (A) HVDC terminal station at Talcher and Kolar related with Pole-II, (B) 400 kV D/C Kolar-Hossur transmission line along with associated bays at Kolar and Hossur and (C) 400 kV S/C Salem-Udumalpet transmission line along with associated bay extension at Salem and Udumalpet etc. under transmission system associated with Talcher Super Thermal Power Station Stage-II for the period 1.4.2004 to 31.3.2009.

## And in the matter of

Power Grid Corporation of India Limited ..Petitioner Vs

1. Karnataka Power Transmission Corporation Ltd., Bangalore
2. Transmission Corporation of Andhra Pradesh Ltd., Hyderabad
3. Kerala State Electricity Board, Thiruvananthapuram
4. Tamil Nadu Electricity Board, Chennai
5. Electricity Department, Govt. of Pondicherry, Pondicherry
6. Electricity Department, Govt. of Goa, Panaji Respondents

## ORDER

The Commission by its order dated 9.5.2006 had allowed tariff for (A) HVDC terminal stations at Talcher and Kolar related with Pole-II, (B) 400 kV D/C KolarHossur transmission line along with associated bays at Kolar and Hossur, and (C) 400 kV S/C Salem-Udumalpet transmission line along with the associated bay extensions at Salem and Udumalpet etc. (the transmission assets) under transmission system associated with Talcher Super Power Station Stage-II (the transmission system) in Southern Region for the period from 1.4.2004 to 31.3.2009.
2. The tariff for the block years 2004-2009 was worked out on the basis of gross block of Rs. 77177.86 lakh as on 1.4.2004. The Commission in its said order dated
9.5.2006, had not considered additional capital expenditure during 2004-05 incurred by the petitioner after the date of commercial operation. The petitioner was granted liberty to approach the Commission for revision of tariff for period 2004-09 in accordance with law based on additional capital expenditure incurred during 2004-05.
3. Through this interlocutory application, the petitioner has prayed for revision of tariff based on additional capitalization incurred during 2004-05 in respect of HVDC terminal station at Talcher and Kolar related with Pole-II and 400 kV D/C Kolar-Hossur transmission line along with associated bays at Kolar and Hossur.

## CAPITAL COST

4. The petitioner has claimed revision of tariff based on capital cost after accounting for additional capitalization for the year 2004-05. The capital expenditure on the date of commercial operation and additional capitalization on account of works claimed by the petitioner for tariff purpose are given under:

| (Rs. in lakh) |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| assets of the transmission | Capital <br> Expenditure as <br> on 1.4.2004 | Additional capital <br> expenditure <br> during 2004-05 | Total <br> capital <br> expenditure |  |  |  |
| HVDC terminal station at Talcher and <br> Kolar related with pole-II | 66272.23 | 41.39 | 66313.62 |  |  |  |
| 400 kV D/C Kolar-Hossur <br> transmission line, along with <br> associated bays at Kolar and <br> Hossur | 5316.08 | 1.20 | 5317.28 |  |  |  |

## ADDITIONAL CAPITALIZATION ON WORKS- 2004-05

5. The petitioner has sought approval of tariff after accounting for additional capital expenditure incurred on account of balance payments. The above expenditure was not considered by the Commission in its order dated 9.5 .2006 ibid while approving tariff. The capital expenditure claimed 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. The capital expenditure as claimed by the petitioner is being considered for revision of tariff.

## DEBT- EQUITY RATIO

6. Clause (1) of Regulation 54 of the 2004 regulations provides that,-
"(1) In case of the existing projects, debt-equity ratio Considered by the Commission for fixation of tariff for the period ending 31.3.2004 shall be considered for determination of tariff with effect from 01.04.2004:

Provided that in cases where the tariff for the period ending 31.3.2004 has not been determined by the Commission, debt-equity ratio shall be as may be decided by the Commission:

Provided further that in case of the existing projects where additional capitalisation has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 53, equity in the additional capitalisation to be considered shall be :-
(a) $30 \%$ of the additional capital expenditure admitted by the Commission, or
(b) equity approved by the competent authority in the financial package, for additional capitalisation, or
(c) actual equity employed,
whichever is the least:
Provided further that in case of additional expenditure admitted under the second proviso, the Commission may considered equity of more than 30\% if the transmission licensee is able to satisfy the Commission that deployment of such equity of more than $30 \%$ was in the interest of general public.
7. The Note 1 below Regulation 53 lays down that any expenditure on account of committed liabilities within the original scope of work is to be serviced in the normative debt-equity ratio specified in Regulation 54.
8. In the instant case, the approved debt-equity ratio for the transmission system is stated to be $80: 20$. Therefore, the additional capital expenditure on works for different assets has been considered in the approved debt-equity ratio of 80:20.

Therefore, notional equity considered for revision of tariff in each of the assets is hereinunder:

| Name of the transmission assets | Equity (Rs. in lakh) |  |
| :--- | ---: | ---: |
|  | As on 31.3.2004 | As on 31.3.2005 |
| HVDC terminal station at Talcher and <br> Kolar related with pole-II | 13254.45 | 13262.72 |
| 400 kV D/C Kolar-Hossur transmission <br> line, along with associated bays at Kolar <br> and Hossur | 1299.92 | 1300.16 |

## RETURN ON EQUITY

9. 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.
10. For the reasons recorded in para 8 above, equity as given in the table under that para has been considered. However, return on equity for the year 2004-05 has been allowed on average equity. Accordingly, return on equity allowed each year during the tariff period is given under:

| Name of the transmission assets | Return on equity |  |
| :--- | ---: | ---: |
|  | $2004-05$ | $2005-09$ |
| HVDC terminal station at Talcher and Kolar related with <br> pole-II | 1856.20 | 1856.78 |
| 400 kV D/C Kolar-Hossur transmission line, along with <br> associated bays at Kolar and Hossur | 182.01 | 182.02 |

## INTEREST ON LOAN

11. Based on the revised capital cost, the year-wise details of interest on loan worked out are given hereunder:

HVDC terminal station at Talcher and Kolar related with pole-II
(Rs. in lakh)

| Interest on Loan | Up to <br> $\mathbf{3 1 . 3 . 2 0 0 4}$ | $\mathbf{2 0 0 4 - 0 5}$ | $\mathbf{2 0 0 5 - 0 6}$ | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ | $\mathbf{2 0 0 8 - 0 9}$ |
| :--- | ---: | ---: | ---: | ---: | :--- | :--- |
| Gross Loan as per last Order | 51439.00 |  |  |  |  |  |
| Addition due to Additional <br> Capitalisation | 1741.87 |  |  |  |  |  |
| Addition due to FERV | $(-) 163.09$ |  |  |  |  |  |
| Gross Normative Loan | 53017.78 | 53017.78 | 53050.90 | 53050.90 | 53050.90 | 53050.90 |
| Cumulative Repayment up to <br> Previous Year |  | 1632.48 | 5055.24 | 8805.08 | 13680.44 | 18555.81 |
| Net Loan-Opening |  | 51385.30 | 47995.66 | 44245.82 | 39370.45 | 34495.09 |
| Addition due to additional <br> capitalization | 33.11 |  |  |  |  |  |
| Repayment during the year |  | 3422.75 | 3749.84 | 4875.36 | 4875.36 | 4875.36 |
| Net Loan-Closing | 47995.66 | 44245.82 | 39370.45 | 34495.09 | 29619.72 |  |
| Average Loan | 49690.48 | 46120.74 | 41808.13 | 36932.77 | 32057.40 |  |
| Weighted Average Rate of Interest on <br> Loan |  | $6.8406 \%$ | $6.9270 \%$ | $6.9957 \%$ | $7.0566 \%$ | $7.1360 \%$ |
| Interest |  | $\mathbf{3 3 9 9 . 1 2}$ | $\mathbf{3 1 9 4 . 7 8}$ | $\mathbf{2 9 2 4 . 7 7}$ | $\mathbf{2 6 0 6 . 1 9}$ | $\mathbf{2 2 8 7 . 6 1}$ |

400 KV D/C Kolar-Hossur Transmission line along with associated bays at kolar and Hosur
(Rs. in lakh)

| Interest on Loan | Up to <br> $\mathbf{3 1 . 3 . 2 0 0 4}$ | $\mathbf{2 0 0 4 - 0 5}$ | $\mathbf{2 0 0 5 - 0 6}$ | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ | $\mathbf{2 0 0 8 - 0 9}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Gross Loan as per last Order | 3947.00 |  |  |  |  |  |
| Addition due to Additional <br> Capitalization and FERV up to <br> 31.3.2004 | 69.16 |  |  |  |  |  |
| Gross Normative Loan | 4016.16 | 4016.16 | 4017.12 | 4017.12 | 4017.12 | 4017.12 |
| Cumulative Repayment up to <br> Previous Year |  | 34.49 | 229.67 | 467.56 | 808.08 | 1148.59 |
| Net Loan-Opening |  | 3981.67 | 3787.45 | 3549.56 | 3209.04 | 2868.53 |
| Addition due to Additional <br> Capitalization | 0.96 |  |  |  |  |  |
| Repayment during the year |  | 195.18 | 237.89 | 340.52 | 340.52 | 340.52 |
| Net Loan-Closing | 3787.45 | 3549.56 | 3209.04 | 2868.53 | 2528.01 |  |
| Average Loan | 3884.56 | 3668.50 | 3379.30 | 3038.79 | 2698.27 |  |
| Weighted Average Rate of Interest <br> on Loan |  | $9.4142 \%$ | $9.3867 \%$ | $9.3641 \%$ | $9.3491 \%$ | $9.3304 \%$ |
| Interest |  | $\mathbf{3 6 5 . 7 0}$ | $\mathbf{3 4 4 . 3 5}$ | $\mathbf{3 1 6 . 4 4}$ | $\mathbf{2 8 4 . 1 0}$ | $\mathbf{2 5 1 . 7 6}$ |

12. The details calculations in support of interest on loan are attached an

Annexure-I and Annexure-IA to this order.

## DEPRECIATION

13. The revised calculations in support of depreciation allowed on the basis of revised capital cost are appended below:

HVDC terminal station at Talcher and Kolar related with pole-II

| (Rs. in lakh) |  |  |  |  |  |  |  |
| :--- | ---: | ---: | :--- | :--- | :--- | :--- | :--- |
|  |  | Up to <br> $\mathbf{3 1 . 3 . 2 0 0 4}$ | $\mathbf{2 0 0 4 - 0 5}$ | $\mathbf{2 0 0 5 - 0 6}$ | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ | $\mathbf{2 0 0 8 - 0 9}$ |
| Gross Block |  |  |  |  |  |  |  |
| As per Last Order |  | 64872.07 |  |  |  |  |  |
| Addition due to Additional <br> Capitalisation |  | 1741.87 | 41.39 |  |  |  |  |
| Addition due to FERV |  | $(-) 341.71$ |  |  |  |  |  |
| Gross Block as on 31 ${ }^{\text {st }}$ March |  | 66272.23 | 66313.62 | 66313.62 | 66313.62 | 66313.62 | 66313.62 |
| Depreciation |  |  |  |  |  |  |  |
| Rate of Depreciation |  |  | $3.6026 \%$ | $3.6029 \%$ | $3.6029 \%$ | $3.6029 \%$ | $3.6029 \%$ |
| Depreciable Value | $90 \%$ |  | 59645.01 | 59682.26 | 59682.26 | 59682.26 | 59682.26 |
| Balance Useful life of the asset |  |  | - | - |  | - | - |
| Remaining Depreciable Value |  |  | 57122.18 | 54627.02 | 50877.18 | 46001.81 | 41126.45 |
| Depreciation |  |  | $\mathbf{2 3 8 8 . 2 6}$ | $\mathbf{2 3 8 9 . 1 9}$ | $\mathbf{2 3 8 9 . 1 9}$ | $\mathbf{2 3 8 9 . 1 9}$ | $\mathbf{2 3 8 9 . 1 9}$ |

400 KV D/C Kolar-Hossur Transmission line along with associated bays at kolar and Hosur (Rs. in lakh)

|  |  | Up to <br> $\mathbf{3 1 . 3 . 2 0 0 4}$ | $\mathbf{2 0 0 4 - 0 5}$ | $\mathbf{2 0 0 5 - 0 6}$ | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ | $\mathbf{2 0 0 8 - 0 9}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Gross Block |  |  |  |  |  |  |  |
| As per Last Order |  | 5246.92 |  |  |  |  |  |
| Addition due to Additional <br> Capitalisation |  | 69.16 | 1.20 |  |  |  |  |
| Addition due to FERV |  | 0.00 |  |  |  |  |  |
| Gross Block as on 31 ${ }^{\text {st }}$ March |  | 5316.08 | 5317.28 | 5317.28 | 5317.28 | 5317.28 | 5317.28 |
| Depreciation |  |  |  |  |  |  |  |
| Rate of Depreciation |  |  | $2.6056 \%$ | $2.6056 \%$ | $2.6056 \%$ | $2.6056 \%$ | $2.6056 \%$ |
| Depreciable Value | $90 \%$ |  | 4731.49 | 4732.57 | 4732.57 | 4732.57 | 4732.57 |
| Balance Useful life of the asset |  |  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Remaining Depreciable Value |  |  | 4595.21 | 4457.76 | 4265.01 | 3924.49 | 3583.98 |
| Depreciation |  |  | $\mathbf{1 3 8 . 5 3}$ | $\mathbf{1 3 8 . 5 5}$ | $\mathbf{1 3 8 . 5 5}$ | $\mathbf{1 3 8 . 5 5}$ | $\mathbf{1 3 8 . 5 5}$ |

## ADVANCE AGAINST DEPRECIATION

14. The petitioner's entitlement to Advance Against Depreciation has also been reworked out and the relevant details are reproduced hereunder:

HVDC terminal station at Talcher and Kolar related with pole-II
(Rs. in lakh)

|  | $\mathbf{2 0 0 4 - 0 5}$ | $\mathbf{2 0 0 5 - 0 6}$ | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ | $\mathbf{2 0 0 8 - 0 9}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $1 / 10^{\text {th }}$ of Gross Loan(s) | 5301.78 | 5305.09 | 5305.09 | 5305.09 | 5305.09 |
| Repayment of the Loan | 3422.75 | 3749.84 | 4875.36 | 4875.36 | 4875.36 |
| Minimum of the above | 3422.75 | 3749.84 | 4875.36 | 4875.36 | 4875.36 |


| Depreciation during the year | 2388.26 | 2389.19 | 2389.19 | 2389.19 | 2389.19 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| (A) Difference | 1034.49 | 1360.66 | 2486.18 | 2486.18 | 2486.18 |
| Cumulative Repayment of the Loan | 5055.24 | 8805.08 | 13680.44 | 18555.81 | 23431.17 |
| Cumulative Depreciation/ Advance against <br> Depreciation | 4911.08 | 7444.42 | 11194.27 | 16069.63 | 20945.00 |
| (B) Difference | 144.15 | 1360.66 | 2486.18 | 2486.18 | 2486.18 |
| Advance against Depreciation Minimum of (A) <br> and (B) | $\mathbf{1 4 4 . 1 5}$ | $\mathbf{1 3 6 0 . 6 6}$ | $\mathbf{2 4 8 6 . 1 8}$ | $\mathbf{2 4 8 6 . 1 8}$ | $\mathbf{2 4 8 6 . 1 8}$ |

400 KV D/C Kolar-Hossur Transmission line along with associated bays at kolar and Hosur
(Rs. in lakh)

|  | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Advance against Depreciation |  |  |  |  |  |
| $1 / 10^{\text {th }}$ of Gross Loan(s) | 401.62 | 401.71 | 401.71 | 401.71 | 401.71 |
| Repayment of the Loan | 195.18 | 237.89 | 340.52 | 340.52 | 340.52 |
| Minimum of the above | 195.18 | 237.89 | 340.52 | 340.52 | 340.52 |
| Depreciation during the year | 138.53 | 138.55 | 138.55 | 138.55 | 138.55 |
| (A) Difference | 56.64 | 99.34 | 201.97 | 201.97 | 201.97 |
| Cumulative Repayment of the Loan | 229.67 | 467.56 | 808.08 | 1148.59 | 1489.11 |
| Cumulative Depreciation/ Advance against Depreciation | 274.81 | 413.36 | 606.11 | 946.63 | 1287.14 |
| (B) Difference | (-)45.14 | 54.20 | 201.97 | 201.97 | 201.97 |
| Advance against Depreciation Minimum of (A) and (B) | 0.00 | 54.20 | 201.97 | 201.97 | 201.97 |

## OPERATION \& MAINTENANCE EXPENSES

15. There is no change in $O$ \& $M$ expenses approved under order dated 9.5.2006

## INTEREST ON WORKING CAPITAL

16. The revised computations in support of interest on working capital consequent to increase in return on equity, interest on loan and depreciation are appended hereinbelow.

HVDC terminal station at Talcher and Kolar related with pole-II
(Rs. in lakh)

|  |  | $\mathbf{2 0 0 4 - 0 5}$ | $\mathbf{2 0 0 5 - 0 6}$ | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ | $\mathbf{2 0 0 8 - 0 9}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Maintenance Spares |  | 691.08 | 732.55 | 776.50 | 823.09 | 872.48 |
| O \& M expenses |  | 39.84 | 41.44 | 43.10 | 44.81 | 46.61 |
| Receivables |  | 1414.28 | 1590.16 | 1739.39 | 1689.70 | 1640.23 |
| Total |  | $2,145.19$ | $2,364.15$ | $2,558.99$ | $2,557.60$ | $2,559.31$ |
| Interest | $10.25 \%$ | $\mathbf{2 1 9 . 8 8}$ | $\mathbf{2 4 2 . 3 3}$ | $\mathbf{2 6 2 . 3 0}$ | $\mathbf{2 6 2 . 1 5}$ | $\mathbf{2 6 2 . 3 3}$ |

400 KV D/C Kolar-Hossur Transmission line along with associated bays at kolar and Hosur
(Rs. in lakh)

|  |  | $\mathbf{2 0 0 4}-05$ | $\mathbf{2 0 0 5 - 0 6}$ | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ | $\mathbf{2 0 0 8 - 0 9}$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Maintenance Spares |  | 55.62 | 58.95 | 62.49 | 66.24 | 70.22 |


| O \& M expenses |  | 7.30 | 7.59 | 7.90 | 8.20 | 8.54 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Receivables |  | 132.30 | 138.54 | 159.56 | 154.76 | 150.04 |
| Total |  | 195.22 | 205.08 | 229.95 | 229.21 | 228.80 |
| Interest | $10.25 \%$ | $\mathbf{2 0 . 0 1}$ | $\mathbf{2 1 . 0 2}$ | $\mathbf{2 3 . 5 7}$ | $\mathbf{2 3 . 4 9}$ | $\mathbf{2 3 . 4 5}$ |

## TRANSMISSION CHARGES

17. The summary sheets showing the revised basic details of capital cost and other related aspects is annexed to this order as Annexure-II and Annexure-IIA. The revised transmission charges being allowed for the transmission assets, excluding 400 kV S/C Salem-Udmalpet transmission line, in suppression of the transmission charges approved under order dated 9.5.2006 are summarised below:

HVDC terminal station at Talcher and Kolar related with pole-II
(Rs. in lakh)

|  | $\mathbf{2 0 0 4 - 0 5}$ | $\mathbf{2 0 0 5 - 0 6}$ | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ | $\mathbf{2 0 0 8 - 0 9}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Depreciation | 2388.26 | 2389.19 | 2389.19 | 2389.19 | 2389.19 |
| Interest on Loan | 3399.12 | 3194.78 | 2924.77 | 2606.19 | 2287.61 |
| Return on Equity | 1856.20 | 1856.78 | 1856.78 | 1856.78 | 1856.78 |
| Advance against Depreciation | 144.15 | 1360.66 | 2486.18 | 2486.18 | 2486.18 |
| Interest on Working Capital | 219.88 | 242.33 | 262.30 | 262.15 | 262.33 |
| O \& M Expenses | 478.04 | 497.25 | 517.14 | 537.71 | 559.30 |
| Total | $\mathbf{8 4 8 5 . 6 6}$ | $\mathbf{9 5 4 0 . 9 8}$ | $\mathbf{1 0 4 3 6 . 3 5}$ | $\mathbf{1 0 1 3 8 . 2 0}$ | $\mathbf{9 8 4 1 . 3 9}$ |

400 KV D/C Kolar-Hossur Transmission line along with associated bays at kolar and Hosur

| (Rs. in lakh) |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{2 0 0 4 - 0 5}$ | $\mathbf{2 0 0 5 - 0 6}$ | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ | $\mathbf{2 0 0 8 - 0 9}$ |
| Depreciation | 138.53 | 138.55 | 138.55 | 138.55 | 138.55 |
| Interest on Loan | 365.70 | 344.35 | 316.44 | 284.10 | 251.76 |
| Return on Equity | 182.01 | 182.02 | 182.02 | 182.02 | 182.02 |
| Advance against Depreciation | 0.00 | 54.20 | 201.97 | 201.97 | 201.97 |
| Interest on Working Capital | 20.01 | 21.02 | 23.57 | 23.49 | 23.45 |
| O \& M Expenses | 87.57 | 91.07 | 94.79 | 98.45 | 102.51 |
| Total | $\mathbf{7 9 3 . 8 2}$ | $\mathbf{8 3 1 . 2 1}$ | $\mathbf{9 5 7 . 3 4}$ | $\mathbf{9 2 8 . 5 8}$ | $\mathbf{9 0 0 . 2 6}$ |

18. In all other respects including the transmission charges approved for 400 kV S/C Salem-Udmalpet transmission line, the order dated 9.5.2006 shall continue to apply.
19. This order disposes of I.A.No.72/2006.

Sd-/

## (RAKESH NATH)

MEMBER
(BHANU BHUSHAN)
MEMBER

New Delhi dated the $20^{\text {th }}$ April 2007

## Annexure -

## CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

HVDC Terminal station at Talcher and Kolar related with pole-II

| (Rs. in Lakh) |  |  |  |  |  |  |
| ---: | :--- | ---: | ---: | ---: | ---: | ---: |
|  | Details of Loan | $\mathbf{2 0 0 4 - 0 5}$ | $\mathbf{2 0 0 5 - 0 6}$ | $\mathbf{2 0 0 6 - 0 7}$ | $\mathbf{2 0 0 7 - 0 8}$ | $\mathbf{2 0 0 8 - 0 9}$ |
| $\mathbf{1}$ | Bond-IX |  |  |  |  |  |
|  | Net Loan-Opening | 2273.40 | 2020.80 | 1768.20 | 1515.60 | 1263.00 |
|  | Repayment during the year | 252.60 | 252.60 | 252.60 | 252.60 | 252.60 |
|  | Net Loan-Closing | 2020.80 | 1768.20 | 1515.60 | 1263.00 | 1010.40 |


|  | Average Loan | 2147.10 | 1894.50 | 1641.90 | 1389.30 | 1136.70 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rate of Interest | 12.25\% | 12.25\% | 12.25\% | 12.25\% | 12.25\% |
|  | Interest | 263.02 | 232.08 | 201.13 | 170.19 | 139.25 |
|  | Repayment Schedule | 10 Annual instalments from 22.08.2003 |  |  |  |  |
| 2 | Bond-X |  |  |  |  |  |
|  | Net Loan-Opening | 4804.00 | 4403.67 | 4003.33 | 3603.00 | 3202.67 |
|  | Repayment during the year | 400.33 | 400.33 | 400.33 | 400.33 | 400.33 |
|  | Net Loan-Closing | 4403.67 | 4003.33 | 3603.00 | 3202.67 | 2802.33 |
|  | Average Loan | 4603.83 | 4203.50 | 3803.17 | 3402.83 | 3002.50 |
|  | Rate of Interest | 10.90\% | 10.90\% | 10.90\% | 10.90\% | 10.90\% |
|  | Interest | 501.82 | 458.18 | 414.55 | 370.91 | 327.27 |
|  | Repayment Schedule | 12 Annual instalments from 21-6-2004 |  |  |  |  |
| 3 | Bond- XI Option 1 |  |  |  |  |  |
|  | Net Loan-Opening | 3508.00 | 3508.00 | 3215.67 | 2923.33 | 2631.00 |
|  | Repayment during the year | 0.00 | 292.33 | 292.33 | 292.33 | 292.33 |
|  | Net Loan-Closing | 3508.00 | 3215.67 | 2923.33 | 2631.00 | 2338.67 |
|  | Average Loan | 3508.00 | 3361.83 | 3069.50 | 2777.17 | 2484.83 |
|  | Rate of Interest | 9.80\% | 9.80\% | 9.80\% | 9.80\% | 9.80\% |
|  | Interest | 343.78 | 329.46 | 300.81 | 272.16 | 243.51 |
|  | Repayment Schedule | 12 Annual instalments from 07-122005 |  |  |  |  |
| 4 | Bond- XII |  |  |  |  |  |
|  | Net Loan-Opening | 247.00 | 247.00 | 226.42 | 205.83 | 185.25 |
|  | Repayment during the year | 0.00 | 20.58 | 20.58 | 20.58 | 20.58 |
|  | Net Loan-Closing | 247.00 | 226.42 | 205.83 | 185.25 | 164.67 |
|  | Average Loan | 247.00 | 236.71 | 216.13 | 195.54 | 174.96 |
|  | Rate of Interest | 9.70\% | 9.70\% | 9.70\% | 9.70\% | 9.70\% |
|  | Interest | 23.96 | 22.96 | 20.96 | 18.97 | 16.97 |
|  | Repayment Schedule | 12 Annual Instalments from 28.03.2006 |  |  |  |  |
| 5 | Bond- XIII Option 1 |  |  |  |  |  |
|  | Net Loan-Opening | 13015.00 | 13015.00 | 13015.00 | 11930.42 | 10845.83 |
|  | Repayment during the year | 0.00 | 0.00 | 1084.58 | 1084.58 | 1084.58 |
|  | Net Loan-Closing | 13015.00 | 13015.00 | 11930.42 | 10845.83 | 9761.25 |
|  | Average Loan | 13015.00 | 13015.00 | 12472.71 | 11388.13 | 10303.54 |
|  | Rate of Interest | 8.63\% | 8.63\% | 8.63\% | 8.63\% | 8.63\% |
|  | Interest | 1123.19 | 1123.19 | 1076.39 | 982.80 | 889.20 |
|  | Repayment Schedule | 12 Annual inatalments from 31-7-2006 |  |  |  |  |
| 6 | PNB-II |  |  |  |  |  |
|  | Net Loan-Opening | 1028.00 | 942.33 | 856.67 | 771.00 | 685.33 |
|  | Repayment during the year | 85.67 | 85.67 | 85.67 | 85.67 | 85.67 |
|  | Net Loan-Closing | 942.33 | 856.67 | 771.00 | 685.33 | 599.67 |
|  | Average Loan | 985.17 | 899.50 | 813.83 | 728.17 | 642.50 |
|  | Rate of Interest | 8.60\% | 8.60\% | 8.60\% | 8.60\% | 8.60\% |
|  | Interest | 84.72 | 77.36 | 69.99 | 62.62 | 55.26 |
|  | Repayment Schedule | 12 Annual Instalments from 08.3.2005 |  |  |  |  |
| 7 | OBC |  |  |  |  |  |
|  | Net Loan-Opening | 1616.00 | 1481.33 | 1346.67 | 1212.00 | 1077.33 |
|  | Repayment during the year | 134.67 | 134.67 | 134.67 | 134.67 | 134.67 |
|  | Net Loan-Closing | 1481.33 | 1346.67 | 1212.00 | 1077.33 | 942.67 |
|  | Average Loan | 1548.67 | 1414.00 | 1279.33 | 1144.67 | 1010.00 |
|  | Rate of Interest | 8.60\% | 8.60\% | 8.60\% | 8.60\% | 8.60\% |
|  | Interest | 133.19 | 121.60 | 110.02 | 98.44 | 86.86 |
|  | Repayment Schedule | 12 Annual Instalments from 22.03.2005 |  |  |  |  |
| 8 | KFW ECA- Hermes (Fixed) |  |  |  |  |  |


|  | Net Loan-Opening | 16426.72 | 14697.59 | 12968.46 | 11239.33 | 9510.20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Repayment during the year | 1729.13 | 1729.13 | 1729.13 | 1729.13 | 1729.13 |
|  | Net Loan-Closing | 14697.59 | 12968.46 | 11239.33 | 9510.20 | 7781.07 |
|  | Average Loan | 15562.16 | 13833.02 | 12103.89 | 10374.76 | 8645.63 |
|  | Rate of Interest | 3.91450\% | 3.91450\% | 3.91450\% | 3.91450\% | 3.91450\% |
|  | Interest | 609.18 | 541.49 | 473.81 | 406.12 | 338.43 |
|  | Repayment Schedule | Half yearly Instalments for 10 years from 31.03.2004 |  |  |  |  |
| 9 | KFW Hermes (Floating) |  |  |  |  |  |
|  | Net Loan-Opening | 2658.79 | 2378.92 | 2099.05 | 1819.18 | 1539.32 |
|  | Repayment during the year | 279.87 | 279.87 | 279.87 | 279.87 | 279.87 |
|  | Net Loan-Closing | 2378.92 | 2099.05 | 1819.18 | 1539.32 | 1259.45 |
|  | Average Loan | 2518.85 | 2238.99 | 1959.12 | 1679.25 | 1399.38 |
|  | Rate of Interest | 0.67\% | 0.67\% | 0.67\% | 0.67\% | 0.67\% |
|  | Interest | 16.94 | 15.06 | 13.18 | 11.29 | 9.41 |
|  | Repayment Schedule | Half yearly Instalments for 10 years from 31.03.2004 |  |  |  |  |
| 10 | KFW Commercial (Fixed) |  |  |  |  |  |
|  | Net Loan-Opening | 3142.48 | 2811.70 | 2480.91 | 2150.13 | 1819.34 |
|  | Repayment during the year | 330.78 | 330.78 | 330.78 | 330.78 | 330.78 |
|  | Net Loan-Closing | 2811.70 | 2480.91 | 2150.13 | 1819.34 | 1488.56 |
|  | Average Loan | 2977.09 | 2646.31 | 2315.52 | 1984.74 | 1653.95 |
|  | Rate of Interest | 5.54029\% | 5.54029\% | 5.54029\% | 5.54029\% | 5.54029\% |
|  | Interest | 164.94 | 146.61 | 128.29 | 109.96 | 91.63 |
|  | Repayment Schedule | Half yearly Instalments for 10 years from 31.03.2004 |  |  |  |  |
| 11 | KFW Commercial (Floating) |  |  |  |  |  |
|  | Net Loan-Opening | 831.11 | 743.62 | 656.13 | 568.65 | 481.16 |
|  | Repayment during the year | 87.49 | 87.49 | 87.49 | 87.49 | 87.49 |
|  | Net Loan-Closing | 743.62 | 656.13 | 568.65 | 481.16 | 393.67 |
|  | Average Loan | 787.36 | 699.88 | 612.39 | 524.90 | 437.41 |
|  | Rate of Interest | 1.5125\% | 1.5125\% | 1.5125\% | 1.5125\% | 1.5125\% |
|  | Interest | 11.91 | 10.59 | 9.26 | 7.94 | 6.62 |
|  | Repayment Schedule | Half yearly Instalments for 10 years from 31.03.2004 |  |  |  |  |
|  | Total Loan |  |  |  |  |  |
|  | Net Loan-Opening | 49550.50 | 46249.96 | 42636.51 | 37938.47 | 33240.43 |
|  | Repayment during the year | 3300.54 | 3613.45 | 4698.04 | 4698.04 | 4698.04 |
|  | Net Loan-Closing | 46249.96 | 42636.51 | 37938.47 | 33240.43 | 28542.39 |
|  | Average Loan | 47900.23 | 44443.23 | 40287.49 | 35589.45 | 30891.41 |
|  | Rate of Interest | 6.8406\% | 6.9270\% | 6.9957\% | 7.0566\% | 7.1360\% |
|  | Interest | 3276.65 | 3078.58 | 2818.39 | 2511.40 | 2204.41 |

## Annexure-IA

## CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

400 KV D/C Kolar-Hossur Transmission line along with associated bays at kolar and Hosur
(Rs. in Lakh)


|  | Rate of Interest | $8.60 \%$ | $8.60 \%$ | $8.60 \%$ | $8.60 \%$ | $8.60 \%$ |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
|  | Interest | 51.43 | 46.96 | 42.48 | 38.01 | 33.54 |
|  | Repayment Schedule | 12 Annual Instalments from 22.3 .2005 |  |  |  |  |
|  | Total Loan |  |  |  |  |  |
|  | Net Loan-Opening | 3913.10 | 3721.28 | 3487.55 | 3152.98 | 2818.42 |
|  | Repayment during the year | 191.82 | 233.73 | 334.57 | 334.57 | 334.57 |
|  | Net Loan-Closing | 3721.28 | 3487.55 | 3152.98 | 2818.42 | 2483.85 |
|  | Average Loan | 3817.19 | 3604.42 | 3320.27 | 2985.70 | 2651.13 |
|  | Rate of Interest | $9.4142 \%$ | $9.3867 \%$ | $9.3641 \%$ | $9.3491 \%$ | $9.3304 \%$ |
|  | Interest | 359.36 | 338.34 | 310.91 | 279.14 | 247.36 |

Annexure-II



## Annexure-IIA




