

**CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

**Petition No. 79/TT/2011**

**Coram: Dr. Pramod Deo, Chairperson  
Shri S. Jayaraman, Member  
Shri V.S. Verma, Member  
Shri M. Deena Dayalan, Member**

**Date of Hearing: 17.11.2011**

**Date of Order: 26 .3.2012**

**In the matter of:**

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 for Stage-I Combined Assets (Notional DOCO: 1.10.2003): consisting of (a) 400 kV Meerut-Mandola Ckt-I along with associated bays at Meerut and Mandola Sub-stations (DOCO: 1.10.2003), (b) 400 kV Meerut-Mandola Ckt-II along with associated bays at Meerut and Mandola Sub-stations (DOCO: 1.4.2003), (c) ICT-II along with associated bays at Meerut Sub-station (DOCO: 1.4.2003), (d) ICT-III along with associated bays at Meerut sub-station (DOCO: 1.7.2003) and Stage-II Combined Assets (Notional DOCO: 1.2.2007): consisting of (e) ICT-I along with associated bays at Meerut Sub-station (DOCO: 1.8.2005), (f) 800 kV Tehri-Meerut Ckt-I along with associated bays (DOCO: 1.4.2006), (g) 800 kV Tehri-Meerut Ckt-II and 400 kV S/C Meerut- Muzaffarpur transmission line (DOCO: 1.6.2006) and (h) ICT at Muzaffarnagar along with one No. 400 kV and one No. 220 kV bay (DOCO: 1.2.2007) under Tehri Transmission System, in Northern Region, for the Tariff block 2009-14

**And**

**In the matter of:**

Power Grid Corporation of India Ltd., Gurgaon

**.....Petitioner**

**Vs**

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
2. Ajmer Vidyut Vitran Nigam Limited, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited, Jaipur
4. Jodhpur Vidyut Vitran Nigam Limited, Jaipur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Power Purchase Centre, Panchkula



8. Power Development Department, Jammu
9. Uttar Pradesh Power Corporation Ltd., Lucknow
10. Delhi Transco Limited, New Delhi
11. BSES Yamuna Power Limited, New Delhi
12. BSES Rajdhani Power limited, New Delhi
13. North Delhi Power Limited, New Delhi
14. Chandigarh Administration, Chandigarh
15. Uttarakhand Power Corporation Ltd., Dehradun
16. North Central Railway, Allahabad
17. New Delhi Municipal Council, New Delhi

.....Respondents

**The following were present:**

1. Shri S.S. Raju, PGCIL
2. Shri M.M. Mondal, PGCIL

**ORDER**

This petition has been filed by PGCIL seeking approval of transmission tariff for Stage-I Combined Assets consisting of (a) 400 kV Meerut-Mandola Ckt-I along with associated bays at Meerut and Mandola Sub-stations (date of commercial operation: 1.10.2003), (b) 400 kV Meerut-Mandola Ckt-II along with associated bays at Meerut and Mandola Sub-stations (date of commercial operation: 1.4.2003), (c) ICT-II along with associated bays at Meerut Sub-station (date of commercial operation: 1.4.2003), (d) ICT-III along with associated bays at Meerut Sub-station (date of commercial operation: 1.7.2003) and Stage-II Combined Assets consisting of (e) ICT-I along with associated bays at Meerut Sub-station (date of commercial operation: 1.8.2005), (f) 800 kV Tehri-Meerut Ckt-I along with associated bays (date of commercial operation: 1.4.2006), (g) 800 kV Tehri-Meerut Ckt-II and 400 kV S/C Meerut- Muzaffarpur transmission line (date of commercial operation: 1.6.2006) and (h) ICT at Muzaffarnagar along with one No. 400 kV and one No. 220 kV bay (date of commercial operation: 1.2.2007) (hereinafter referred to as "transmission



assets") for tariff block 2009-14 period from date of commercial operation to 31.3.2014 under Regulation 86 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "2009 regulations") for tariff block 2009-14.

2. The administrative approval and expenditure sanction to the transmission project was accorded by the Central Government (Ministry of Power) vide letter dated 15.3.1994 for ₹ 42100 lakh, including IDC of ₹ 5000 lakh. Subsequently, revised cost estimate for the transmission system was approved by the Ministry of Power vide its letter dated 20.8.2002 at an estimated cost of ₹ 70229 lakh including IDC of ₹13601 lakh. The cost estimate for the transmission system was again revised by the Ministry, vide letter dated 9.1.2006, to ₹ 91384 lakh including IDC of ₹ 26916 lakh.

3. In line with the procedure decided by the Commission vide letter No. C-7/189(204)/2009-CERC dated 23.10.2009 for combination of assets for the purpose of determination of tariff for 2009-14 period, assets consisting of (a) 400 kV Meerut-Mandola Ckt-I along with associated bays at Meerut and Mandola Sub-stations, (b) 400 kV Meerut-Mandola Ckt-II along with associated bays at Meerut and Mandola Sub-stations, (c) ICT-II along with associated bays at Meerut Sub-station, (d) ICT-III along with associated bays at Meerut sub-station under Tehri project have been clubbed for the purpose of determination of transmission charges and accordingly termed as Stage-I Combined Assets (Notional date of commercial operation: 1.10.2003). Assets consisting of (e) ICT-I along with associated bays at Meerut Sub-station, (f) 800 kV Tehri-Meerut Ckt-I along with associated bays, (g) 800 kV Tehri-Meerut Ckt-II and 400 kV S/C

Meerut- Muzaffarpur transmission line and (h) ICT at Muzaffarnagar along with one No. 400 kV and one No. 220 kV bay under Tehri Project have been clubbed for the purpose of determination of transmission charges and accordingly termed as Stage-II Combined Assets (Notional date of commercial operation: 1.2.2007).

4. The final transmission tariff, based on admitted cost of ₹ 8532.64 lakh for all the assets of Stage-I and ₹ 79246.08 lakh for assets under Stage-II, for the said transmission system, covered under this petition for the tariff period 2004-09 up to 31.3.2009, has been approved by the Commission vide its order dated 31.7.2006 in Petition No. 141/2005 and order dated 6.2.2007 in I.A. No. 74/2006 in Petition No. 141/2005 for the Stage-I assets and order dated 11.3.2010 in Petition No. 263/2009, order dated 21.8.2008 in Petition No. 146/2007 and order dated 20.7.2009 in Petition No. 57/2009 for Stage-II assets. The details of apportioned approved cost, admitted cost as on 31.03.2009 and additional capital expenditure during 2009-2014 period for the transmission assets are given as under:-

(₹ in lakh)

| Assets                            | Apportioned approved cost | Admitted cost as on 31.03.09 | Additional capital expenditure |               |         |                |               | Total estimated completion cost |
|-----------------------------------|---------------------------|------------------------------|--------------------------------|---------------|---------|----------------|---------------|---------------------------------|
|                                   |                           |                              | 2009-10                        | 2010-11       | 2011-12 | 2012-13        | 2013-14       |                                 |
| <b>Stage- I Combined Assets</b>   |                           |                              |                                |               |         |                |               |                                 |
| (a)                               | 2972.74                   | 2961.82                      | -                              | -             | -       | -              | -             | 2961.82                         |
| (b)                               | 2565.73                   | 2544.50                      | -                              | -             | -       | -              | -             | 2544.50                         |
| (c)                               | 1032.74                   | 1024.64                      | -                              | -             | -       | -              | -             | 1024.64                         |
| (d)                               | 2007.22                   | 2001.68                      | -                              | -             | -       | -              | -             | 2001.68                         |
| <b>Sub-Total</b>                  | <b>8578.43</b>            | <b>8532.64</b>               | -                              | -             | -       | -              | -             | <b>8532.64</b>                  |
| <b>Stage – II Combined Assets</b> |                           |                              |                                |               |         |                |               |                                 |
| (e)                               | 3038.24                   | 2481.89                      | -                              | 38.89         | -       | -              | -             | 2520.78                         |
| (f)                               | 37208.28                  | 35306.73                     | 18.73                          | -             | -       | 259.70         | 111.30        | 35696.46                        |
| (g)                               | 41473.41                  | 39713.65                     | 5.66                           | 88.03         | -       | 519.40         | 222.60        | 40549.34                        |
| (h)                               | 1085.19                   | 1743.81                      | 72.13                          | -             | -       | 259.70         | 111.30        | 2186.94                         |
| <b>Sub-Total</b>                  | <b>82805.12</b>           | <b>79246.08</b>              | <b>96.52</b>                   | <b>126.92</b> | -       | <b>1038.80</b> | <b>445.20</b> | <b>80953.52</b>                 |
| <b>TOTAL</b>                      | <b>91383.55</b>           | <b>87778.72</b>              | <b>96.52</b>                   | <b>126.92</b> | -       | <b>1038.80</b> | <b>445.20</b> | <b>89486.16</b>                 |



5. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003. Reply to the petition has been filed by Ajmer Vidyut Vitran Nigam Limited (AVVNL), Respondent No. 2, Jaipur Vidyut Vitran Nigam Limited (JVVNL), Respondent No. 3, Jodhpur Vidyut Vitran Nigam Limited (Jd.VVNL), Respondent No. 4, Punjab State Power Corporation Limited (PSPCL), Respondent No. 6, and Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9. UPPCL has raised the issue pertaining to PGCIL's plea for relaxation under Regulation 44 of the 2009 regulations for additional capital expenditure incurred after the cut-off date on account of undischarged liabilities, the grossing up of base rate of return on equity with the applicable MAT rates for the relevant year and realization thereof, service tax, licence fee, floating rate of interest, etc.

6. Having heard the representatives of the parties and perused the material on record, we proceed to dispose of the petition. While doing so, we also take care of the submissions of the respondent in its reply and address them in the relevant paragraphs.

### **CAPITAL COST**

7. As regards capital cost, Regulation 7(2) of the 2009 regulations provides that:-

XXX  
XXX

*“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff.”*

8. Details of capital cost considered for the purpose of tariff calculation as on 31.3.2009 is given hereunder:-

| Assets                          | Actual/Notional date of commercial operation | Capital cost admitted by CERC as on 31.3.2009 |          | Details of CERC orders  |
|---------------------------------|--|---|----------|---|
|                                 |  | (₹ in lakh)                                   | Stages   |   |
| <b>Stage-I Combined Assets</b>  |  |   |          |   |
| (a)                             | 1.10.2003                                    | 2961.82                                       | Stage-I  | CERC order dated 6.2.2007 in IA 74/2006 in Petition No. 141/2005                                      |
| (b)                             | 1.4.2003                                     | 2544.50                                       |          |   |
| (c)                             | 1.4.2003                                     | 1024.64                                       |          |   |
| (d)                             | 1.7.2003                                     | 2001.68                                       |          |   |
| <b>Sub-Total</b>                | <b>1.10.2003 (Notional)</b>                  | <b>8532.64</b>                                |          |   |
| <b>Stage-II Combined Assets</b> |  |   |          |   |
| (e)                             | 1.8.2005                                     | 2481.89                                       | Stage-II | CERC Order dated 20.7.2009 in Petition No. 57/2009<br>CERC Order dated 11.3.2010 in Pet. No. 263/2009 |
| (f)                             | 1.4.2006                                     | 35306.73                                      |          |   |
| (g)                             | 1.6.2006                                     | 39713.65                                      |          |   |
| (h)                             | 1.2.2007                                     | 1743.81                                       |          |   |
| <b>Sub-Total</b>                | <b>1.2.2007 (Notional)</b>                   | <b>79246.08</b>                               |          |   |
| <b>Total</b>                    |  | <b>87778.72</b>                               |          |   |

### **ADDITIONAL CAPITAL EXPENDITURE**

9. No additional capital expenditure has been claimed by the petitioner for assets consisting in Stage-I. The petitioner has claimed additional capital expenditure of ₹ 96.52 lakh, ₹ 1017.32 lakh, ₹ 296.80 lakh, ₹ 148.40 lakh and ₹ 148.40 lakh for the Stage-II assets for 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14. UPPCL has opposed the petitioner's claim for relaxation under Regulation 44 of the 2009 regulations for additional capital expenditure incurred after the cut-off date on account of undischarged liabilities. However, during the hearing, representative of the petitioner submitted that a court case was filed by a land owner claiming compensation. Provision has been made in the tariff block 2009-14 for payment of compensation, in case of a verdict against the petitioner. It was also submitted that the provision made for 2010-11 and 2011-12 has not been utilized and it would be transferred to 2012-13 and 2013-14. Revised information in this regard was filed by PGCIL vide affidavit dated 6.1.2012.

Accordingly, additional capital expenditure of ₹ 96.52 lakh, ₹ 126.92 lakh, ₹ 1038.80 lakh and ₹ 445.20 lakh for the period 2009-10, 2010-11, 2012-13 and 2013-14 respectively, on account of balance and retention payment as per original scope of work has been considered for the purpose of tariff calculation.

### **DEBT- EQUITY RATIO**

10. Regulation 12 of the 2009 regulations provides that,

"(1) XXXX

(2) *In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered."*

11. The details of debt-equity of combined assets as on 1.4.2009 is as follows:-

| Particular                      | Admitted as on 31.3.2009      |               |
|---------------------------------|-------------------------------|---------------|
| <b>Stage-I Combined Assets</b>  |                               |               |
|                                 | <b>Amount<br/>(₹ in lakh)</b> | <b>%</b>      |
| Debt                            | 6604.30                       | 77.40         |
| Equity                          | 1928.34                       | 22.60         |
| <b>Total</b>                    | <b>8532.64</b>                | <b>100.00</b> |
| <b>Stage-II Combined Assets</b> |                               |               |
|                                 | <b>Amount<br/>(₹ in lakh)</b> | <b>%</b>      |
| Debt                            | 55870.47                      | 70.50         |
| Equity                          | 23375.61                      | 29.50         |
| <b>Total</b>                    | <b>79246.08</b>               | <b>100.00</b> |

12. Details of debt-equity as on 31.3.2014 is as follows:-

| Particular                     | Admitted as on 31.3.2014      |               |
|--------------------------------|-------------------------------|---------------|
| <b>Stage-I Combined Assets</b> |                               |               |
|                                | <b>Amount<br/>(₹ in lakh)</b> | <b>%</b>      |
| Debt                           | 6604.30                       | 77.40         |
| Equity                         | 1928.34                       | 22.60         |
| <b>Total</b>                   | <b>8532.64</b>                | <b>100.00</b> |

| <b>Stage-II Combined Assets</b> |                               |               |
|---------------------------------|-------------------------------|---------------|
|                                 | <b>Amount<br/>(₹ in lakh)</b> | <b>%</b>      |
| Debt                            | 57065.68                      | 70.49         |
| Equity                          | 23887.84                      | 29.51         |
| <b>Total</b>                    | <b>80953.52</b>               | <b>100.00</b> |

13. Details of additional capital expenditure (referred to hereinafter as "Add Cap") for 2009-10, 2010-11, 2012-13 and 2013-14 is as follows:-

| <b>Stage-II Combined Assets<br/>Normative (Projected)</b> |                    |               |
|---|--------------------|---------------|
|   | <b>(₹ in lakh)</b> | <b>%</b>      |
| <b>Add Cap for 2009-10</b>                                |                    |               |
| Debt  | 67.56              | 70.00         |
| Equity  | 28.96              | 30.00         |
| <b>Total</b>  | <b>96.52</b>       | <b>100.00</b> |
| <b>Add Cap for 2010-11</b>                                |                    |               |
| Debt  | 88.84              | 70.00         |
| Equity  | 38.08              | 30.00         |
| <b>Total</b>  | <b>126.92</b>      | <b>100.00</b> |
| <b>Add Cap for 2012-13</b>                                |                    |               |
| Debt  | 727.16             | 70.00         |
| Equity  | 311.64             | 30.00         |
| <b>Total</b>  | <b>1038.80</b>     | <b>100.00</b> |
| <b>Add Cap for 2013-14</b>                                |                    |               |
| Debt  | 311.64             | 70.00         |
| Equity  | 133.56             | 30.00         |
| <b>Total</b>  | <b>445.20</b>      | <b>100.00</b> |

## **RETURN ON EQUITY**

14. Regulation 15 of the 2009 regulations provides that:-

*"15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.*

*(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation:*





*Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:*

*Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.*

*(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.*

*(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:*

*Rate of pre-tax return on equity = Base rate / (1-t)*

*Where t is the applicable tax rate in accordance with clause (3) of this regulation.*

*(5) The generating company or the transmission licensee as the case may be, shall recover the shortfall or refund the excess Annual Fixed charge on account of Return on Equity due to change in applicable Minimum Alternate/ Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission.*

*Provided further that Annual Fixed charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective financial year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations".*

15. UPPCL submitted that the petitioner's prayer for grossing up of base rate of return with the applicable tax rates for particular financial year and truing up of ROE every year should not be allowed in view of the specific provisions for truing up at the end of the tariff period as per the 2009 regulations. It is clarified that petitioner's prayer to allow grossing up the base rate of ROE based on the tax rates viz., MAT, surcharge, any other cess, charges, levies etc., as per the relevant Finance Act, shall be settled in accordance with the provisions of Regulation 15 of 2009 regulations.

16. In view of the above, the amount of equity considered for calculation of return of equity is as per details given overleaf:-

(₹ in lakh)

| Return on Equity                               | 2009-10        | 2010-11        | 2011-12        | 2012-13        | 2013-14        |
|--|----------------|----------------|----------------|----------------|----------------|
| <b>Stage-I Combined Assets</b>                 |                |                |                |                |                |
| Opening Equity                                 | 1928.34        | 1928.34        | 1928.34        | 1928.34        | 1928.34        |
| Addition due to additional capital expenditure | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           |
| Closing Equity                                 | 1928.34        | 1928.34        | 1928.34        | 1928.34        | 1928.34        |
| Average Equity                                 | 1928.34        | 1928.34        | 1928.34        | 1928.34        | 1928.34        |
| Return on Equity (Base Rate)                   | 15.50%         | 15.50%         | 15.50%         | 15.50%         | 15.50%         |
| Tax rate for the year 2008-09 (MAT)            | 11.330%        | 11.330%        | 11.330%        | 11.330%        | 11.330%        |
| Rate of Return on Equity (Pre Tax )            | 17.481%        | 17.481%        | 17.481%        | 17.481%        | 17.481%        |
| Return on Equity (Pre Tax)                     | <b>337.09</b>  | <b>337.09</b>  | <b>337.09</b>  | <b>337.09</b>  | <b>337.09</b>  |
| <b>Stage-II Combined Assets</b>                |                |                |                |                |                |
| Return on Equity                               | 2009-10        | 2010-11        | 2011-12        | 2012-13        | 2013-14        |
| Opening Equity                                 | 23375.61       | 23404.57       | 23442.64       | 23442.64       | 23754.28       |
| Addition due to Additional Capitalization      | 28.96          | 38.08          | 0.00           | 311.64         | 133.56         |
| Closing Equity                                 | 23404.57       | 23442.64       | 23442.64       | 23754.28       | 23887.84       |
| Average Equity                                 | 23390.09       | 23423.61       | 23442.64       | 23598.46       | 23821.06       |
| Return on Equity (Base Rate)                   | 15.50%         | 15.50%         | 15.50%         | 15.50%         | 15.50%         |
| Tax rate for the year 2008-09 (MAT)            | 11.330%        | 11.330%        | 11.330%        | 11.330%        | 11.330%        |
| Rate of Return on Equity (Pre Tax )            | 17.481%        | 17.481%        | 17.481%        | 17.481%        | 17.481%        |
| Return on Equity (Pre Tax)                     | <b>4088.82</b> | <b>4094.68</b> | <b>4098.01</b> | <b>4125.25</b> | <b>4164.16</b> |

## **INTEREST ON LOAN**

17. Regulation 16 of the 2009 regulations provides that,

*"16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.*

*(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.*

*(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:*

*(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.*

*(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:*

*Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered: Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.*



*(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*

*(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.*

*(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.*

*(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:*

*Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.”*

18. In these calculations, interest on loan has been worked out as per details given hereunder:-

(a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition;

(b) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period;

(c) Moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed; and

(d) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

19. The methodology followed for the calculation of weighted average rate of interest in case of floating interest loans in Petition No. 132/2010 has been adopted in the instant petition. Accordingly, the interest on loan has been calculated on the basis of rate prevailing as on 1.4.2009/ date of commercial operation. Any change in the rate of interest subsequent to 1.4.2009/ date of commercial operation will be considered at the time of truing up.

20. Detailed calculations of the weighted revised average rate of interest have been given in Annexure to this order.

21. Details of the interest on loan worked on the above basis are given as under:-

(₹ in lakh)

| <b>Stage I Combined Assets</b>                 |               |               |               |               |              |
|--|---------------|---------------|---------------|---------------|--------------|
| Gross Normative Loan                           | 6604.30       | 6604.30       | 6604.30       | 6604.30       | 6604.30      |
| Cumulative Repayment upto Previous Year        | 3416.53       | 3846.93       | 4277.32       | 4707.72       | 5138.11      |
| Net Loan-Opening                               | 3187.77       | 2757.37       | 2326.98       | 1896.58       | 1466.18      |
| Addition due to Additional Capital Expenditure | 0.00          | 0.00          | 0.00          | 0.00          | 0.00         |
| Repayment during the year                      | 430.40        | 430.40        | 430.40        | 430.40        | 430.40       |
| Net Loan-Closing                               | 2757.37       | 2326.98       | 1896.58       | 1466.18       | 1035.79      |
| Average Loan                                   | 2972.57       | 2542.17       | 2111.78       | 1681.38       | 1250.99      |
| Weighted Average Rate of Interest on Loan      | 8.5825%       | 8.4498%       | 8.2424%       | 7.9165%       | 7.5192%      |
| <b>Interest</b>                                | <b>255.12</b> | <b>214.81</b> | <b>174.06</b> | <b>133.11</b> | <b>94.06</b> |

| Stage II Combined Assets                       |                |                |                |                |                |
|--|----------------|----------------|----------------|----------------|----------------|
| Gross Normative Loan                           | 55870.47       | 55938.03       | 56026.88       | 56026.88       | 56754.04       |
| Cumulative Repayment upto Previous Year        | 25739.34       | 29841.06       | 33948.69       | 38059.67       | 42170.64       |
| Net Loan-Opening                               | 30131.13       | 26096.97       | 22078.19       | 17967.21       | 14583.39       |
| Addition due to Additional Capital Expenditure | 67.56          | 88.84          | 0.00           | 727.16         | 311.64         |
| Repayment during the year                      | 4101.73        | 4107.63        | 4110.98        | 4110.98        | 4110.98        |
| Net Loan-Closing                               | 26096.97       | 22078.19       | 17967.21       | 14583.39       | 10784.06       |
| Average Loan                                   | 28114.05       | 24087.58       | 20022.70       | 16275.30       | 12683.73       |
| Weighted Average Rate of Interest on Loan      | 8.6788%        | 8.5872%        | 8.4495%        | 8.2489%        | 8.0103%        |
| <b>Interest</b>                                | <b>2439.97</b> | <b>2068.46</b> | <b>1691.81</b> | <b>1342.54</b> | <b>1016.00</b> |

## DEPRECIATION

22. Regulation 17 (4) of the 2009 regulations provides as under:-

*"Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:*

*Provided that, the remaining depreciable value as on 31th March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the asset".*

23. AVVNL, JVVNL, Jd.VVNL and PSPCL have made a common submission that depreciation should be considered element-wise because of the fact that earlier there was a provision of advance against depreciation which in most cases was allowed. After the loans are repaid, the balance depreciation has to be spread over the balance useful life, and hence the Commission should consider depreciation element-wise. In the instant petition, depreciation has been considered on the capital expenditure. Combined assets of Stage-I and Stage-II in the instant petition were put on commercial operation on 1.10.2003 (notional date of commercial operation) and 1.2.2007 (notional date of commercial operation) respectively and accordingly will complete 12 years beyond 2013-14 and thus depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix- III of 2009 regulations.

24. Details of the depreciation worked out are as given hereunder:-

(₹ in lakh)

| <b>Stage-I Combined Assets</b>                 |                |                |                |                |                |
|--|----------------|----------------|----------------|----------------|----------------|
|  | <b>2009-10</b> | <b>2010-11</b> | <b>2011-12</b> | <b>2012-13</b> | <b>2013-14</b> |
| Opening Gross Block                            | 8532.64        | 8532.64        | 8532.64        | 8532.64        | 8532.64        |
| Addition due to additional capital expenditure | 0.00           | 0.00           | 0.00           | 0.00           | 0.00           |
| Closing Gross Block                            | 8532.64        | 8532.64        | 8532.64        | 8532.64        | 8532.64        |
| Average Gross Block                            | 8532.64        | 8532.64        | 8532.64        | 8532.64        | 8532.64        |
| Rate of Depreciation                           | 5.0441%        | 5.0441%        | 5.0441%        | 5.0441%        | 5.0441%        |
| Depreciable Value                              | 7495.40        | 7495.40        | 7495.40        | 7495.40        | 7495.40        |
| Remaining Depreciable Value                    | 4245.52        | 3815.12        | 3384.73        | 2954.33        | 2523.94        |
| <b>Depreciation</b>                            | <b>430.40</b>  | <b>430.40</b>  | <b>430.40</b>  | <b>430.40</b>  | <b>430.40</b>  |

(₹ in lakh)

| <b>Stage-II Combined Assets</b>                |                |                |                |                |                |
|--|----------------|----------------|----------------|----------------|----------------|
| Opening Gross Block                            | 79246.08       | 79342.60       | 79469.52       | 79469.52       | 80508.32       |
| Addition due to additional capital expenditure | 96.52          | 126.92         | 0.00           | 1038.80        | 445.20         |
| Closing Gross Block                            | 79342.60       | 79469.52       | 79469.52       | 80508.32       | 80953.52       |
| Average Gross Block                            | 79294.34       | 79406.06       | 79469.52       | 79988.92       | 80730.92       |
| Rate of Depreciation                           | 5.1728%        | 5.1729%        | 5.1730%        | 5.1394%        | 5.0922%        |
| Depreciable Value                              | 70118.33       | 70218.88       | 70276.00       | 70276.00       | 70276.00       |
| Remaining Depreciable Value                    | 56217.48       | 52216.30       | 48165.79       | 44054.81       | 39943.84       |
| <b>Depreciation</b>                            | <b>4101.73</b> | <b>4107.63</b> | <b>4110.98</b> | <b>4110.98</b> | <b>4110.98</b> |

### **OPERATION & MAINTENANCE EXPENSES**

25 The Petitioner has submitted that O&M expenditure for 2009-14 tariff block has been arrived on the basis of normalized actual O&M expenses of the petitioner during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking was also considered while calculating the O&M charges for tariff period 2009-14. The petitioner has submitted that it would approach the Commission for suitable revision in the norms for O&M expenditure in case the impact of wage hike w.e.f 1.1.2007 is more than 50%. The petitioner has further submitted that in O & M norms for tariff block 2009-14 the cost associated with license fees had not been captured and the license fee may be allowed to be recovered from the respondents.

26. It is clarified that, if any application for revision in the norms for O&M expenditure is filed in future, it will be dealt with in accordance with law.

### **INTEREST ON WORKING CAPITAL**

27. As per the 2009 regulations the components of the working capital and the interest thereon are discussed are given hereunder:-

**(i) Receivables:** As per Regulation 18(1) (c) (i) of the 2009 regulations the receivables will be equivalent to two months of fixed cost. The petitioner has claimed receivables on the basis of 2 months transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months annual transmission charges.

**(ii) Maintenance spares:** Regulation 18(1) (c) (ii) of the 2009 regulations provides for maintenance spares @ 15% per annum of the O & M expenses from 1.4.2009. The value of maintenance spares has accordingly been worked out.

**(iii) O & M expenses:** Regulation 18(1) (c) (iii) of the 2009 regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O & M expenses for 1 month of respective year as claimed in the petition. This has been considered in the working capital.

(iv) **Rate of interest on working capital:** In the calculations, the SBI PLR as on 1.4.2009 (i.e. 12.25%) is considered as the rate of interest on working capital.

28. Necessary computations in support of interest on working capital are appended hereunder:-

(₹ in lakh)

| <b>Stage-I Combined Assets</b>  |                 |                 |                 |                 |                 |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                 | <b>2009-10</b>  | <b>2010-11</b>  | <b>2011-12</b>  | <b>2012-13</b>  | <b>2013-14</b>  |
| Maintenance Spares              | 85.80           | 90.72           | 95.91           | 101.39          | 107.18          |
| O & M expenses                  | 47.67           | 50.40           | 53.28           | 56.33           | 59.55           |
| Receivables                     | 274.09          | 272.97          | 272.09          | 271.52          | 271.64          |
| <b>Total</b>                    | <b>407.56</b>   | <b>414.08</b>   | <b>421.28</b>   | <b>429.23</b>   | <b>438.37</b>   |
| Interest                        | <b>49.93</b>    | <b>50.72</b>    | <b>51.61</b>    | <b>52.58</b>    | <b>53.70</b>    |
| <b>Stage-II Combined Assets</b> |                 |                 |                 |                 |                 |
|                                 | <b>2009-10</b>  | <b>2010-11</b>  | <b>2011-12</b>  | <b>2012-13</b>  | <b>2013-14</b>  |
| Maintenance Spares              | 116.66          | 123.35          | 130.38          | 137.87          | 145.74          |
| O & M expenses                  | 64.81           | 68.53           | 72.43           | 76.60           | 80.97           |
| Receivables                     | 1944.78         | 1891.38         | 1836.64         | 1790.59         | 1750.83         |
| <b>Total</b>                    | <b>2,126.25</b> | <b>2,083.26</b> | <b>2,039.46</b> | <b>2,005.06</b> | <b>1,977.54</b> |
| Interest                        | <b>260.47</b>   | <b>255.20</b>   | <b>249.83</b>   | <b>245.62</b>   | <b>242.25</b>   |

### **TRANSMISSION CHARGES**

29. The transmission charges being allowed for the transmission lines is as per details given hereunder:-

(₹ in lakh)

| <b>Stage-I Combined Assets</b>  |                 |                 |                 |                 |                 |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                 | <b>2009-10</b>  | <b>2010-11</b>  | <b>2011-12</b>  | <b>2012-13</b>  | <b>2013-14</b>  |
| Depreciation                    | 430.40          | 430.40          | 430.40          | 430.40          | 430.40          |
| Interest on Loan                | 255.12          | 214.81          | 174.06          | 133.11          | 94.06           |
| Return on equity                | 337.09          | 337.09          | 337.09          | 337.09          | 337.09          |
| Interest on Working Capital     | 49.93           | 50.72           | 51.61           | 52.58           | 53.70           |
| O & M Expenses                  | 572.02          | 604.77          | 639.39          | 675.92          | 714.56          |
| <b>Total</b>                    | <b>1644.56</b>  | <b>1637.79</b>  | <b>1632.55</b>  | <b>1629.10</b>  | <b>1629.81</b>  |
| <b>Stage-II Combined Assets</b> |                 |                 |                 |                 |                 |
|                                 | <b>2009-10</b>  | <b>2010-11</b>  | <b>2011-12</b>  | <b>2012-13</b>  | <b>2013-14</b>  |
| Depreciation                    | 4101.73         | 4107.63         | 4110.98         | 4110.98         | 4110.98         |
| Interest on Loan                | 2439.97         | 2068.46         | 1691.81         | 1342.54         | 1016.00         |
| Return on equity                | 4088.82         | 4094.68         | 4098.01         | 4125.25         | 4164.16         |
| Interest on Working Capital     | 260.47          | 255.20          | 249.83          | 245.62          | 242.25          |
| O & M Expenses                  | 777.72          | 822.32          | 869.21          | 919.16          | 971.60          |
| <b>Total</b>                    | <b>11668.70</b> | <b>11348.29</b> | <b>11019.84</b> | <b>10743.54</b> | <b>10504.99</b> |



## **FILING FEE AND THE PUBLICATION EXPENSES**

30. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. In accordance with the Commission's order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee directly from the beneficiaries on *pro-rata* basis. The petitioner shall also be entitled for reimbursement of the publication expenses in connection with the present petition directly from the beneficiary on *pro-rata* basis.

## **LICENCE FEE**

31. The petitioner has submitted that they be allowed to bill and recover the licence fee separately from the Respondent.

32. The respondent, UPPCL has submitted that the petitioner's request for reimbursement for licence fee should be rejected as the payment of license fee is the onus of the petitioner. Under the CERC (Payment of Fees) Regulations, 2008, the deemed licensee is required to pay the licence fee. Moreover, there is no specific provision in the 2009 regulations for recovery of licence fee, from the beneficiaries. It is clarified that the same shall be dealt with in accordance with our order dated 25.10.2011 in Petition No. 21/2011 and 22/2011.

## **SERVICE TAX**

33. The petitioner has made a prayer to permit it to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. The respondent, UPPCL objects to levying of service tax on the beneficiaries as the issue of service tax is pending before Hon'ble

Supreme Court. The respondent has submitted that it is premature for the petitioner to move any such claim. We consider the prayer of the petitioner premature and accordingly this prayer is rejected.

### **SHARING OF TRANSMISSION CHARGES**

34. The transmission charges for the Assets shall be borne by the beneficiaries in accordance with Regulation 33 of the 2009 regulations upto 30.6.2011. With effect from 1.7.2011, the billing, collection and disbursement of the transmission charges shall be governed by the provisions of the CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010.

35. This order disposes of Petition No.79/2011.

Sd/-

**(M.Deena Dayalan)**  
**Member**

Sd/-

**(V.S. Verma)**  
**Member**

Sd/-

**(S. Jayaraman)**  
**Member**

Sd/-

**(Dr. Pramod Deo)**  
**Chairperson**



| CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN |  |  |         |         |         |         |
|--|--|--|---------|---------|---------|---------|
| STAGE-I COMBINED ASSETS                                  |  |  |         |         |         |         |
| (₹ in lakh)  |  |  |         |         |         |         |
|  | Details of Loan                              | 2009-10  | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| <b>1</b>   | <b>Bond- VIII</b>                            |  |         |         |         |         |
|  | Gross loan opening                           | 50.00  | 50.00   | 50.00   | 50.00   | 50.00   |
|  | Cumulative Repayment upto DOCO/previous year | 20.00  | 25.00   | 30.00   | 35.00   | 40.00   |
|  | Net Loan-Opening                             | 30.00  | 25.00   | 20.00   | 15.00   | 10.00   |
|  | Additions during the year                    | 0.00   | 0.00    | 0.00    | 0.00    | 0.00    |
|  | Repayment during the year                    | 5.00   | 5.00    | 5.00    | 5.00    | 5.00    |
|  | Net Loan-Closing                             | 25.00  | 20.00   | 15.00   | 10.00   | 5.00    |
|  | Average Loan                                 | 27.50  | 22.50   | 17.50   | 12.50   | 7.50    |
|  | Rate of Interest                             | 10.35%   | 10.35%  | 10.35%  | 10.35%  | 10.35%  |
|  | Interest                                     | 2.85   | 2.33    | 1.81    | 1.29    | 0.78    |
|  | Rep Schedule                                 | 10 annual instalments from 27-04-2005          |         |         |         |         |
| <b>2</b>   | <b>PFC</b>                                   |  |         |         |         |         |
|  | Gross loan opening                           | 1298.00  | 1298.00 | 1298.00 | 1298.00 | 1298.00 |
|  | Cumulative Repayment upto DOCO/previous year | 843.70   | 973.50  | 1103.30 | 1233.10 | 1298.00 |
|  | Net Loan-Opening                             | 454.30   | 324.50  | 194.70  | 64.90   | 0.00    |
|  | Additions during the year                    | 0.00   | 0.00    | 0.00    | 0.00    | 0.00    |
|  | Repayment during the year                    | 129.80   | 129.80  | 129.80  | 64.90   | 0.00    |
|  | Net Loan-Closing                             | 324.50   | 194.70  | 64.90   | 0.00    | 0.00    |
|  | Average Loan                                 | 389.40   | 259.60  | 129.80  | 32.45   | 0.00    |
|  | Rate of Interest                             | 9.25%  | 9.25%   | 9.25%   | 9.25%   | 9.25%   |
|  | Interest                                     | 36.02  | 24.01   | 12.01   | 3.00    | 0.00    |
|  | Rep Schedule                                 | 40 Equal Quarterly Instalments from 15.10.2002 |         |         |         |         |
| <b>3</b>   | <b>Bond- VI</b>                              |  |         |         |         |         |
|  | Gross loan opening                           | 59.00  | 59.00   | 59.00   | 59.00   | 59.00   |
|  | Cumulative Repayment upto DOCO/previous year | 41.30  | 47.20   | 53.10   | 59.00   | 59.00   |
|  | Net Loan-Opening                             | 17.70  | 11.80   | 5.90    | 0.00    | 0.00    |
|  | Additions during the year                    | 0.00   | 0.00    | 0.00    | 0.00    | 0.00    |
|  | Repayment during the year                    | 5.90   | 5.90    | 5.90    | 0.00    | 0.00    |
|  | Net Loan-Closing                             | 11.80  | 5.90    | 0.00    | 0.00    | 0.00    |
|  | Average Loan                                 | 14.75  | 8.85    | 2.95    | 0.00    | 0.00    |
|  | Rate of Interest                             | 13.13%   | 13.13%  | 13.13%  | 13.13%  | 13.13%  |
|  | Interest                                     | 1.94   | 1.16    | 0.39    | 0.00    | 0.00    |
|  | Rep Schedule                                 | 10 Annual Instalments from 06.12.2002          |         |         |         |         |
| <b>4</b>   | <b>Bond XIII (Option II)</b>                 |  |         |         |         |         |
|  | Gross loan opening                           | 217.00   | 217.00  | 217.00  | 217.00  | 217.00  |



|          |  |                                       |         |         |         |         |
|----------|--|---------------------------------------|---------|---------|---------|---------|
|          | Cumulative Repayment upto DOCO/previous year | 217.00                                | 217.00  | 217.00  | 217.00  | 217.00  |
|          | Net Loan-Opening                             | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Additions during the year                    | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Repayment during the year                    | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Net Loan-Closing                             | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Average Loan                                 | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Rate of Interest                             | 7.85%                                 | 7.85%   | 7.85%   | 7.85%   | 7.85%   |
|          | Interest                                     | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Rep Schedule                                 | 6 Annual instalments from 31.07.2003  |         |         |         |         |
|          |  |                                       |         |         |         |         |
| <b>5</b> | <b>Bond XI (Option II)</b>                   |                                       |         |         |         |         |
|          | Gross loan opening                           | 90.00                                 | 90.00   | 90.00   | 90.00   | 90.00   |
|          | Cumulative Repayment upto DOCO/previous year | 90.00                                 | 90.00   | 90.00   | 90.00   | 90.00   |
|          | Net Loan-Opening                             | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Additions during the year                    | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Repayment during the year                    | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Net Loan-Closing                             | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Average Loan                                 | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Rate of Interest                             | 9.20%                                 | 9.20%   | 9.20%   | 9.20%   | 9.20%   |
|          | Interest                                     | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Rep Schedule                                 | 6 Annual instalments from 07.12.2003  |         |         |         |         |
|          |  |                                       |         |         |         |         |
| <b>6</b> | <b>Bond XI (Option I)</b>                    |                                       |         |         |         |         |
|          | Gross loan opening                           | 1565.00                               | 1565.00 | 1565.00 | 1565.00 | 1565.00 |
|          | Cumulative Repayment upto DOCO/previous year | 521.67                                | 652.08  | 782.50  | 912.92  | 1043.33 |
|          | Net Loan-Opening                             | 1043.33                               | 912.92  | 782.50  | 652.08  | 521.67  |
|          | Additions during the year                    | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Repayment during the year                    | 130.42                                | 130.42  | 130.42  | 130.42  | 130.42  |
|          | Net Loan-Closing                             | 912.92                                | 782.50  | 652.08  | 521.67  | 391.25  |
|          | Average Loan                                 | 978.13                                | 847.71  | 717.29  | 586.88  | 456.46  |
|          | Rate of Interest                             | 9.80%                                 | 9.80%   | 9.80%   | 9.80%   | 9.80%   |
|          | Interest                                     | 95.86                                 | 83.08   | 70.29   | 57.51   | 44.73   |
|          | Rep Schedule                                 | 12 Annual instalments from 07.12.2005 |         |         |         |         |
|          |  |                                       |         |         |         |         |
| <b>7</b> | <b>ICICI</b>                                 |                                       |         |         |         |         |
|          | Gross loan opening                           | 607.00                                | 607.00  | 607.00  | 607.00  | 607.00  |
|          | Cumulative Repayment upto DOCO/previous year | 364.20                                | 424.90  | 485.60  | 546.30  | 607.00  |
|          | Net Loan-Opening                             | 242.80                                | 182.10  | 121.40  | 60.70   | 0.00    |
|          | Additions during the year                    | 0.00                                  | 0.00    | 0.00    | 0.00    | 0.00    |
|          | Repayment during the year                    | 60.70                                 | 60.70   | 60.70   | 60.70   | 0.00    |
|          | Net Loan-Closing                             | 182.10                                | 121.40  | 60.70   | 0.00    | 0.00    |
|          | Average Loan                                 | 212.45                                | 151.75  | 91.05   | 30.35   | 0.00    |
|          | Rate of Interest                             | 7.32%                                 | 7.32%   | 7.32%   | 7.32%   | 7.32%   |
|          | Interest                                     | 15.55                                 | 11.11   | 6.66    | 2.22    | 0.00    |
|          | Rep Schedule                                 | 10 Annual instalments from 29.06.2003 |         |         |         |         |
|          |  |                                       |         |         |         |         |



|           |  |  |               |               |               |               |
|-----------|--|--|---------------|---------------|---------------|---------------|
| <b>8</b>  | <b>Corp Bank</b>                             |  |               |               |               |               |
|           | Gross loan opening                           | <b>139.00</b>                              | <b>139.00</b> | <b>139.00</b> | <b>139.00</b> | <b>139.00</b> |
|           | Cumulative Repayment upto DOCO/previous year | <b>76.45</b>                               | <b>90.35</b>  | <b>104.25</b> | <b>118.15</b> | <b>132.05</b> |
|           | Net Loan-Opening                             | 62.55                                      | 48.65         | 34.75         | 20.85         | 6.95          |
|           | Additions during the year                    | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Repayment during the year                    | 13.90                                      | 13.90         | 13.90         | 13.90         | 6.95          |
|           | Net Loan-Closing                             | 48.65                                      | 34.75         | 20.85         | 6.95          | 0.00          |
|           | Average Loan                                 | 55.60                                      | 41.70         | 27.80         | 13.90         | 3.48          |
|           | Rate of Interest                             | 11.40%                                     | 11.40%        | 11.40%        | 11.40%        | 11.40%        |
|           | Interest                                     | 6.34                                       | 4.75          | 3.17          | 1.58          | 0.40          |
|           | Rep Schedule                                 | 20 half yearly instalments from 10.03.2004 |               |               |               |               |
| <b>9</b>  | <b>PNB-I</b>                                 |  |               |               |               |               |
|           | Gross loan opening                           | <b>277.00</b>                              | <b>277.00</b> | <b>277.00</b> | <b>277.00</b> | <b>277.00</b> |
|           | Cumulative Repayment upto DOCO/previous year | <b>166.20</b>                              | <b>193.90</b> | <b>221.60</b> | <b>249.30</b> | <b>277.00</b> |
|           | Net Loan-Opening                             | 110.80                                     | 83.10         | 55.40         | 27.70         | 0.00          |
|           | Additions during the year                    | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Repayment during the year                    | 27.70                                      | 27.70         | 27.70         | 27.70         | 0.00          |
|           | Net Loan-Closing                             | 83.10                                      | 55.40         | 27.70         | 0.00          | 0.00          |
|           | Average Loan                                 | 96.95                                      | 69.25         | 41.55         | 13.85         | 0.00          |
|           | Rate of Interest                             | 9.41%                                      | 9.41%         | 9.41%         | 9.41%         | 9.41%         |
|           | Interest                                     | 9.12                                       | 6.52          | 3.91          | 1.30          | 0.00          |
|           | Rep Schedule                                 | 10 Annual instalments from 30.03.2004      |               |               |               |               |
| <b>10</b> | <b>PNB-II</b>                                |  |               |               |               |               |
|           | Gross loan opening                           | <b>271.00</b>                              | <b>271.00</b> | <b>271.00</b> | <b>271.00</b> | <b>271.00</b> |
|           | Cumulative Repayment upto DOCO/previous year | <b>112.92</b>                              | <b>135.50</b> | <b>158.08</b> | <b>180.67</b> | <b>203.25</b> |
|           | Net Loan-Opening                             | 158.08                                     | 135.50        | 112.92        | 90.33         | 67.75         |
|           | Additions during the year                    | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Repayment during the year                    | 22.58                                      | 22.58         | 22.58         | 22.58         | 22.58         |
|           | Net Loan-Closing                             | 135.50                                     | 112.92        | 90.33         | 67.75         | 45.17         |
|           | Average Loan                                 | 146.79                                     | 124.21        | 101.63        | 79.04         | 56.46         |
|           | Rate of Interest                             | 9.35%                                      | 9.35%         | 9.35%         | 9.35%         | 9.35%         |
|           | Interest                                     | 13.73                                      | 11.61         | 9.50          | 7.39          | 5.28          |
|           | Rep Schedule                                 | 12 Annual instalments from 08.03.2005      |               |               |               |               |
| <b>11</b> | <b>OBC</b>                                   |  |               |               |               |               |
|           | Gross loan opening                           | <b>199.00</b>                              | <b>199.00</b> | <b>199.00</b> | <b>199.00</b> | <b>199.00</b> |
|           | Cumulative Repayment upto DOCO/previous year | <b>82.92</b>                               | <b>99.50</b>  | <b>116.08</b> | <b>132.67</b> | <b>149.25</b> |
|           | Net Loan-Opening                             | 116.08                                     | 99.50         | 82.92         | 66.33         | 49.75         |
|           | Additions during the year                    | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Repayment during the year                    | 16.58                                      | 16.58         | 16.58         | 16.58         | 16.58         |
|           | Net Loan-Closing                             | 99.50                                      | 82.92         | 66.33         | 49.75         | 33.17         |
|           | Average Loan                                 | 107.79                                     | 91.21         | 74.63         | 58.04         | 41.46         |
|           | Rate of Interest                             | 9.60%                                      | 9.60%         | 9.60%         | 9.60%         | 9.60%         |
|           | Interest                                     | 10.35                                      | 8.76          | 7.16          | 5.57          | 3.98          |
|           | Rep Schedule                                 | 12 Annual instalments from 22.03.2005      |               |               |               |               |
| <b>12</b> | <b>Bond-X</b>                                |  |               |               |               |               |
|           | Gross loan opening                           | <b>388.00</b>                              | <b>388.00</b> | <b>388.00</b> | <b>388.00</b> | <b>388.00</b> |
|           | Cumulative Repayment upto DOCO/previous year | <b>161.67</b>                              | <b>194.00</b> | <b>226.33</b> | <b>258.67</b> | <b>291.00</b> |



|           |  |  |               |               |               |               |
|-----------|--|--|---------------|---------------|---------------|---------------|
|           | Net Loan-Opening                             | 226.33                                     | 194.00        | 161.67        | 129.33        | 97.00         |
|           | Additions during the year                    | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Repayment during the year                    | 32.33                                      | 32.33         | 32.33         | 32.33         | 32.33         |
|           | Net Loan-Closing                             | 194.00                                     | 161.67        | 129.33        | 97.00         | 64.67         |
|           | Average Loan                                 | 210.17                                     | 177.83        | 145.50        | 113.17        | 80.83         |
|           | Rate of Interest                             | 10.90%                                     | 10.90%        | 10.90%        | 10.90%        | 10.90%        |
|           | Interest                                     | 22.91                                      | 19.38         | 15.86         | 12.34         | 8.81          |
|           | Rep Schedule                                 | 12 Annual instalments from 21.06.2004      |               |               |               |               |
|           |  |  |               |               |               |               |
| <b>13</b> | <b>Bond- VII</b>                             |  |               |               |               |               |
|           | Gross loan opening                           | <b>277.00</b>                              | <b>277.00</b> | <b>277.00</b> | <b>277.00</b> | <b>277.00</b> |
|           | Cumulative Repayment upto DOCO/previous year | <b>277.00</b>                              | <b>277.00</b> | <b>277.00</b> | <b>277.00</b> | <b>277.00</b> |
|           | Net Loan-Opening                             | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Additions during the year                    | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Repayment during the year                    | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Net Loan-Closing                             | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Average Loan                                 | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Rate of Interest                             | 13.64%                                     | 13.64%        | 13.64%        | 13.64%        | 13.64%        |
|           | Interest                                     | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Rep Schedule                                 | 5 Annual instalments from 04.08.2003       |               |               |               |               |
|           |  |  |               |               |               |               |
| <b>14</b> | <b>BOI (Foreign) @ 44.31</b>                 |  |               |               |               |               |
|           | Gross loan opening                           | <b>741.31</b>                              | <b>741.31</b> | <b>741.31</b> | <b>741.31</b> | <b>741.31</b> |
|           | Cumulative Repayment upto DOCO/previous year | <b>195.08</b>                              | <b>234.10</b> | <b>273.11</b> | <b>312.13</b> | <b>351.15</b> |
|           | Net Loan-Opening                             | 546.23                                     | 507.21        | 468.19        | 429.18        | 390.16        |
|           | Additions during the year                    | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Repayment during the year                    | 39.02                                      | 39.02         | 39.02         | 39.02         | 39.02         |
|           | Net Loan-Closing                             | 507.21                                     | 468.19        | 429.18        | 390.16        | 351.15        |
|           | Average Loan                                 | 526.72                                     | 487.70        | 448.69        | 409.67        | 370.65        |
|           | Rate of Interest                             | 3.3163%                                    | 3.32%         | 3.32%         | 3.32%         | 3.32%         |
|           | Interest                                     | 17.47                                      | 16.17         | 14.88         | 13.59         | 12.29         |
|           | Rep Schedule                                 | 38 half yearly instalments from 10.06.2004 |               |               |               |               |
|           |  |  |               |               |               |               |
| <b>15</b> | <b>Bond- IX</b>                              |  |               |               |               |               |
|           | Gross loan opening                           | <b>396.00</b>                              | <b>396.00</b> | <b>396.00</b> | <b>396.00</b> | <b>396.00</b> |
|           | Cumulative Repayment upto DOCO/previous year | <b>237.60</b>                              | <b>277.20</b> | <b>316.80</b> | <b>356.40</b> | <b>396.00</b> |
|           | Net Loan-Opening                             | 158.40                                     | 118.80        | 79.20         | 39.60         | 0.00          |
|           | Additions during the year                    | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Repayment during the year                    | 39.60                                      | 39.60         | 39.60         | 39.60         | 0.00          |
|           | Net Loan-Closing                             | 118.80                                     | 79.20         | 39.60         | 0.00          | 0.00          |
|           | Average Loan                                 | 138.60                                     | 99.00         | 59.40         | 19.80         | 0.00          |
|           | Rate of Interest                             | 12.25%                                     | 12.25%        | 12.25%        | 12.25%        | 12.25%        |
|           | Interest                                     | 16.98                                      | 12.13         | 7.28          | 2.43          | 0.00          |
|           | Rep Schedule                                 | 10 Annual instalments from 22.08.2003      |               |               |               |               |
|           |  |  |               |               |               |               |
| <b>16</b> | <b>Bond-XII</b>                              |  |               |               |               |               |
|           | Gross loan opening                           | <b>30.00</b>                               | <b>30.00</b>  | <b>30.00</b>  | <b>30.00</b>  | <b>30.00</b>  |
|           | Cumulative Repayment upto DOCO/previous year | <b>10.00</b>                               | <b>12.50</b>  | <b>15.00</b>  | <b>17.50</b>  | <b>20.00</b>  |
|           | Net Loan-Opening                             | 20.00                                      | 17.50         | 15.00         | 12.50         | 10.00         |
|           | Additions during the year                    | 0.00                                       | 0.00          | 0.00          | 0.00          | 0.00          |
|           | Repayment during the year                    | 2.50                                       | 2.50          | 2.50          | 2.50          | 2.50          |



|   |                                       |                |                |                |                |
|---|---------------------------------------|----------------|----------------|----------------|----------------|
| Net Loan-Closing                                | 17.50                                 | 15.00          | 12.50          | 10.00          | 7.50           |
| Average Loan                                    | 18.75                                 | 16.25          | 13.75          | 11.25          | 8.75           |
| Rate of Interest                                | 9.70%                                 | 9.70%          | 9.70%          | 9.70%          | 9.70%          |
| Interest  | 1.82                                  | 1.58           | 1.33           | 1.09           | 0.85           |
| Rep Schedule                                    | 12 Annual instalments from 28.03.2006 |                |                |                |                |
| <b>Total Loan</b>                               |                                       |                |                |                |                |
| Gross loan opening                              | 6604.31                               | 6604.31        | 6604.31        | 6604.31        | 6604.31        |
| Cumulative Repayment upto<br>DOCO/previous year | 3417.70                               | 3943.73        | 4469.76        | 4995.80        | 5451.03        |
| Net Loan-Opening                                | 3186.61                               | 2660.58        | 2134.54        | 1608.51        | 1153.28        |
| Additions during the year                       | 0.00                                  | 0.00           | 0.00           | 0.00           | 0.00           |
| Repayment during the year                       | 526.03                                | 526.03         | 526.03         | 455.23         | 255.38         |
| Net Loan-Closing                                | 2660.58                               | 2134.54        | 1608.51        | 1153.28        | 897.90         |
| Average Loan                                    | 2923.59                               | 2397.56        | 1871.53        | 1380.89        | 1025.59        |
| <b>Weighted Average Rate of Interest</b>        | <b>8.5825%</b>                        | <b>8.4498%</b> | <b>8.2424%</b> | <b>7.9165%</b> | <b>7.5192%</b> |
| <b>Interest</b>                                 | 250.92                                | 202.59         | 154.26         | 109.32         | 77.12          |

