

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 19/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 : 19.11.2012

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 determination of transmission tariff of Combined Elements from DOCO to 31.3.2014 for Northern Region System Strengthening Scheme-XII (NRSS-XII) for tariff block 2009-14 period in Northern Region.

And In the matter of:

Power Grid Corporation of India Ltd., Gurgaon

.....**Petitioner**

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited
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:

Shri S.S. Raju, PGCIL

ORDER

This petition has been filed by Power Grid Corporation Limited (PGCIL) for determination of transmission tariff of Combined Elements from date of commercial operation to 31.3.2014 for Northern Region System Strengthening Scheme-XII (NRSS-XII) (hereinafter referred to as "transmission assets") for tariff block 2009-14 period in Northern Region under Regulation 86 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 (hereinafter referred to as "2009 Tariff Regulations").

2. The administrative approval to the NRSS Scheme-XII was accorded by the Board of Directors of the petitioner vide letter dated 26.2.2008 for `26155 lakh including an IDC of `1775 lakh based on 3rd Quarter, 2007 price level. The scope of the transmission project includes the following assets:-

- Asset I : 2 nos. bays at Nalagarh Extension
- Asset II : 2 nos. bays at Kota Extension
- Asset III : 400 kV D/C Bahadurgarh Sonapat Line
- Asset IV : 315 MVA ICT II at Sonapat
- Asset V : 315 MVA ICT I at Sonapat
- Asset VI : 2 nos. bays at Bhiwadi Extension
- Asset VII : 125 MVAR 400 kV Bus Reactor at Sonapat

3. The transmission tariff for Assets I, II, III, IV and V was allowed by the Commission vide Order dated 3.10.2012 in Petition No.342/2010. The instant petition has been filed for determination of transmission tariff for Combined Asset 'A'



and 'B' involving the following assets:-

(A) **Combined Assets A :-**

Asset II: 2 nos. bays at Kota Extension

Asset VI: 2 nos. bays at Bhiwadi Extension

(B) **Combined Assets :-**

Assets III: 400kV D/C Bahadurgarh Sonapat Line

Assets VII: 125 MVAR 400kV Bus Reactor at Sonapat

As the Asset-II and Asset-III are combined in both Petition No. 342/2010 and in the present petition the transmission tariff allowed in the instant petition shall supersede the tariff allowed for Asset II and Asset III in order dated 3.10.2012 in Petition No.342/2010.

4. The details of the assets covered in the instant petition are as follows:-

| Combined Asset-A | | | |
|-------------------------|--|-------------------------------------|--|
| Sr. No. | Name of the Asset | Date of commercial operation | Notional date of commercial operation |
| | Kota Sub-Station: (Asset-II) | | |
| 1 | 220 kV Bhiwadi bay | 1.10.2010 | 1.2.2011 |
| 2 | 220 kV Dooni bay | 1.10.2010 | 1.2.2011 |
| | Bhiwadi Sub-Station: (Asset-VI) | | |
| 1 | 220 kV Neemrana-I, bay | 1.2.2011 | 1.2.2011 |
| 2 | 220 kV Neemrana-II, bay | 1.2.2011 | 1.2.2011 |

| Combined Asset-B | | | |
|-------------------------|---|-------------------------------------|----------|
| Sr. No. | Name of the Asset | Date of commercial operation | |
| | Transmission Line: (Asset-III) | | |
| 1 | 400 kV D/C Triple Conductor, Bahadurgarh- Sonapat T/L | 1.10.2010 | 1.6.2011 |
| | Sonapat Sub-Station: (Asset-VII) | | |
| 1 | 400 kV 125 MVAR Bus Reactor Bay | 1.6.2011 | 1.6.2011 |
| 2 | 400 kV Bahadurgarh-I, bay | 1.10.2010 | 1.6.2011 |
| 3 | 400 kV Bahadurgarh-II bay | 1.10.2010 | 1.6.2011 |
| | Bahadurgarh Sub-Station: | | |

| | | | |
|---|------------------------|-----------|----------|
| 1 | 400 kV Sonepat-I, bay | 1.10.2010 | 1.6.2011 |
| 2 | 400 kV Sonepat-II, bay | 1.10.2010 | 1.6.2011 |

5. The instant petition covers determination of tariff based on actual expenditure incurred up to date of commercial operation and estimated additional capital expenditure projected to be incurred from date of commercial operation till 31.3.2014. The petitioner, vide affidavit dated 18.4.2011 has submitted that the actual date of commercial operation of Asset-VI is 1.2.2011. The petitioner, vide affidavit dated 12.8.2011 has further submitted that the actual date of commercial operation of Asset-VII is 1.6.2011.

6. The details of apportioned approved cost as on the date of commercial operation and estimated additional capital expenditure projected to be incurred towards the assets covered in the instant petition, claimed by the petitioner, are summarized hereunder:-

(₹ in lakh)

| Name of the asset and date of commercial operation | Apportioned FR Cost | Actual cost incurred as on date of commercial operation | Projected additional capital expenditure | | | Total estimated completion cost |
|--|---------------------|---|--|-----------------------------------|---------------|---------------------------------|
| | | | From date of commercial operation to 31.3.2011 | 2011-12 | 2012-13 | |
| Asset II 1.10.2010 | 524.61 | 394.25* | 120.79 | 0.00 | 0.00 | 515.04 |
| Asset III 1.10.2010 | 13579.08 | 8097.64* | 648.80 | 600.00 | 20.00 | 9366.44 |
| Asset VI 1.2.2011 | 498.17 | 344.25@ | 0.00 | 31.54 | 126.21 | 502.00 |
| Asset VII 1.6.2011 | 2273.07 | 945.32@ | NA | 175.57 (1.6.2011 to 31.3.2011) | 15.00 | 1135.89 |
| TOTAL | 16874.93 | 9605.94 | 769.59 | 807.11 | 161.21 | 11343.85 |



* As per the Management certificate dated 26.11.2011, @ as per the Management certificate dated 14.3.2012

7. The transmission tariff allowed in the instant petition for the Combined Asset A and Combined Asset B is applicable from the notional date of commercial operation i.e. from 1.2.2011 and 1.6.2011 respectively.

8. Details of the transmission charges claimed by the petitioner are given as hereunder:-

(' in lakh)

| Combined Asset-A | | | | |
|-----------------------------|-------------------------------|----------------|----------------|----------------|
| Particulars | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 8.03 | 54.12 | 54.12 | 54.12 |
| Interest on Loan | 9.20 | 59.47 | 54.63 | 49.78 |
| Return on equity | 7.90 | 53.34 | 53.34 | 53.34 |
| Interest on Working Capital | 1.74 | 11.20 | 11.55 | 11.93 |
| O & M Expenses | 25.85 | 164.00 | 173.36 | 183.38 |
| Total | 52.72 | 342.13 | 347.00 | 352.45 |
| Combined Asset-B | | | | |
| Particulars | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 40.04 | 518.43 | 538.35 | 539.21 |
| Interest on loan | 46.92 | 584.05 | 561.04 | 513.89 |
| Return on equity | 40.67 | 526.67 | 547.07 | 547.99 |
| Interest on Working Capital | 3.80 | 48.37 | 49.63 | 49.68 |
| O & M Expenses | 26.03 | 330.28 | 349.17 | 369.11 |
| Total | 157.46 | 2007.80 | 2045.26 | 2019.88 |

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

(` in lakh)

| Combined Asset-A | | | | |
|-------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Maintenance Spares | 23.26 | 24.60 | 26.00 | 27.49 |
| O & M expenses | 12.93 | 13.67 | 14.45 | 15.27 |
| Receivables | 52.72 | 57.02 | 57.83 | 58.74 |
| Total | 88.92 | 95.29 | 98.28 | 101.50 |
| Interest | 1.74 | 11.20 | 11.55 | 11.93 |
| Rate of Interest | 11.75% | 11.75% | 11.75% | 11.75% |

(` in lakh)

| Combined Asset-B | | | | |
|-------------------------|----------------|----------------|----------------|----------------|
| Particulars | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Maintenance Spares | 46.85 | 49.54 | 52.38 | 55.37 |
| O & M expenses | 26.03 | 27.52 | 29.10 | 30.76 |
| Receivables | 314.92 | 334.63 | 340.88 | 336.65 |
| Total | 387.80 | 411.69 | 422.36 | 422.78 |
| Interest | 3.80 | 48.37 | 49.63 | 49.68 |
| Rate of Interest | 11.75% | 11.75% | 11.75% | 11.75% |

10. 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. The Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No.9, in its reply dated 9.11.2011 has raised the issue of floating rate of interest, service tax, grossing up of base rate of return on equity with applicable MAT rates, filing fee and licence fee. The objections raised by UPPCL have been dealt with in relevant paragraphs of this order.

11. Having heard the representatives of the parties and perused the material on records, we proceed to dispose of the petition.



Capital Cost

12. As regards capital cost, Regulation 7(1) (a) of the 2009 Tariff Regulations provides that:-

“The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.”

Time Over Run

13. As per the investment approval dated 26.2.2008, the transmission assets are to be commissioned within 33 months from the date of investment approval i.e. by 1.12.2010. All assets were commissioned within the scheduled DOCO except Asset VI and VII which were commissioned on 1.2.2011 and 1.6.2011 respectively, resulting in delay of 2 months and 6 months respectively. The petitioner, vide affidavit dated 21.6.2011 has prayed for condonation of the marginal delay of 2 months in commissioning of Asset VI. As regards the delay in commissioning of Asset VII, the petitioner has submitted that the Reactor was to be originally supplied by M/s Areva. The package came into contractual dispute involving arbitration/court case and the arbitration award was received in November, 2009. M/s Areva informed that they were not in a position to deliver the Reactors as per the LOA schedule. Finally, the contract for supply of Reactor at Sonapat sub-station was awarded to M/s BHEL. In view of the dispute involving arbitration / court case, the petitioner has requested to condone the delay of six months. We have considered the submission of the petitioner. It is observed that the petitioner has not furnished any reason for

delay of two months in commissioning Asset VI. Hence, the delay of two months is not condoned. The delay of six months in the case of Asset VII seems to be due to court case / arbitration, which is a bilateral matter between the petitioner and supplier and hence the petitioner should claim Liquidation Damages from the supplier. The delay of six months is also not condoned. Accordingly, IDC and IEDC for the delayed period of two months and six months in commissioning Asset VI and VII respectively are not allowed.

14. The details of the IDC and IEDC disallowed for Asset VI and VII are given as follows:-

(` in lakh)

| Asset-VI | | |
|---|--------------|--------------|
| Detail of IDC and IEDC as per Management Certificate dated 14.3.2012 | | |
| | IDC | IEDC |
| From Date of Investment Approval to 31.1.2011 | 43.10 | 12.50 |
| Total IDC and IEDC Claimed | 43.10 | 12.50 |
| Detail of IDC Disallowed for 2 months | | |
| From December 2010 to January 2011 (for 2 months) | 2.46 | 0.71 |
| Total Disallowed IDC & IEDC (for 2 months) | 2.46 | 0.71 |

(` in lakh)

| Asset-VII | | |
|---|--------------|--------------|
| Detail of IDC and IEDC as per Management Certificate dated 14.3.2012 | | |
| | IDC | IEDC |
| From Date of Investment Approval to 31.5.2011 | 70.68 | 34.50 |
| Total IDC and IEDC Claimed | 70.68 | 34.50 |
| Detail of IDC Disallowed for 6 months | | |
| From December 2010 to May 2011 (for 6 months) | 10.87 | 5.31 |
| Total Disallowed IDC & IEDC (for 6 months) | 10.87 | 5.31 |



15. The disallowed IDC and IEDC of `2.46 lakh and `0.71 lakh respectively for Asset-VI have been proportionally deducted from the elements (excluding land) of the asset. Detail of the same is given as under:-

(` in lakh)

| Asset-VI | | | |
|------------------------------|---|--|--|
| Particulars | Capital cost as on date of commercial operation as per Management Certificate vide affidavit dated 14.3.2012 | Apportioned Disallowed IDC and IEDC | Capital Cost as on date of commercial operation after deducting disallowed IDC & IEDC |
| | (a) | (b) | (c)= (a)-(b) |
| Freehold Land | 0.00 | 0.00 | 0.00 |
| Leasehold Land | 0.00 | 0.00 | 0.00 |
| Building & Other Civil Works | 0.00 | 0.00 | 0.00 |
| Transmission Line | 0.00 | 0.00 | 0.00 |
| Sub-Station | 328.17 | 3.03 | 325.14 |
| PLCC | 16.08 | 0.15 | 15.93 |
| Total | 344.25 | 3.18 | 341.07 |

16. Disallowed IDC and IEDC of `10.87 lakh and `5.31 lakh respectively for Asset-VII have been proportionally deducted from the elements (excluding land) of the asset. Detail of the same is given below:-

(` in lakh)

| Asset-VII | | | |
|------------------------------|---|--|--|
| Particulars | Capital cost as on date of commercial Operation as per Management Certificate vide affidavit dated 14.3.2012 | Apportioned Disallowed IDC and IEDC | Capital cost as on date of commercial operation after deducting disallowed IDC & IEDC |
| | (a) | (b) | (c)= (a)-(b) |
| Freehold Land | 58.78 | 0.00 | 58.78 |
| Leasehold Land | 0.00 | 0.00 | 0.00 |
| Building & Other Civil Works | 41.12 | 0.75 | 40.37 |
| Transmission Line | 0.00 | 0.00 | 0.00 |
| Sub-Station | 843.69 | 15.40 | 828.29 |
| PLCC | 1.73 | 0.03 | 1.70 |
| Total | 945.32 | 16.18 | 929.14 |

Treatment of Initial Spares

17. The details of the initial spares claimed by the petitioner and the initial spares allowed as per the ceiling limits specified in Regulation (8) of 2009 Tariff Regulations are given hereunder:-

(` in lakh)

| Asset-VI | | | | | | |
|----------------------|-------------------------|------------------------|---|--|---------------------------|-------------------------------|
| | Cost as on cut-off date | Initial spares claimed | Proportionate initial spares claimed by Petitioner after restricting IDC & IEDC | Ceiling limits as per Regulation 8 of 2009 tariff Regulation | Initial spares worked out | Excess initial spares claimed |
| (Sub-station & PLCC) | 502.00 | 33.28 | 33.07 | 2.50% | 12.02 | 21.05 |

18. Initial spares claimed by the petitioner and proportionate initial spares, deemed to be claimed by petitioner after adjusting IDC & IEDC is `33.07 lakh for sub-station inclusive of PLCC. However, the spares work out to `12.02 lakh as per Regulation 8 of 2009 tariff regulations which exceeds the limit by `21.05 lakh.

19. In order dated 3.10.2012 in Petition No. 342/2010 it was observed that:-

"As the all the elements in the Project Scope are not complete and other assets are yet to be commissioned in the system hence initial spares will be reviewed at the time of completion of entire Project and filing of the tariff petition for the last element or at the time of truing up whichever is earlier".

20. As all the elements of the transmission project are completed, the initial spares are required to be worked out with reference to the complete project. The initial spares worked out for the entire transmission project is given overleaf:-

| ASSET | Petition No. | Particulars | Cost as on cut-off date pertaining to TL & SS | Initial spares claimed | Ceiling limit as per 2009 tariff regulations | Initial spares worked out as per ceiling limit | Initial spares allowed |
|--------------|----------------------|--------------------------------------|---|------------------------|--|--|------------------------|
| | | | (a) | (b) | (c) | $(d)=[(a)-(b)]*(c)/[100\%-(c)]$ | $(e)=(b)-(d)$ |
| Asset-I | 342/2010 | SS inclusive of PLCC | 305.08 | 20.72 | 2.50% | 7.29 | 7.29 |
| Asset-II | | SS inclusive of PLCC | 515.04 | 26.73 | 2.50% | 12.52 | 12.52 |
| Asset-III | | SS inclusive of PLCC | 2063.10 | 55.64 | 2.50% | 51.47 | 51.47 |
| | | TL | 7032.10 | 208.71 | 0.75% | 51.56 | 51.56 |
| Asset-IV | | SS inclusive of PLCC | 2521.36 | 47.72 | 2.50% | 63.43 | 47.42 |
| Asset-V | SS inclusive of PLCC | 3074.40 | 49.20 | 2.50% | 77.57 | 49.20 | |
| Asset-VI | 19/2011 | SS inclusive of PLCC | 502.00 | 33.28 | 2.50% | 12.02 | 12.02 |
| Asset-VII | | SS inclusive of PLCC | 999.11 | 8.20 | 2.50% | 25.41 | 8.20 |
| TOTAL | | Total of SS inclusive of PLCC | 9980.09 | *241.49 | 2.50% | *249.71 | *188.42 |

*Excluding Transmission Line

21. The instant petition does not have initial spares corresponding to Transmission Line, hence initial spares for Transmission Line is not being reviewed. However, in the case of sub-station (inclusive PLCC), the initial spares in the case of Asset VI exceeds the stipulated limit and therefore, initial spares amounting to `12.02 lakh is only allowed. The petitioner has claimed overall initial spares of `188.42 lakh

and it is within the ceiling limit of `249.71 lakh. Accordingly, the petitioner's claim of `188.42 lakh is allowed.

22. Therefore, capital cost of `320.02 lakh for Asset VI, as on the date of commercial operation after deducting IDC & IEDC and adjusting excess initial spares, of `12.83 lakh is considered for calculating initial spares. The petitioner's claim for initial spares for Asset-VII has been found to be within specified norms. Capital cost of `813.66 lakh for combined Asset A and `9682.64 lakh for combined Asset B has been adopted for calculating tariff.

Projected Additional Capital Expenditure

23. As per Regulation 9 (1) of 2009 Tariff Regulations-

“Additional Capitalisation: (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of Regulation 8;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law.”

24. As per 2009 Tariff Regulations-

“cut-off date means 31st march of the year closing after 2 years of the year of commercial operation of the project, and in-case of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation”.

Therefore, cut-off date for the above mentioned assets is 31.3.2013.

25. The additional capital expenditure claimed by the petitioner is for balance and retention payments. Additional capital expenditure claimed falls within the cut-off date and hence the same is being allowed and considered for the purpose of tariff calculation under Regulations 9(1) (ii) of the 2009 Tariff Regulations.

26. In the instant petition, the expenditure for Asset-II from 1.10.2010 to 1.2.2011 and in case of Asset-III, the expenditure from 1.4.2011 to 1.5.2011 have been considered as per petitioner's affidavit dated 9.9.2011. In case of Asset-III, expenditure data for the period 1.5.2011 to 31.5.2011 was not available, hence not taken into account for calculation for tariff. The details of the additional capital expenditure for Combined Asset A and Combined Asset B are as under:-

(` in lakh)

| | | | |
|-------------------------------------|-------------------------------------|---------------|-------------------------|
| Combined Asset-A | 2010-11 (Balance/Retention Payment) | 4.46 | Sub-station |
| | | 2.73 | PLCC |
| | Total | 7.19 | |
| | 2011-12 (Balance/Retention Payment) | 31.54 | Substation |
| | | Total | 31.54 |
| 2012-13 (Balance/Retention Payment) | 123.75 | Substation | |
| | 2.46 | PLCC | |
| Total | 126.21 | | |
| Combined Asset-B | 2011-12 (Balance/Retention Payment) | 66.00 | Buildings & Civil works |
| | | 208.19 | Transmission Line |
| | | 326.19 | Sub-Station |
| | | 6.82 | PLCC |
| | TOTAL | 607.20 | |
| | 2012-13 (Balance/Retention Payment) | 7.38 | Buildings & Civil works |
| | | 12.26 | Transmission Line |
| | | 15.15 | Sub-Station |
| | | 0.21 | PLCC |
| | TOTAL | 35.00 | |

Debt- Equity Ratio



27. Regulation 12 of the 2009 Tariff Regulations provides that :-

"(1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Explanation- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(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.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."

28. The details of debt-equity of asset considered for the purpose of tariff calculation as on the date of commercial operation is given below:-

(` in lakh)

| Combined Asset-A | | |
|--|---------------|---------------|
| Capital cost as on date of commercial operation | | |
| Particulars | Amount | % |
| Debt | 569.57 | 70.00 |
| Equity | 244.09 | 30.00 |
| Total | 813.66 | 100.00 |
| Combined Asset-B | | |
| Capital cost as on date of commercial operation | | |
| Particulars | Amount | % |
| Debt | 6777.85 | 70.00 |

| | | |
|--------------|----------------|---------------|
| Equity | 2904.78 | 30.00 |
| Total | 9682.64 | 100.00 |

29. Details of debt-equity ratio projected for additional capital expenditure are given overleaf:-

(` in lakh)

| Combined Asset-A | | |
|-------------------------|------------------|---------------|
| 2010-11 | Normative | |
| Particulars | Amount | % |
| Debt | 5.03 | 70.00 |
| Equity | 2.16 | 30.00 |
| Total | 7.19 | 100.00 |
| 2011-12 | Normative | |
| Particulars | Amount | % |
| Debt | 22.08 | 70.00 |
| Equity | 9.46 | 30.00 |
| Total | 31.54 | 100.00 |
| 2012-13 | Normative | |
| Particulars | Amount | % |
| Debt | 88.35 | 70.00 |
| Equity | 37.86 | 30.00 |
| Total | 126.21 | 100.00 |

(` in lakh)

| Combined Asset-B | | |
|-------------------------|------------------|---------------|
| 2011-12 | Normative | |
| Particulars | Amount | % |
| Debt | 425.04 | 70.00 |
| Equity | 182.16 | 30.00 |
| Total | 607.20 | 100.00 |
| 2012-13 | Normative | |
| Particulars | Amount | % |
| Debt | 24.50 | 70.00 |
| Equity | 10.50 | 30.00 |
| Total | 35.00 | 100.00 |

30. Details of debt- equity as on 31.3.2014 are given below:-

(` in lakh)

| Combined Asset-A | |
|-------------------------|-----------------------------------|
| | Capital cost as on date of |



| commercial operation | | |
|-----------------------------|---------------|---------------|
| Particulars | Amount | % |
| Debt | 685.03 | 70.00 |
| Equity | 293.57 | 30.00 |
| Total | 978.60 | 100.00 |

(` in lakh)

| Combined Asset-B | | |
|-------------------------|-----------------|---------------|
| Normative | | |
| Particulars | Amount | % |
| Debt | 7227.39 | 70.00 |
| Equity | 3097.44 | 30.00 |
| Total | 10324.84 | 100.00 |

Return on Equity

31. Regulation 15 of the 2009 Tariff 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"

32. Petitioner's prayer to allow grossing up the base rate of return on equity based on tax rates viz., MAT, surcharge, any other cess, charges, levies etc., as per relevant Finance Act, shall be settled in accordance with the provisions of Regulation 15 of 2009 Tariff Regulations.

33. In view of the above, the following amount of equity has been considered for calculation of return of equity:-

(₹ in lakh)

| Combined Asset-A | | | | |
|--|-------------------------------|----------------|----------------|----------------|
| Particulars | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| Opening Equity | 244.09 | 246.25 | 255.71 | 293.57 |
| Addition due to additional capital expenditure | 2.16 | 9.46 | 37.86 | 0.00 |
| Closing Equity | 246.25 | 255.71 | 293.57 | 293.57 |
| Average Equity | 245.17 | 250.98 | 274.64 | 293.57 |
| Return on Equity (Base Rate) | 15.50% | 15.50% | 15.50% | 15.50% |
| Tax rate for the year 2008-09 (MAT) | 11.33% | 11.33% | 11.33% | 11.33% |
| Rate of Return on Equity (Pre Tax) | 17.481% | 17.481% | 17.481% | 17.481% |
| Return on Equity (Pre Tax) | 7.14 | 43.87 | 48.01 | 51.32 |

(₹ in lakh)

| Combined Asset-B | | | |
|-------------------------|-------------------------------|----------------|----------------|
| Particulars | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Opening Equity | 2904.78 | 3086.94 | 3097.44 |

| | | | |
|--|---------------|---------------|---------------|
| Addition due to additional capital expenditure | 182.16 | 10.50 | 0.00 |
| Closing Equity | 3086.94 | 3097.44 | 3097.44 |
| Average Equity | 2995.86 | 3092.19 | 3097.44 |
| Return on Equity (Base Rate) | 15.50% | 15.50% | 15.50% |
| Tax rate for the year 2008-09 (MAT) | 11.33% | 11.33% | 11.33% |
| Rate of Return on Equity (Pre Tax) | 17.481% | 17.481% | 17.481% |
| Return on Equity (Pre Tax) | 436.42 | 540.55 | 541.46 |

34. The return on equity for combined Asset- A works out to `7.14, `43.87, `48.01 and `51.32 lakh for the period of 2010-11, 2011-12, 2012-13 and 2013-14 respectively. Return on equity for combined Asset-B works out to `436.42 lakh, `540.55 lakh, `541.46 lakh for the period 2011-12, 2012-13 and 2013-14 respectively.

Interest on Loan

35. Regulation 16 of the 2009 Tariff 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.”

36. The petitioner has prayed to be allowed to bill and adjust impact on interest on loan, if any due to change in interest rate on account of floating rate of interest applicable during 2009-14 period. UPPCL has submitted that the existing financial package do not have any provision for floating rate of interest. However, 2009 Tariff Regulations provides for swapping of loans in the interest of consumers only. UPPCL has submitted that the prayer of the petitioner is not tenable. We have considered the submission of UPPCL. It is noted that the project has been funded only through bonds of fixed rate of interest. The petitioner seems to have made a prayer for floating rate of interest inadvertently. Hence, the issue of floating rate of interest does not arise.

37. In these calculations, interest on loan has been worked out as detailed as under:-

- (i) For Asset-II and Asset-III, Gross amount of loan, repayment of instalments and rate of interest and actual average loan have been considered as per calculations submitted in Petition No 342/2010. In the instant petition, the date of commercial operation of Asset-VI and Asset-VII were indicated as anticipated and accordingly the funding pattern was shown. The petitioner further, vide affidavit dated 14.3.2012 has submitted the revised loan funding pattern of these two assets and the same has been considered in these calculations.
- (ii) Tariff has been worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the tariff period 2009-14.
- (iii) Weighted average rate of interest on actual loan worked out as above has been applied on the notional average loan during the year to arrive at the interest on loan.

38. Detailed calculations of the weighted revised average rate of interest of are given in Annexure-I and Annexure-II to this order.

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

(` in lakh)

| |
|-------------------------|
| Combined Asset-A |
|-------------------------|



| Particulars | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
|--|-----------------------|--------------|--------------|--------------|
| Gross Normative Loan | 569.57 | 574.61 | 596.68 | 685.03 |
| Cumulative Repayment upto Previous Year | 7.82 | 15.08 | 59.64 | 108.38 |
| Net Loan-Opening | 561.75 | 559.53 | 537.04 | 576.65 |
| Addition due to additional capital expenditure | 5.03 | 22.08 | 88.35 | 0.00 |
| Repayment during the year | 7.25 | 44.57 | 48.74 | 52.09 |
| Net Loan-Closing | 559.53 | 537.04 | 576.65 | 524.56 |
| Average Loan | 560.64 | 548.29 | 556.84 | 550.60 |
| Weighted Average Rate of Interest on Loan | 8.9100% | 8.9100% | 8.9061% | 8.8995% |
| Interest | 8.33 | 48.85 | 49.59 | 49.00 |

(` in lakh)

| Combined Asset-B | | | |
|--|-----------------------|---------------|---------------|
| Particulars | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Gross Normative Loan | 6777.85 | 7202.89 | 7227.39 |
| Cumulative Repayment upto Previous Year | 291.55 | 721.18 | 1253.00 |
| Net Loan-Opening | 6486.30 | 6481.72 | 5974.39 |
| Addition due to additional capital expenditure | 425.04 | 24.50 | 0.00 |
| Repayment during the year | 429.62 | 531.83 | 532.68 |
| Net Loan-Closing | 6481.72 | 5974.39 | 5441.71 |
| Average Loan | 6484.01 | 6228.05 | 5708.05 |
| Weighted Average Rate of Interest on Loan | 8.9184% | 8.9158% | 8.9122% |
| Interest | 481.89 | 555.28 | 508.71 |

Depreciation

40. Regulation 17 (4) of the 2009 Tariff 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".



41. The petitioner has submitted that the petitioner be allowed to recover the full depreciation of the assets during its useful life reckoning from the actual date of commercial operation of the assets. We have considered the submission of the petitioner and the respondent. Regulation 17(4) as quoted above provides that the depreciation shall be calculated as per the straight line method and at the rate specified in the Appendix-III for the first 12 years from the date of commercial operation and the remaining depreciable value shall be spread over the balance useful life of the asset. Since the notional date of commercial operation has been adopted for determination of tariff in case of combining the assets, the notional date of commercial operation have been treated as the starting point for the calculation of depreciation of the combined assets. However, the depreciation of the individual assets from the actual date of commercial operation till the notional date of commercial operation of the combined assets is added to the cumulative depreciation. Details of the depreciation worked out are given below:-

(` in lakh)

| Combined Asset-A | | | | |
|---|-------------------------------|----------------|----------------|----------------|
| Particulars | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| Opening Gross Block | 813.66 | 820.85 | 852.39 | 978.60 |
| Addition during 2009-14 due to Projected additional capital expenditure | 7.19 | 31.54 | 120.21 | 0.00 |
| Closing Gross Block | 820.85 | 852.39 | 978.60 | 978.60 |
| Average Gross Block | 817.26 | 836.62 | 915.50 | 978.60 |
| Rate of Depreciation | 5.3261% | 5.3268% | 5.3242% | 5.3226% |
| Depreciable Value | 735.53 | 752.96 | 823.95 | 880.74 |
| Remaining Depreciable Value | 727.71 | 737.88 | 764.31 | 772.36 |
| Depreciation | 7.25 | 44.57 | 48.74 | 52.09 |

(` in lakh)

| Combined Asset-B | | | |
|--------------------------------|-------------------------------|----------------|----------------|
| Particulars | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Opening Gross Block | 9682.64 | 10289.84 | 10324.84 |
| Addition during 2009-14 due to | 607.20 | 35.00 | 0.00 |



| | | | |
|--|----------------|-----------------|-----------------|
| Projected additional capital expenditure | | | |
| Closing Gross Block | 10289.84 | 10324.84 | 10324.84 |
| Average Gross Block | 9986.24 | 10307.34 | 10324.84 |
| Rate of Depreciation | 5.1626% | 5.1597% | 5.1592% |
| Depreciable Value | 8828.90 | 9117.89 | 9133.64 |
| Remaining Depreciable Value | 8537.35 | 8396.71 | 7880.64 |
| Depreciation | 429.62 | 531.83 | 532.68 |

Operation & Maintenance Expenses

42. Clause (9) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for operation and maintenance expenses based on the type of sub-station and line. The norms for the assets covered in this petition are as under:-

| Element | (` in lakh) | | | | |
|---|-------------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 400 kV D/C triple conductor T/Line (` lakh/ kms) | 0.627 | 0.663 | 0.701 | 0.741 | 0.783 |
| 400 kV Bays (₹ lakh/ bay.) | 52.40 | 55.40 | 58.57 | 61.92 | 65.46 |
| 220 kV Bays (` lakh/ bay.) | 36.68 | 38.78 | 41.00 | 43.43 | 45.82 |

43. As per the above mentioned norms the allowable O & M expenses for the assets covered in this petition are given hereunder:-

| Combined Asset-A (Notional date of commercial operation:1.2.2011) | (` in lakh) | | | |
|--|-----------------------|---------|---------|---------|
| | 2010-11 (Pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| 2 Nos. 220 kV bays at Kota Sub-station (date of commercial operation: 1.10.2010) and 2 Nos. 220 kV bays at Bhiwadi Sub-station (date | 25.85 | 164.00 | 173.36 | 183.28 |

| | | | | |
|--|--------------|---------------|---------------|---------------|
| of commercial operation: 1.2.2011) | | | | |
| Total O&M for combined elements-1 | 25.85 | 164.00 | 173.36 | 183.28 |

| (` in lakh) | | | | |
|--|----------------|-------------------------------|----------------|----------------|
| Combined Asset-B (Notional date of commercial operation:1.6.2011) | 2010-11 | 2011-12 (Pro-rata) | 2012-13 | 2013-14 |
| 53.4 Kms, 400 kV D/C triple conductor, T/L (date of commercial operation:1.10.2010) | --- | 31.19 | 39.57 | 41.80 |
| 5 Nos. 400 kV bays (date of commercial operation: 1.6.2011) | --- | 244.04 | 309.60 | 327.30 |
| Total O&M for combined elements-2 | --- | 275.24 | 349.17 | 369.11 |
| Total O&M for Combined asset-1 and asset-2 | 25.85 | 439.24 | 522.53 | 552.39 |

44. The petitioner has submitted that O & M expenses for the year 2009-14 had been arrived at on the basis of normalized actual O & M expenses during the period 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O & M charges for the tariff period 2009-14. The petitioner has further submitted that it would approach the Commission for suitable revision in the norms for O & M expenses in case the impact of wage hike with effect from 1.1.2007 is more than 50%. The O&M expenses have been allowed as per the norms of 2009 Tariff Regulations. It is clarified that, if any application for revision of norms of O&M expenses is filed by the petitioner in future, it will be dealt in accordance with law.

Interest on Working Capital

45. As per the 2009 regulations the components of the working capital and the interest thereon are discussed are given as under:-

(i) Receivables: As per Regulation 18 (1) (c) (i) of the 2009 tariff regulations, receivables will be equivalent to two months of fixed cost. The petitioner has claimed the 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 transmission charges.

(ii) Maintenance spares: Maintenance spares have been worked out based on 15% of Operation and Maintenance expenses specified in Regulation 19 of the 2009 tariff regulations.

(iii) O & M expenses: Regulation 18(1) (c) (iii) of the 2009 tariff regulations provides for operation and maintenance expenses for one month of the recommended O & M expenses.

(iv) Rate of interest on working capital: The SBI Base Rate of 8.25% Plus 350Bps i.e. 11.75% has been considered as the rate of interest on working capital.

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

(` in lakh)

| Combined Asset-A | | | | |
|--------------------|-----------------------|----------|---------|---------|
| Particulars | 2010-11 (pro-rata) | 2011- 12 | 2012-13 | 2013-14 |
| Maintenance Spares | 23.27 | 24.60 | 26.00 | 27.49 |
| O & M expenses | 12.93 | 13.67 | 14.45 | 15.27 |

| | | | | |
|--------------|--------------|--------------|--------------|---------------|
| Receivables | 50.27 | 51.98 | 55.61 | 57.92 |
| Total | 86.46 | 90.25 | 95.61 | 100.69 |
| Interest | 1.69 | 10.60 | 11.23 | 11.83 |

(` in lakh)

| Combined Asset-B | | | |
|--------------------|-----------------------|---------------|---------------|
| Particulars | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Maintenance Spares | 49.54 | 52.38 | 55.37 |
| O & M expenses | 27.52 | 29.10 | 30.76 |
| Receivables | 332.66 | 337.68 | 333.55 |
| Total | 409.73 | 419.15 | 419.67 |
| Interest | 40.12 | 49.25 | 49.31 |

Transmission Charges

47. The transmission charges being allowed for the transmission lines are summarized hereunder:-

(` in lakh)

| Combined Asset-A | | | | |
|-----------------------------|-----------------------|---------------|---------------|---------------|
| Particulars | 2010-11 (pro-rata) | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 7.25 | 44.57 | 48.74 | 52.09 |
| Interest on Loan | 8.33 | 48.85 | 49.59 | 49.00 |
| Return on equity | 7.14 | 43.87 | 48.01 | 51.32 |
| Interest on Working Capital | 1.69 | 10.60 | 11.23 | 11.83 |
| O & M Expenses | 25.85 | 164.00 | 173.36 | 183.28 |
| Total | 50.27 | 311.90 | 330.94 | 347.52 |

(` in lakh)

| Combined Asset-B | | | |
|------------------|-----------------------|---------|---------|
| Particulars | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Depreciation | 429.62 | 531.83 | 532.68 |
| Interest on Loan | 481.89 | 555.28 | 508.71 |
| Return on equity | 436.42 | 540.55 | 541.46 |



| | | | |
|-----------------------------|----------------|----------------|----------------|
| Interest on Working Capital | 40.12 | 49.25 | 49.31 |
| O & M Expenses | 275.24 | 349.17 | 369.11 |
| Total | 1663.30 | 2026.07 | 2001.28 |

Filing fee and the publication expenses:-

48. An application for determination of tariff for inter-State transmission system should be accompanied by an application fee at the rate of 0.05% of the total annual transmission charges per annum claimed in the application, subject to a minimum of `40,000/- as per the Central Electricity Regulatory Commission (Payment of Fees) Regulations, 2008. The petitioner has requested to adjust the excess filing fee already paid in Petition No. 342/2010 towards the filing fee to be paid in the petition. UPPCL has requested, vide its reply dated 9.11.2011, to abolish the requirement of payment of minimum filing fee of `40,000/- by invoking Regulation 9, Power to Relax, of the Payment of Fee Regulations. As per the Payment of Fees Regulations, 2008 a minimum of `40,000/- is required to be deposited by an applicant for transmission tariff for every petition. Accordingly, the petitioner is required to pay the minimum prescribed fee of in Petition No. 342/2010 40,000/-. As such, the petitioner's request for adjusting the filing fee paid in Petition No. 342/2010 is rejected. The petitioner has deposited the filing fee of `2,200/- in the instant petition. The petitioner is directed to deposit the remaining `37,800/- within 30 days from the date of this order.

49. 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

50. The petitioner has 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 separately from the respondents. The respondent, UPPCL has submitted that the petitioner's request for reimbursement for licence fee should be rejected as license fee is the eligibility fee of a licence holder and it is the onus of the petitioner. It is clarified that the petitioner's prayer for licence fee shall be dealt with in accordance with our order dated 25.10.2011 in Petition No. 21/2011 and 22/2011.

Service Tax

51. The petitioner has made a prayer to be allowed 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 the petitioner's request for recovery of service tax is premature. We consider the prayer of the petitioner pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

52. The petitioner has submitted that the transmission tariff (Annual Fixed Charges) of Asset II shall be recovered on monthly basis in accordance with Regulation 23 and shall be borne by Rajasthan and the transmission charges for

Asset III shall be shared by all the constituents of the Northern Region. The petitioner has filed the instant petition before coming into force of the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 with effect from 1.7.2011. Thus, the transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shared by the beneficiaries in accordance with Regulation 33 of the 2009 Tariff Regulations up to 30.6.2011. With effect from 1.7.2011, the billing, collection & disbursement of the transmission charges shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010.

53. This order disposes of Petition No.19/TT/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

(` in lakh)

| | Details of Loan | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|----------|--|--|---------|---------|---------|
| 1 | Bond XXXIII | | | | |
| | Gross loan opening | 99.95 | 99.95 | 99.95 | 99.95 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 | 0.00 |
| | Net Loan-Opening | 99.95 | 99.95 | 99.95 | 99.95 |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 0.00 | 0.00 |
| | Net Loan-Closing | 99.95 | 99.95 | 99.95 | 99.95 |
| | Average Loan | 99.95 | 99.95 | 99.95 | 99.95 |
| | Rate of Interest | 8.64% | 8.64% | 8.64% | 8.64% |
| | Interest | 8.64 | 8.64 | 8.64 | 8.64 |
| | Rep Schedule | 12 Annual instalments from 08.07.2014. | | | |
| 2 | Bond XXIX | | | | |
| | Gross loan opening | 143.00 | 143.00 | 143.00 | 143.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 | 11.92 |
| | Net Loan-Opening | 143.00 | 143.00 | 143.00 | 131.08 |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 11.92 | 11.92 |
| | Net Loan-Closing | 143.00 | 143.00 | 131.08 | 119.17 |
| | Average Loan | 143.00 | 143.00 | 137.04 | 125.13 |
| | Rate of Interest | 9.20% | 9.20% | 9.20% | 9.20% |
| | Interest | 13.16 | 13.16 | 12.61 | 11.51 |
| | Rep Schedule | 12 Annual instalments from 12.03.2013 | | | |
| 3 | Bond XXVIII | | | | |
| | Gross loan opening | 15.00 | 15.00 | 15.00 | 15.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 | 1.25 |
| | Net Loan-Opening | 15.00 | 15.00 | 15.00 | 13.75 |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 1.25 | 1.25 |
| | Net Loan-Closing | 15.00 | 15.00 | 13.75 | 12.50 |
| | Average Loan | 15.00 | 15.00 | 14.38 | 13.13 |
| | Rate of Interest | 9.33% | 9.33% | 9.33% | 9.33% |

| | | | | | |
|----------|--|---------------------------------------|----------------|----------------|----------------|
| | Interest | 1.40 | 1.40 | 1.34 | 1.22 |
| | Rep Schedule | 12 Annual Instalments from 15.12.2012 | | | |
| | | | | | |
| 4 | Bond XXX | | | | |
| | Gross loan opening | 182.00 | 182.00 | 182.00 | 182.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 | 0.00 |
| | Net Loan-Opening | 182.00 | 182.00 | 182.00 | 182.00 |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 0.00 | 15.17 |
| | Net Loan-Closing | 182.00 | 182.00 | 182.00 | 166.83 |
| | Average Loan | 182.00 | 182.00 | 182.00 | 174.42 |
| | Rate of Interest | 8.80% | 8.80% | 8.80% | 8.80% |
| | Interest | 16.02 | 16.02 | 16.02 | 15.35 |
| | Rep Schedule | 12 Annual instalments from 29.09.2013 | | | |
| | | | | | |
| 5 | Bond XXXI | | | | |
| | Gross loan opening | 77.00 | 77.00 | 77.00 | 77.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 | 0.00 |
| | Net Loan-Opening | 77.00 | 77.00 | 77.00 | 77.00 |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 0.00 | 6.42 |
| | Net Loan-Closing | 77.00 | 77.00 | 77.00 | 70.58 |
| | Average Loan | 77.00 | 77.00 | 77.00 | 73.79 |
| | Rate of Interest | 8.90% | 8.90% | 8.90% | 8.90% |
| | Interest | 6.85 | 6.85 | 6.85 | 6.57 |
| | Rep Schedule | 12 Annual Instalments from 25.02.2014 | | | |
| | | | | | |
| | | | | | |
| | Total Loan | | | | |
| | Gross loan opening | 516.95 | 516.95 | 516.95 | 516.95 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 | 13.17 |
| | Net Loan-Opening | 516.95 | 516.95 | 516.95 | 503.78 |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 13.17 | 34.75 |
| | Net Loan-Closing | 516.95 | 516.95 | 503.78 | 469.03 |
| | Average Loan | 516.95 | 516.95 | 510.37 | 486.41 |
| | Rate of Interest | 8.9100% | 8.9100% | 8.9061% | 8.8995% |
| | Interest | 46.06 | 46.06 | 45.45 | 43.29 |



| | Details of Loan | 2011-12 | 2012-13 | 2013-14 |
|----------|--|--|---------------|---------------|
| 1 | Bond XXXIII | | | |
| | Gross loan opening | 260.00 | 260.00 | 260.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Opening | 260.00 | 260.00 | 260.00 |
| | Additions during the year | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Closing | 260.00 | 260.00 | 260.00 |
| | Average Loan | 260.00 | 260.00 | 260.00 |
| | Rate of Interest | 8.64% | 8.64% | 8.64% |
| | Interest | 22.46 | 22.46 | 22.46 |
| | Rep Schedule | 12 Annual instalments from 08.07.2014. | | |
| | | | | |
| 2 | Bond XXIX | | | |
| | Gross loan opening | 786.00 | 786.00 | 786.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 65.50 |
| | Net Loan-Opening | 786.00 | 786.00 | 720.50 |
| | Additions during the year | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 65.50 | 65.50 |
| | Net Loan-Closing | 786.00 | 720.50 | 655.00 |
| | Average Loan | 786.00 | 753.25 | 687.75 |
| | Rate of Interest | 9.20% | 9.20% | 9.20% |
| | Interest | 72.31 | 69.30 | 63.27 |
| | Rep Schedule | 12 Annual instalments from 12.03.2013 | | |
| | | | | |
| 3 | Bond XXVIII | | | |
| | Gross loan opening | 423.00 | 423.00 | 423.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 35.25 |
| | Net Loan-Opening | 423.00 | 423.00 | 387.75 |
| | Additions during the year | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 35.25 | 35.25 |
| | Net Loan-Closing | 423.00 | 387.75 | 352.50 |
| | Average Loan | 423.00 | 405.38 | 370.13 |
| | Rate of Interest | 9.33% | 9.33% | 9.33% |
| | Interest | 39.47 | 37.82 | 34.53 |
| | Rep Schedule | 12 Annual Instalments from 15.12.2012 | | |

| | | | | |
|----------|--|--|----------------|----------------|
| 5 | Bond XXX | | | |
| | Gross loan opening | 2300.00 | 2300.00 | 2300.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Opening | 2300.00 | 2300.00 | 2300.00 |
| | Additions during the year | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 191.67 |
| | Net Loan-Closing | 2300.00 | 2300.00 | 2108.33 |
| | Average Loan | 2300.00 | 2300.00 | 2204.17 |
| | Rate of Interest | 8.80% | 8.80% | 8.80% |
| | Interest | 202.40 | 202.40 | 193.97 |
| | Rep Schedule | 12 Annual instalments from 29.09.2013 | | |
| 6 | Bond XXXI | | | |
| | Gross loan opening | 2491.00 | 2491.00 | 2491.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Opening | 2491.00 | 2491.00 | 2491.00 |
| | Additions during the year | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Closing | 2491.00 | 2491.00 | 2491.00 |
| | Average Loan | 2491.00 | 2491.00 | 2491.00 |
| | Rate of Interest | 8.90% | 8.90% | 8.90% |
| | Interest | 221.70 | 221.70 | 221.70 |
| | Rep Schedule | 12 Annual Instalments from 25.02.2014 | | |
| 7 | Bond XXXIV | | | |
| | Gross loan opening | 60.00 | 60.00 | 60.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Opening | 60.00 | 60.00 | 60.00 |
| | Additions during the year | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Closing | 60.00 | 60.00 | 60.00 |
| | Average Loan | 60.00 | 60.00 | 60.00 |
| | Rate of Interest | 8.84% | 8.84% | 8.84% |
| | Interest | 5.30 | 5.30 | 5.30 |
| | Rep Schedule | 12 Annual instalments from 21.10.2014 | | |
| 8 | Bond XXXV | | | |
| | Gross loan opening | 10.07 | 10.07 | 10.07 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Opening | 10.07 | 10.07 | 10.07 |
| | Additions during the year | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 0.00 |

| | | | |
|---|---|----------------|----------------|
| Net Loan-Closing | 10.07 | 10.07 | 10.07 |
| Average Loan | 10.07 | 10.07 | 10.07 |
| Rate of Interest | 9.64% | 9.64% | 9.64% |
| Interest | 0.97 | 0.97 | 0.97 |
| Rep Schedule | 12 Annual instalments from 31.5.2015 | | |
| Total Loan | | | |
| Gross loan opening | 6320.00 | 6320.00 | 6320.00 |
| Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 100.75 |
| Net Loan-Opening | 6320.00 | 6320.00 | 6219.25 |
| Additions during the year | 0.00 | 0.00 | 0.00 |
| Repayment during the year | 0.00 | 100.75 | 292.42 |
| Net Loan-Closing | 6320.00 | 6219.25 | 5926.83 |
| Average Loan | 6320.00 | 6269.63 | 6073.04 |
| Rate of Interest | 8.9184% | 8.9158% | 8.9122% |
| Interest | 563.64 | 558.99 | 541.24 |

