

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 342/2010**

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

**Date of Hearing: 26.4.2012**

**Date of Order: 3.10.2012**

**In the matter of:**

Approval under Regulation-86 of CERC (Conduct of Business) Regulations 1999 and CERC (Terms and Conditions of Tariff) Regulations 2009 for determination of transmission tariff of the combined elements from date of commercial operation to 31.3.2014 for Northern Region System Strengthening Scheme-XII for tariff block 2009-14 period in Northern Region.

**And**

**In the matter of:**

Power Grid Corporation of India Limited, Gurgaon

**.....Petitioner**

**Vs**

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur
2. Ajmer Vidyut Vitran Nigam Ltd, Jaipur
3. Jaipur Vidyut Vitran Nigam Ltd., Jaipur
4. Jodhpur Vidyut Vitran Nigam Ltd., Jaipur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Power Purchase Centre, Haryana
8. Power Development Department, Jammu & Kashmir
9. Uttar Pradesh Power Corporation Ltd., Lucknow
10. Delhi Transco Ltd., New Delhi
11. BSES Yamuna Power Ltd., New Delhi



12. BSES Rajdhani Power Ltd., New Delhi
13. North Delhi Power Ltd., 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 T.P.S. Bawa, PSPCL

**ORDER**

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) for determination of transmission tariff of the 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 under Regulation 86 of CERC (Terms and Conditions of Tariff) Regulations 2009 (hereinafter referred to as "2009 Tariff Regulations")

2. The administrative approval and expenditure sanction to the transmission project was accorded by the Board of Directors of the petitioner vide C/CP/NRSS-XII dated 26.2.2008 for `26155 lakh including an IDC of `1775 lakh based on 3<sup>rd</sup> Quarter, 2007 price level.

3. The scope of work covered under the project broadly includes following transmission lines and sub-stations:-



## Transmission Lines

Bahadurgarh-Sonepat 400 kV D/C (Triple Conductor)

## Sub Stations

- (i) New 400/220 kV Sonepat Substation.
- (ii) Extension of 400/220kV Bahadurgarh Substation.
- (iii) Extension of 400/220kV Nallagarh Substation.
- (iv) Extension of 400/220 kV Kota Substation.
- (v) Extension 400/220kV Bhiwadi Substation.

4. The transmission tariff for the following elements is determined in the instant petition:-

Sr. No.	220 kV Nallagarh sub-station: (Asset-I)	Date of commercial operation
1	220 kV HPSEB-I, bay	1.7.2010
2	220 kV HPSEB-II, bay	1.7.2010
	<b>400/220 kV Kota Ext. sub-station: (Asset-II)</b>	
1	220 kV Bhilwara, bay	1.10.2010
2	220 kV Dooni, bay	1.10.2010
	<b>Transmission Line: (Asset-III)</b>	
1	400 kV D/C triple conductor Bahadurgarh-Sonepat T/Line	1.10.2010
	<b>400/220 kV Bahadurgarh Sub-station:</b>	
1	400 kV Sonepat-I, bay	1.10.2010
2	400 kV Sonepat-II, bay	1.10.2010
	<b>400/220 kV Sonepat sub-station:</b>	
1	400 kV Bahadurgarh-I, bay	1.10.2010
2	400 kv Bahadurgarh-II, bay	1.10.2010
	<b>400/220 kV Sonepat sub-station: Asset-IV:</b>	
1	400 kV ICT-II, bay	1.10.2010
2	220 kV ICT-II, bay	1.10.2010
3	220 kV Mohana-I, bay	1.10.2010
4	220 kV Mohana-II, bay	1.10.2010
	<b>400/220 kV Sonepat sub-station: Asset-V:</b>	
1	400 kV ICT-I, bay	1.11.2010
2	220 kV ICT-I, bay	1.11.2010



3	220 kV HVPNL-I, bay	1.11.2010
4	220 kV HVPNL-II, bay	1.11.2010
5	220 kV HVPNL-III ,bay	1.11.2010
6	220 kV HVPNL-IV, bay	1.11.2010

5. The details of apportioned approved cost, capital expenditure incurred upto the date of commercial operation and estimated additional capital expenditure projected to be incurred for the assets covered in the instant petition, claimed by the petitioner, are summarized below:-

(` in lakh)

Name of the asset	Apportioned FR Cost	Actual cost incurred as on Date of commercial operation	Projected additional capital expenditure			Total estimated completion cost
			Date of commercial operation to 31.3.2011	2011-12	2012-13	
2nos. bays at Nalagarh Extension (hereinafter referred to as <b>Asset-I</b> )	<b>616.07</b>	204.54	60.51	30.00	10.00	<b>305.08</b>
2nos. bays at Kota Extension (hereinafter referred to as <b>Asset-II</b> )	<b>524.61</b>	394.25	120.79			<b>515.04</b>
400 kv D/C Bahadurgarh Sonapat Line (hereinafter referred to as <b>Asset-III</b> )	<b>13579.08</b>	8097.64	648.80	600.00	20.00	<b>9366.44</b>
315 MVA ICT II at Sonapat (hereinafter referred to as <b>Asset-IV</b> )	<b>4332.22</b>	2281.48	531.27	226.32	24.00	<b>3063.07</b>
315 MVA ICT I at Sonapat (hereinafter referred to as <b>Asset-V</b> )	<b>4332.22</b>	2960.33	536.36	372.52	20.00	<b>3889.21</b>
<b>TOTAL</b>	<b>23384.20</b>	13938.27	1897.73	1228.84	74.00	<b>17138.84</b>

6. Details of the transmission charges of claimed by the petitioner are given as under:-

(` in lakh)

<b>Asset-I</b>				
<b>Particulars</b>	<b>2010-11 (Pro-rata)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Depreciation	9.36	14.88	15.94	16.20
Interest on Loan	11.17	16.72	16.59	15.42
Return on equity	9.53	15.16	16.24	16.51
Interest on Working Capital	3.39	4.86	5.13	5.36
O & M Expenses	58.17	82.00	86.68	91.64
<b>Total</b>	<b>91.62</b>	<b>133.62</b>	<b>140.58</b>	<b>145.13</b>

(` in lakh)

<b>Asset-II</b>				
<b>Particulars</b>	<b>2010-11 (Pro-rata)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Depreciation	12.11	27.42	27.42	27.42
Interest on Loan	14.00	30.01	27.54	25.07
Return on equity	11.92	27.01	27.01	27.01
Interest on Working Capital	2.62	5.62	5.79	5.98
O & M Expenses	38.78	82.00	86.68	91.64
<b>Total</b>	<b>79.43</b>	<b>172.06</b>	<b>174.44</b>	<b>177.12</b>

(` in lakh)

<b>Asset-III</b>				
<b>Particulars</b>	<b>2010-11 (Pro-rata)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Depreciation	218.88	470.09	486.14	486.66
Interest on Loan	258.51	525.30	501.81	458.83
Return on equity	220.84	474.42	490.68	491.20
Interest on Working Capital	20.11	42.38	43.31	43.25
O & M Expenses	128.50	271.71	287.25	303.65
<b>Total</b>	<b>846.84</b>	<b>1783.90</b>	<b>1809.19</b>	<b>1783.59</b>

(` in lakh)

Asset-IV	
Particulars	2010-11 (Pro-rata)
Depreciation	59.12
Interest on Loan	78.32
Return on equity	66.79
Interest on Working Capital	8.20
O & M Expenses	85.87
<b>Total</b>	<b>298.31</b>

(` in lakh)

Combined Asset-IV & V				
Particulars	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
Depreciation	110.22	305.11	320.74	321.81
Interest on Loan	146.95	385.99	378.03	350.63
Return on equity	126.21	346.60	363.46	364.61
Interest on Working Capital	16.07	42.07	43.77	44.56
O & M Expenses	175.43	445.14	470.56	497.48
<b>Total</b>	<b>574.88</b>	<b>1524.91</b>	<b>1576.56</b>	<b>1579.09</b>

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

(` in lakh)

Asset-I				
Particulars	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Maintenance Spares	11.63	12.30	13.00	38.17
O & M expenses	6.46	6.83	7.22	21.21
Receivables	20.36	22.27	23.43	24.19
<b>Total</b>	<b>38.46</b>	<b>41.41</b>	<b>43.66</b>	<b>45.57</b>
Interest	3.39	4.86	5.13	5.36
Rate of Interest	11.75%	11.75%	11.75%	11.75%

(` in lakh)

Asset-II				
Particulars	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Maintenance Spares	11.63	12.30	13.00	13.75
O & M expenses	6.46	6.83	7.22	7.64
Receivables	26.47	28.68	29.07	29.52
<b>Total</b>	<b>44.57</b>	<b>47.81</b>	<b>49.29</b>	<b>50.91</b>
Interest	2.62	5.62	5.79	5.98
Rate of Interest	11.75%	11.75%	11.75%	11.75%



( ` in lakh)

<b>Asset-III</b>				
Particulars	<b>2010-11 (pro-rata)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Maintenance Spares	38.55	40.76	43.09	45.55
O & M expenses	21.42	22.64	23.94	25.30
Receivables	282.28	297.32	301.53	297.27
<b>Total</b>	<b>342.25</b>	<b>360.72</b>	<b>368.56</b>	<b>368.12</b>
Interest	20.11	42.38	43.31	43.25
Rate of Interest	11.75%	11.75%	11.75%	11.75%

( ` in lakh)

<b>Asset-IV</b>	
Particulars	<b>2010-11 (pro-rata)</b>
Maintenance Spares	25.76
O & M expenses	14.31
Receivables	99.43
<b>Total</b>	<b>139.50</b>
Interest	8.20
Rate of Interest	11.75%

( ` in lakh)

<b>Combined Asset-IV&amp;V</b>				
Particulars	<b>2010-11 (pro-rata)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Maintenance Spares	63.15	66.77	70.58	74.62
O & M expenses	35.09	37.10	39.21	41.46
Receivables	229.95	254.15	262.76	263.18
<b>Total</b>	<b>328.19</b>	<b>358.02</b>	<b>372.55</b>	<b>379.26</b>
Interest	16.07	42.07	43.77	44.56
Rate of Interest	11.75%	11.75%	11.75%	11.75%

8. 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. Replies have been filed by Punjab State Power Corporation Limited (PSPCL) Respondent No. 6, Uttar Pradesh Power Corporation Limited (UPPCL) Respondent No. 9, BSES Rajdhani Power Limited (BRPL) Respondent No. 12. Respondents have raised the issue of additional return on equity, service tax, licence fee, publication fee and



actual date of commercial operation etc. The objections have been dealt with in relevant paragraphs of this order.

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

### **CAPITAL COST:-**

10. 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.”*

11. Petitioner has claimed initial spares for transmission line and sub-station. The initial spares claimed by the petitioner for Asset- IV and Asset- V falls within the ceiling limits specified in Regulation 8 of the 2009 Tariff Regulations.

12. Initial spares claimed for Asset-I, Asset-II and Asset-III are in excess of the norms specified in Regulation 8 of the 2009 Tariff Regulations. Accordingly, initial spares allowed have been restricted to the norms and details of the same are given overleaf:-

(` in lakh)

Calculation of initial spares.						
Name of Asset	Particulars	Cost as on cut-off date pertaining to transmission line and substation	Initial spares claimed	Ceiling limits as per Regulation 8 2009Tariff Regulation	Initial Spares worked out	Excess initial spares claimed
		(a)	(b)	(c)	(d)= {(a)- (b)}*(c)/(100%- (c)	(e)= (b)-(d)
<b>Asset -I</b>	Sub Station (inclusive of PLCC)	305.08	20.72	2.50%	7.29	<b>13.43</b>
<b>Asset-II</b>	Sub Station (inclusive of PLCC)	515.04	26.73	2.50%	12.52	<b>14.21</b>
<b>Asset-III</b>	Sub Station (inclusive of PLCC)	2063.10	55.64	2.50%	51.47	<b>4.17</b>
	Transmission Line	7032.48	208.71	0.75%	51.57	<b>157.14</b>

All the elements in the transmission project are not completed. Initial spares will be reviewed at the time of completion of entire transmission project and filing of the tariff petition for the last element or at the time of truing up, whichever is earlier.

13. The petitioner has claimed initial spares in excess of the norms specified in the 2009 Tariff Regulations. The respondent, BRPL in its reply, vide affidavit dated 20.4.12, has requested to allow initial spares element wise in accordance with the norms specified in the 2009 Tariff Regulations. It is clarified that the initial spares are allowed as per the norms specified in the 2009 Tariff Regulations.

14. Details of capital cost as on date of commercial operation considered for the purpose of tariff calculation are mentioned below:-

(` in lakh)

Name of the Asset	Capital cost claimed	Initial spares deducted	Capital cost admitted
Asset-I	204.57	13.43	191.14
Asset-II	394.25	14.21	380.04
Asset-III	8097.64	161.31	7936.33
Asset-IV	2281.48	-	2281.48
Combined Asset-IV & V	5255.37	-	5255.37

The tariff for Asset-I, Asset-II & Asset-III will be applicable from the date of commercial operation to 31.3.2014. Tariff for Asset-IV has been computed for the year 2010-11 on pro-rata basis for one month, i.e. October 2010. Tariff for Combined Assets-IV & V will be applicable from 1.11.2010 to 31.3.2014 period.

### **PROJECTED ADDITIONAL CAPITAL EXPENDITURE**

15. As regards additional capital expenditure, Regulation 9(1) of the 2009 Tariff Regulations provides as under:-

*“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) XXX
- (iii) XXX
- (iv) XXX
- (v) XXX”

16. As per 2009 Tariff Regulations-

*“cut-off date means 31<sup>st</sup> march of the year closing after 2 years of the year of commercial operation of the project, and incase of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31<sup>st</sup> 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.

17. Details of proposed additional capital expenditure for all the assets are as under:-

(` in lakh)

<b>Asset-I</b>			
<b>Year</b>	<b>Work/Equipment proposed to be added after COD upto cut-off date / beyond cut-off date</b>	<b>Amount capitalized and proposed to be capitalized</b>	<b>Justification as per purpose</b>
2010-11	Substation	57.80	Balance & retention payments
	PLCC	2.71	
	<b>Total</b>	<b>60.51</b>	
2011-12	Substation	<b>30.00</b>	Balance & retention payments
2012-13	Substation	<b>10.00</b>	
<b>Asset-II</b>			
<b>Year</b>	<b>Work/Equipment proposed to be added after COD upto cut-off date / beyond cutoff date</b>	<b>Amount capitalized and proposed to be capitalized</b>	<b>Justification as per purpose</b>
2010-11	Substation	118.06	Balance & retention payments
	PLCC	2.73	
	<b>Total</b>	<b>120.79</b>	
<b>Asset-III</b>			
<b>Year</b>	<b>Work/Equipment proposed to be added after COD upto cut-off date / beyond cutoff date</b>	<b>Amount capitalized and proposed to be capitalized</b>	<b>Justification as per purpose</b>
2010-11	Building & Other Civil Works	38.19	Balance & retention payments
	Transmission Line	397.73	
	Sub-Station Equipments.	205.84	
	PLCC	7.04	
	<b>Total</b>	<b>648.80</b>	
2011-12	Building & Other Civil Works	35.32	Balance & retention payments
	Transmission Line	367.81	
	Sub-Station Equipments.	190.36	
	PLCC	6.51	
	<b>Total</b>	<b>600.00</b>	
2012-13	Building & Other Civil Works	1.18	Balance & retention payments
	Transmission Line	12.26	
	Sub-Station Equipments.	6.35	
	PLCC	0.21	
	<b>Total</b>	<b>20.00</b>	

(` in lakh)

<b>Asset-IV</b>			
2010-11	Building & Other Civil Works	101.53	Balance & retention payments
	Transmission Line	0.00	
	Sub-Station Equipments.	427.83	
	PLCC	1.91	
	<b>Total</b>	<b>531.27</b>	

(` in lakh)

<b>Combined Asset IV&amp;V</b>			
2010-11	Building & Other Civil Works	131.78	Balance & retention payments
	Sub-Station Equipments.	490.25	
	PLCC	2.77	
	<b>Total</b>	<b>624.80</b>	
2011-12	Building & Other Civil Works	220.98	Balance & retention payments
	Sub-Station Equipments.	802.78	
	PLCC	4.65	
	<b>Total</b>	<b>1028.41</b>	
2012-13	Building & Other Civil Works	9.27	Balance & retention payments
	Sub-Station Equipments.	34.55	
	PLCC	0.18	
	<b>Total</b>	<b>44.00</b>	

18. Projected additional capital expenditure is mainly on account of Balance & Retention Payments and falls within the cut-off date. Hence, the same has been considered for the purpose of tariff calculation.

### **DEBT- EQUITY RATIO**

19. 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.

(2) XXX.

20. Details of the debt-equity in respect of transmission assets considered for the purpose of tariff calculation as on 31.3.2009 are given hereunder:-

(` in lakh)

<b>Asset-I</b>				
<b>Particulars</b>	<b>Approved</b>		<b>Cost as on date of commercial operation</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	431.25	70.00	133.80	70.00
Equity	184.82	30.00	57.34	30.00
<b>Total</b>	<b>616.07</b>	<b>100.00</b>	<b>191.14</b>	<b>100.00</b>

(` in lakh)

<b>Asset-II</b>				
<b>Particulars</b>	<b>Approved</b>		<b>Cost as on date of commercial operation</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	367.23	70.00	266.03	70.00
Equity	157.38	30.00	114.01	30.00
<b>Total</b>	<b>524.61</b>	<b>100.00</b>	<b>380.04</b>	<b>100.00</b>

(` in lakh)

<b>Asset-III</b>				
<b>Particulars</b>	<b>Approved</b>		<b>Cost as on date of commercial operation</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	9505.36	70.00	5555.43	70.00
Equity	4073.72	30.00	2380.90	30.00
<b>Total</b>	<b>13579.08</b>	<b>100.00</b>	<b>7936.33</b>	<b>100.00</b>

(` in lakh)

<b>Asset-IV</b>				
<b>Particulars</b>	<b>Approved</b>		<b>Cost as on date of commercial operation</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	3032.55	70.00	1597.04	70.00
Equity	1299.67	30.00	684.44	30.00
<b>Total</b>	<b>4332.22</b>	<b>100.00</b>	<b>2281.48</b>	<b>100.00</b>

(` in lakh)

<b>Combined Asset-IV &amp; V</b>				
<b>Particulars</b>	<b>Approved</b>		<b>Cost as on date of commercial operation</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	6065.11	70.00	3678.76	70.00
Equity	2599.33	30.00	1576.61	30.00
<b>Total</b>	<b>8664.44</b>	<b>100.00</b>	<b>5255.37</b>	<b>100.00</b>

21. The details of debt-equity as on 31.3.2014 are as under:-

(` in lakh)

<b>Asset-I</b>		
<b>Particulars</b>	<b>As on 31.3.2014</b>	
	<b>Amount</b>	<b>%</b>
Debt	204.16	70.00
Equity	87.49	30.00
<b>Total</b>	<b>291.65</b>	<b>100.00</b>

(` in lakh)

<b>Asset-II</b>		
<b>Particulars</b>	<b>As on 31.3.2014</b>	
	<b>Amount</b>	<b>%</b>
Debt	350.59	70.00
Equity	150.24	30.00
<b>Total</b>	<b>500.83</b>	<b>100.00</b>

(` in lakh)

<b>Asset-III</b>		
<b>Particulars</b>	<b>As on 31.3.2014</b>	
	<b>Amount</b>	<b>%</b>
Debt	6443.59	70.00
Equity	2761.54	30.00
<b>Total</b>	<b>9205.13</b>	<b>100.00</b>



(` in lakh)

<b>Combined Asset-IV &amp; V</b>		
<b>Particulars</b>	<b>As on 31.3.2014</b>	
	<b>Amount</b>	<b>%</b>
Debt	4866.81	70.00
Equity	2085.77	30.00
<b>Total</b>	<b>6952.58</b>	<b>100.00</b>

22. Details of debt-equity of projected additional capital expenditure are as under:-

(` in lakh)

<b>Asset-I</b>		
<b>Normative Loan</b>		
<b>Add cap for 2010-2011</b>		
	<b>Amount</b>	<b>%</b>
Debt	42.36	70.00
Equity	18.15	30.00
<b>Total</b>	<b>60.51</b>	<b>100.00</b>
<b>Add cap for 2011-2012</b>		
	<b>Amount</b>	<b>%</b>
Debt	21.00	70.00
Equity	9.00	30.00
<b>Total</b>	<b>30.00</b>	<b>100.00</b>
<b>Add cap for 2011-2012</b>		
	<b>Amount</b>	<b>%</b>
Debt	7.00	70.00
Equity	3.00	30.00
<b>Total</b>	<b>10.00</b>	<b>100.00</b>

(` in lakh)

<b>Asset-II</b>		
<b>Normative Loan</b>		
<b>Add cap for 2011-2012</b>		
	<b>Amount</b>	<b>%</b>
Debt	84.55	70.00
Equity	36.24	30.00
<b>Total</b>	<b>120.79</b>	<b>100.00</b>

(` in lakh)

<b>Asset-III</b>		
<b>Normative Loan</b>		
<b>Add cap for 2010-2011</b>		
	<b>Amount</b>	<b>%</b>
Debt	454.16	70.00



Equity	194.64	30.00
<b>Total</b>	<b>648.80</b>	<b>100.00</b>
<b>Add cap for 2011-2012</b>		
	<b>Amount</b>	<b>%</b>
Debt	420.00	70.00
Equity	180.00	30.00
<b>Total</b>	<b>600.00</b>	<b>100.00</b>
<b>Add cap for 2011-2012</b>		
	<b>Amount</b>	<b>%</b>
Debt	14.00	70.00
Equity	6.00	30.00
<b>Total</b>	<b>20.00</b>	<b>100.00</b>

(` in lakh)

<b>Asset-IV</b>		
<b>Normative Loan</b>		
<b>Add cap for 2010-2011</b>		
	<b>Amount</b>	<b>%</b>
Debt	371.89	70.00
Equity	159.38	30.00
<b>Total</b>	<b>531.27</b>	<b>100.00</b>

(` in lakh)

<b>Combined Asset-IV &amp; V</b>		
<b>Normative Loan</b>		
<b>Add cap for 2010-2011</b>		
	<b>Amount</b>	<b>%</b>
Debt	437.36	70.00
Equity	187.44	30.00
<b>Total</b>	<b>624.80</b>	<b>100.00</b>
<b>Add cap for 2011-2012</b>		
	<b>Amount</b>	<b>%</b>
Debt	719.89	70.00
Equity	308.52	30.00
<b>Total</b>	<b>1028.41</b>	<b>100.00</b>
<b>Add cap for 2011-2012</b>		
	<b>Amount</b>	<b>%</b>
Debt	30.80	70.00
Equity	13.20	30.00
<b>Total</b>	<b>44.00</b>	<b>100.00</b>

## RETURN ON EQUITY

23. 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"*

24. The petitioner has claimed additional ROE of 0.5 % for Asset-I i.e. 2 nos. bays at Nalagarh Extension, which was commissioned on 1.7.2010. The petitioner has mentioned that as per Appendix-II of 2009 Tariff Regulations, in case a scheme having combination of the projects, the qualifying time schedule of the activity having maximum time period shall be considered for the scheme as a whole. The timeline for Bahadurgarh-Sonepat 400 kV D/C (triple conductor) transmission line is 30 months. Accordingly, the timeline of 30 months has been considered for all the assets commissioned. The 2 no. bays at Nalagarh have been commissioned on 1.7.2010 and it

is within the qualifying time schedule of 30 months from the date of investment approval i.e. 26.2.2008 and hence additional return on equity of 0.5% has been claimed.

25. The respondents, BRPL in its reply, vide affidavit dated 23.4.2012 and UPPCL in its reply, vide affidavit dated 20.4.2012, have submitted that additional return on equity claimed by the petitioner is not admissible as all the assets under the project were not commissioned within the qualifying time period.

26. For qualifying for grant of additional return on equity under first proviso to Regulation 15(2) of 2009 Tariff Regulations, all the elements of the transmission systems are to be completed within the time schedule specified in Appendix II of the said Regulations. This view has been upheld by the ATE in its judgment dated 10.5.2012 in Appeal No. 155/2011. In this case, all the elements were required to be commissioned within 30 months from the date of investment approval i.e. by 26.8.2010. Asset V of the transmission system has been commissioned on 1.11.2011, which is beyond the schedule date of commercial operation of 26.8.2010. Accordingly, additional return on equity has not been allowed for the transmission system.

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

(` in lakh)

<b>Asset-I</b>				
<b>Particulars</b>	<b>2010-11 (pro-rata for 9 months)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening Equity	57.34	75.49	84.49	87.49
Addition due to additional capital expenditure	18.15	9.00	3.00	0.00
Closing Equity	75.49	84.49	87.49	87.49
Average Equity	66.42	79.99	85.99	87.49
Return on Equity (Base Rate )	<b>15.50%</b>	<b>15.50%</b>	<b>15.50%</b>	<b>15.50%</b>
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%
<b>Return on Equity (Pre Tax)</b>	<b>8.71</b>	<b>13.98</b>	<b>15.03</b>	<b>15.29</b>

(` in lakh)

<b>Asset-II</b>				
<b>Particulars</b>	<b>2010-11 (pro-rata for 6 months)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening Equity	114.01	150.24	150.24	150.24
Addition due to additional capital expenditure	36.24	0.00	0.00	0.00
Closing Equity	150.24	150.24	150.24	150.24
Average Equity	132.13	150.24	150.24	150.24
Return on Equity (Base Rate )	<b>15.50%</b>	<b>15.50%</b>	<b>15.50%</b>	<b>15.50%</b>
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%
<b>Return on Equity (Pre Tax)</b>	<b>11.55</b>	<b>26.26</b>	<b>26.26</b>	<b>26.26</b>

(` in lakh)

<b>Asset-III</b>				
<b>Particulars</b>	<b>2010-11 (pro-rata for 6 months)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening Equity	2380.90	2575.54	2755.54	2761.54
Addition due to additional capital expenditure	194.64	180.00	6.00	0.00
Closing Equity	2575.54	2755.54	2761.54	2761.54
Average Equity	2478.22	2665.54	2758.54	2761.54
Return on Equity (Base Rate )	<b>15.50%</b>	<b>15.50%</b>	<b>15.50%</b>	<b>15.50%</b>
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%
<b>Return on Equity (Pre Tax)</b>	<b>216.61</b>	<b>465.96</b>	<b>482.22</b>	<b>482.74</b>



(` in lakh)

Asset-IV	
Particulars	2010-11 (pro-rata for 6 months)
Opening Equity	684.44
Addition due to additional capital expenditure	159.38
Closing Equity	843.83
Average Equity	764.13
Return on Equity (Base Rate )	<b>15.50%</b>
Tax rate for the year 2008-09 (MAT)	11.33%
Rate of Return on Equity (Pre Tax )	17.481%
<b>Return on Equity (Pre Tax)</b>	<b>66.79</b>

(` in lakh)

Asset-IV & V				
Particulars	2010-11 (pro-rata for 5 months)	2011-12	2012-13	2013-14
Opening Equity	1576.61	1764.05	2072.57	2085.77
Addition due to additional Capital expenditure	187.44	308.52	13.20	0.00
Closing Equity	1764.05	2072.57	2085.77	2085.77
Average Equity	1670.33	1918.31	2079.17	2085.77
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%
<b>Return on Equity (Pre Tax)</b>	<b>121.66</b>	<b>335.34</b>	<b>363.46</b>	<b>364.61</b>

## **INTEREST ON LOAN**

28. 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."*

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

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

- (iii) 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
- (iv) 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.

30. 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 rate of interest subsequent to 1.4.2009/date of commercial operation will be considered at the time of truing up.

31. Repayment of normative loan of ₹9.85 lakh for Asset IV for the month of October 2010 has been considered cumulative repayment of normative loan for Combined Assets IV and V as on the date of notional date of commercial operation i.e. 1.11.2010.

32. Detailed calculations of the weighted revised average rate of interest are given in Annexure-I, Annexure-II, Annexure-III, Annexure-IV and Annexure-V to this order.

33. Details of the interest on loan worked on the above basis are given overleaf:-

(` in lakh)

Asset-I				
Particulars	2010-11 (pro-rata for 9 months)	2011-12	2012-13	2013-14
Gross Normative Loan	133.80	176.16	197.16	204.16
Cumulative Repayment upto Previous Year	0.00	8.83	23.00	38.23
Net Loan-Opening	133.80	167.33	174.16	165.93
Addition due to Additional Capital expenditure	42.36	21.00	7.00	0.00
Repayment during the year	8.83	14.17	15.23	15.49
Net Loan-Closing	167.33	174.16	165.93	150.43
Average Loan	150.56	170.74	170.04	158.18
Weighted Average Rate of Interest on Loan	9.3300%	9.3300%	9.3300%	9.3300%
Interest	<b>10.54</b>	<b>15.93</b>	<b>15.86</b>	<b>14.76</b>

(` in lakh)

Asset-II				
Particulars	2010-11 (pro-rata for 6 months)	2011-12	2012-13	2013-14
Gross Normative Loan	266.03	350.59	350.59	350.59
Cumulative Repayment upto Previous Year	0.00	11.73	38.40	65.07
Net Loan-Opening	266.03	338.85	312.19	285.52
Addition due to Additional Capital expenditure	84.55	0.00	0.00	0.00
Repayment during the year	11.73	26.67	26.67	26.67
Net Loan-Closing	338.85	312.19	285.52	258.85
Average Loan	302.44	325.52	298.85	272.18
Weighted Average Rate of Interest on Loan	8.9660%	8.9660%	8.9622%	8.9569%
Interest	<b>13.56</b>	<b>29.19</b>	<b>26.78</b>	<b>24.38</b>

(` in lakh)

Asset-III				
Particulars	2010-11 (pro-rata for 6 months)	2011-12	2012-13	2013-14
Gross Normative Loan	5555.43	6009.59	6429.59	6443.59
Cumulative Repayment upto Previous Year	0.00	214.62	676.20	1153.82
Net Loan-Opening	5555.43	5794.97	5753.39	5289.77
Addition due to Additional Capital expenditure	454.16	420.00	14.00	0.00
Repayment during the year	214.62	461.57	477.62	478.14
Net Loan-Closing	5794.97	5753.39	5289.77	4811.63
Average Loan	5675.20	5774.18	5521.58	5050.70
Weighted Average Rate of Interest on Loan	8.9358%	8.9358%	8.9330%	8.9299%
Interest	<b>253.56</b>	<b>515.97</b>	<b>493.24</b>	<b>451.02</b>



( ` in lakh)

<b>Asset-IV</b>	
<b>Particulars</b>	<b>2010-11 (pro-rata for 6 months)</b>
Gross Normative Loan	1597.04
Cumulative Repayment upto Previous Year	0.00
Net Loan-Opening	1597.04
Addition due to Additional Capital expenditure	371.89
Repayment during the year	59.12
Net Loan-Closing	1909.80
Average Loan	1753.42
Weighted Average Rate of Interest on Loan	8.9339%
Interest	<b>78.32</b>

( ` in lakh)

<b>Asset-IV &amp; V</b>				
<b>Particulars</b>	<b>2010-11 (pro-rata for 5 months)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Gross Normative Loan	3678.76	4116.12	4836.01	4866.81
Cumulative Repayment upto Previous Year	9.85	115.84	410.48	731.21
Net Loan-Opening	3668.90	4000.28	4425.53	4135.59
Addition due to additional capital expenditure	437.36	719.89	30.80	0.00
Repayment during the year	105.99	294.63	320.74	321.81
Net Loan-Closing	4000.28	4425.53	4135.59	3813.78
Average Loan	3834.59	4212.90	4280.56	3974.69
Weighted Average Rate of Interest on Loan	8.8657%	8.8657%	8.8618%	8.8544%
Interest	<b>141.65</b>	<b>373.50</b>	<b>379.33</b>	<b>351.93</b>

## **DEPRECIATION**

34. 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".*



35. The actual date of commercial operation of Asset was 1.7.2010 and Asset II and Asset III was 1.10.2010. The notional date of commercial operation of Combined Assets IV and V was 1.11.2010. Accordingly, the assets would complete 12 years beyond 2013-14 and thus depreciation has been calculated annually based on the Straight Line Method.

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

( in lakh)

<b>Asset-I</b>				
<b>Particulars</b>	<b>2010-11 (pro-rata for 9 months)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening Gross Block	191.14	251.65	281.65	291.65
Addition during 2009-14 due to projected additional capital expenditure	60.51	30.00	10.00	0.00
Closing Gross Block	251.65	281.65	291.65	291.65
<b>Average Gross Block</b>	<b>221.40</b>	<b>266.65</b>	<b>286.65</b>	<b>291.65</b>
Rate of Depreciation	5.3160%	5.3152%	5.3128%	5.3122%
Depreciable Value	199.26	239.99	257.99	262.49
Remaining Depreciable Value	199.26	231.16	234.99	224.26
<b>Depreciation</b>	<b>8.83</b>	<b>14.17</b>	<b>15.23</b>	<b>15.49</b>

( in lakh)

<b>Asset-II</b>				
<b>Particulars</b>	<b>2010-11 (pro-rata for 6 months)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening Gross Block	380.04	500.83	500.83	500.83
Addition during 2009-14 due to projected additional capital expenditure	120.79	0.00	0.00	0.00
Closing Gross Block	500.83	500.83	500.83	500.83
<b>Average Gross Block</b>	<b>440.44</b>	<b>500.83</b>	<b>500.83</b>	<b>500.83</b>
Rate of Depreciation	5.3276%	5.3247%	5.3247%	5.3247%
Depreciable Value	396.39	450.75	450.75	450.75
Remaining Depreciable Value	396.39	439.02	412.35	385.68
<b>Depreciation</b>	<b>11.73</b>	<b>26.67</b>	<b>26.67</b>	<b>26.67</b>

(` in lakh)

<b>Asset-III</b>				
<b>Particulars</b>	<b>2010-11 (pro-rata for 6 months)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening Gross Block	7936.33	8585.13	9185.13	9205.13
Addition during 2009-14 due to projected additional capital expenditure	648.80	600.00	20.00	0.00
Closing Gross Block	8585.13	9185.13	9205.13	9205.13
<b>Average Gross Block</b>	<b>8260.73</b>	<b>8885.13</b>	<b>9195.13</b>	<b>9205.13</b>
Rate of Depreciation	5.1962%	5.1949%	5.1943%	5.1943%
Depreciable Value	7328.84	7890.80	8169.80	8178.80
Remaining Depreciable Value	7328.84	7676.18	7493.61	7024.98
<b>Depreciation</b>	<b>214.62</b>	<b>461.57</b>	<b>477.62</b>	<b>478.14</b>

(` in lakh)

<b>Combined Asset-IV</b>	
<b>Particulars</b>	<b>2010-11 (pro-rata for 6 months)</b>
Opening Gross Block	2281.48
Addition during 2009-14 due to projected additional capital expenditure	531.27
Closing Gross Block	2812.75
<b>Average Gross Block</b>	<b>2547.12</b>
Rate of Depreciation	4.6424%
Depreciable Value	2080.79
Remaining Depreciable Value	2080.79
<b>Depreciation</b>	<b>59.12</b>

(` in lakh)

<b>Combined Asset-IV&amp;V</b>				
<b>Particulars</b>	<b>2010-11 (pro-rata for 5 months)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Opening Gross Block	5255.37	5880.17	6908.58	6952.58
Addition during 2009-14 due to projected additional capital expenditure	624.80	1028.41	44.00	0.00
Closing Gross Block	5880.17	6908.58	6952.58	6952.58
<b>Average Gross Block</b>	<b>5567.77</b>	<b>6394.38</b>	<b>6930.58</b>	<b>6952.58</b>



Rate of Depreciation	4.5686%	4.6077%	4.6279%	4.6286%
Depreciable Value	4481.95	5225.89	5708.48	5728.28
Remaining Depreciable Value	4472.09	5110.05	5298.00	4997.06
<b>Depreciation</b>	<b>105.99</b>	<b>294.63</b>	<b>320.74</b>	<b>321.81</b>

### **OPERATION & MAINTENANCE EXPENSES**

37. The petitioner has submitted that the O&M expenditure for 2009-14 tariff block had 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%. PSPCL and UPPCL have submitted that O&M expenses should be allowed only as per 2009 Tariff Regulations. BRPL has submitted that the petitioner should take care of the wage revision by improving the productivity level.

38. It is clarified that, if any, application for revision of norms of O&M expenditure is filed by the petitioner in future, it will be dealt with in accordance with law. It is further clarified that in the instant petition the O&M expenses are allowed as per the existing norms.

39. Clause (g) of Regulation 19 of the 2009 Tariff regulations prescribes the norms for operation and maintenance expenses based on the type of sub-station and transmission line. Norms prescribed in respect of asset in instant petition are given overleaf:-

Element	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	43.34	45.82

40. As per the above mentioned norms the allowable O & M expenses for the assets covered in the petition works out are as under:-

(` in lakh)

Asset-I	2009-10	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
2 Nos. 220 kV bays	---	58.17	82.00	86.68	91.64
<b>Total O&amp;M (Asset-I)</b>	---	<b>58.17</b>	<b>82.00</b>	<b>86.68</b>	<b>91.64</b>

(` in lakh)

Asset-II	2009-10	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
2 Nos. 220 kV bays	---	38.78	82.00	86.68	91.64
<b>Total O&amp;M (Asset-II)</b>	---	<b>38.78</b>	<b>82.00</b>	<b>86.68</b>	<b>91.64</b>

(` in lakh)

Asset-III	2009-10	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
53.4 kms. 400 kV D/C (triple conductor) T/Line	---	17.70	37.43	39.57	41.81
4 Nos. 400 kV bays	---	110.80	234.28	247.68	261.84
<b>Total O&amp;M (Asset-III)</b>	---	<b>128.50</b>	<b>271.71</b>	<b>287.25</b>	<b>303.65</b>

(` in lakh)

Asset-IV	2009-10	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
1 No. 400 kV bay	---	27.70	58.57	61.92	65.46
3 Nos. 220 kV bays	---	58.17	123.00	130.02	137.46
<b>Total O&amp;M (Asset-IV)</b>	---	<b>85.87</b>	<b>181.57</b>	<b>191.94</b>	<b>202.92</b>



(` in lakh)

Asset-V	2009-10	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
1 No. 400 kV	-	23.08	58.57	61.92	65.46
5 Nos. 220 kV bays	---	80.79	205.00	216.70	229.10
<b>Total O&amp;M (Asset-V)</b>	---	<b>103.88</b>	<b>263.57</b>	<b>278.62</b>	<b>294.56</b>

(` in lakh)

<b>Total O&amp;M (Asset-I+II+III+IV+V)</b>	---	<b>415.20</b>	<b>880.85</b>	<b>931.17</b>	<b>984.41</b>
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### INTEREST ON WORKING CAPITAL

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

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

**(iii) O & M expenses:** Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month as a



component of working capital. The petitioner has claimed O&M expenses for one month of the respective year. This has been considered in the working capital.

**(iv) Rate of interest on working capital:** In accordance with the 2009 Tariff Regulations, the SBI Base Rate (7.50%) Plus 350 Bps i.e. 11.00% has been considered as the rate of interest on working capital.

42. Necessary computations in support of interest on working capital are appended overleaf:-

(` in lakh)

Asset-I	2010- 11 (pro-rata for 9 months)	2011-12	2012-13	2013-14
Maintenance Spares	11.63	12.30	13.00	13.75
O & M expenses	6.46	6.83	7.22	7.64
Receivables	19.86	21.76	22.93	23.69
<b>Total</b>	<b>37.96</b>	<b>40.90</b>	<b>43.15</b>	<b>45.07</b>
Interest	<b>3.13</b>	<b>4.50</b>	<b>4.75</b>	<b>4.96</b>

(` in lakh)

Asset-II	2010- 11 (pro-rata for 6 months)	2011-12	2012-13	2013-14
Maintenance Spares	11.63	12.30	13.00	13.75
O & M expenses	6.46	6.83	7.22	7.64
Receivables	26.02	28.22	28.63	29.08
<b>Total</b>	<b>44.11</b>	<b>47.35</b>	<b>48.85</b>	<b>50.47</b>
Interest	<b>2.43</b>	<b>5.21</b>	<b>5.37</b>	<b>5.55</b>

(` in lakh)

Asset-III	2010- 11 (pro-rata for 6 months)	2011-12	2012-13	2013-14
Maintenance Spares	38.55	40.76	43.09	45.55
O & M expenses	21.42	22.64	23.94	25.30
Receivables	277.28	292.39	296.72	292.59
<b>Total</b>	<b>337.25</b>	<b>355.79</b>	<b>363.75</b>	<b>363.44</b>
Interest	<b>18.55</b>	<b>39.14</b>	<b>40.01</b>	<b>39.98</b>

( ` in lakh)

Asset-IV	2010- 11 (pro-rata for 6 months)
Maintenance Spares	25.76
O & M expenses	14.31
Receivables	99.26
<b>Total</b>	<b>139.33</b>
Interest	<b>7.66</b>

( ` in lakh)

Combined Asset-IV&V	2010- 11 (pro-rata for 5 months)	2011-12	2012-13	2013-14
Maintenance Spares	63.15	66.77	70.58	74.62
O & M expenses	35.09	37.10	39.21	41.46
Receivables	223.80	247.88	262.51	262.92
<b>Total</b>	<b>322.04</b>	<b>351.75</b>	<b>372.30</b>	<b>379.00</b>
Interest	<b>14.76</b>	<b>38.69</b>	<b>40.95</b>	<b>41.69</b>

### TRANSMISSION CHARGES

43. The transmission charges being allowed for the transmission lines are summarized below:-

( ` in lakh)

Asset-I				
Particulars	2010-11 (pro-rata for 9 months)	2011-12	2012-13	2013-14
Depreciation	8.83	14.17	15.23	15.49
Interest on Loan	10.54	15.93	15.86	14.76
Return on equity	8.71	13.98	15.03	15.29
Interest on Working Capital	3.13	4.50	4.75	4.96
O & M Expenses	58.17	82.00	86.68	91.64
<b>Total</b>	<b>89.37</b>	<b>130.59</b>	<b>137.55</b>	<b>142.14</b>

( ` in lakh)

Asset-II				
Particulars	2010-11 (pro-rata for 6 months)	2011-12	2012-13	2013-14
Depreciation	11.73	26.67	26.67	26.67
Interest on Loan	13.56	29.19	26.78	24.38
Return on equity	11.55	26.26	26.26	26.26
Interest on Working Capital	2.43	5.21	5.37	5.55
O & M Expenses	38.78	82.00	86.68	91.64

<b>Total</b>	<b>78.05</b>	<b>169.33</b>	<b>171.77</b>	<b>174.50</b>
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(` in lakh)

<b>Asset-III</b>				
<b>Particulars</b>	<b>2010-11 (pro-rata for 6 months)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Depreciation	214.62	461.57	477.62	478.14
Interest on Loan	253.56	515.97	493.24	451.02
Return on equity	216.61	465.96	482.22	482.74
Interest on Working Capital	18.55	39.14	40.01	39.98
O & M Expenses	128.50	271.71	287.25	303.65
<b>Total</b>	<b>831.84</b>	<b>1754.35</b>	<b>1780.35</b>	<b>1755.54</b>

(` in lakh)

<b>Asset-IV</b>		
<b>Particulars</b>	<b>2010-11 (pro-rata for 6 months)</b>	<b>For the month of October 2010</b>
Depreciation	59.12	9.85
Interest on Loan	78.32	13.05
Return on equity	66.79	11.13
Interest on Working Capital	7.66	1.28
O & M Expenses	85.87	14.31
<b>Total</b>	<b>297.77</b>	<b>49.63</b>

(` in lakh)

<b>Combined Asset- IV &amp; V</b>				
<b>Particulars</b>	<b>2010-11 (pro-rata for 5 months)</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Depreciation	105.99	294.63	320.74	321.81
Interest on Loan	141.65	373.50	379.33	351.93
Return on equity	121.66	335.34	363.46	364.61
Interest on Working Capital	14.76	38.69	40.95	41.69
O & M Expenses	175.43	445.14	470.56	497.48
<b>Total</b>	<b>559.49</b>	<b>1487.31</b>	<b>1575.05</b>	<b>1577.53</b>

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

44. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that the petitioner's request for filing fee and



publication expenses should be rejected in line with the Commission's order of 11.9.2008 in Petition No. 129/2005. UPPCL has submitted that the filing fee shall be governed as per the Commission's order. It is clarified that Petition No. 129/2005 pertains to the 2004-09 tariff block. 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**

45. 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 hence the license fee may be allowed to be recovered separately from the respondents.

46. 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. BRPL has submitted that the licence fee is part of the O&M expenses and there is no provision for reimbursement of licence fee in the 2009 Tariff Regulations and hence the petitioner's request should be rejected. 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**

47. The petitioner has made a prayer 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. BRPL has also submitted that the petitioner's request for recovery of licence fee from the beneficiaries must be rejected. We consider the prayer of the petitioner pre-mature and accordingly this prayer is rejected.

### **SHARING OF TRANSMISSION CHARGES**

48. 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 provision of Central Electricity Regulatory Commission (sharing of inter-state transmission charges and losses) Regulations, 2010 as amended.

49. This order disposes of Petition No. 342/2010.

Sd/-  
**(M. Deena Dayalan)**  
**Member**

Sd/-  
**(V.S. Verma)**  
**Member**

Sd/-  
**(S. Jayaraman)**  
**Member**

Sd/-  
**(Dr. Pramod Deo)**  
**Chairperson**



## Annexure-I

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOANFOR Asset-I</b>					
(₹ in lakh)					
	<b>Details of Loan</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>
<b>1</b>	<b>Bond XXVIII</b>				
	Gross loan opening	<b>143.20</b>	<b>143.20</b>	<b>143.20</b>	<b>143.20</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>11.93</b>
	Net Loan-Opening	143.20	143.20	143.20	131.27
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	11.93	11.93
	Net Loan-Closing	143.20	143.20	131.27	119.33
	Average Loan	143.20	143.20	137.23	125.30
	Rate of Interest	9.33%	9.33%	9.33%	9.33%
	Interest	13.36	13.36	12.80	11.69
	Rep Schedule	12 annual installments from 15.12.2012			
	<b>Total Loan</b>				
	Gross loan opening	<b>143.20</b>	<b>143.20</b>	<b>143.20</b>	<b>143.20</b>
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	11.93
	Net Loan-Opening	143.20	143.20	143.20	131.27
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	11.93	11.93
	Net Loan-Closing	143.20	143.20	131.27	119.33
	Average Loan	143.20	143.20	137.23	125.30
	Rate of Interest	<b>9.3300%</b>	<b>9.3300%</b>	<b>9.3300%</b>	<b>9.3300%</b>
	<b>Interest</b>	13.36	13.36	12.80	11.69

**Annexure-II**

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR</b>					
<b>Asset-II</b>					
(₹ in lakh)					
	<b>Details of Loan</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>
<b>1</b>	<b>Bond XXVIII</b>				
	Gross loan opening	<b>15.00</b>	<b>15.00</b>	<b>15.00</b>	<b>15.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.25</b>
	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 installments from 15.12.2012			
<b>2</b>	<b>Bond XXIX</b>				
	Gross loan opening	<b>83.00</b>	<b>83.00</b>	<b>83.00</b>	<b>83.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6.92</b>
	Net Loan-Opening	83.00	83.00	83.00	76.08
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	6.92	6.92
	Net Loan-Closing	83.00	83.00	76.08	69.17
	Average Loan	83.00	83.00	79.54	72.63
	Rate of Interest	9.20%	9.20%	9.20%	9.20%
	Interest	7.64	7.64	7.32	6.68
	Rep Schedule	12 annual installments from 12.3.2013			
<b>3</b>	<b>Bond XXX</b>				
	Gross loan opening	<b>82.00</b>	<b>82.00</b>	<b>82.00</b>	<b>82.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	82.00	82.00	82.00	82.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	6.83
	Net Loan-Closing	82.00	82.00	82.00	75.17
	Average Loan	82.00	82.00	82.00	78.58
	Rate of Interest	8.80%	8.80%	8.80%	8.80%
	Interest	7.22	7.22	7.22	6.92
	Rep Schedule	12 annual installments from 29.9.2013			
<b>4</b>	<b>Bond XXXI</b>				



	Gross loan opening	<b>77.00</b>	<b>77.00</b>	<b>77.00</b>	<b>77.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	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 installments from 25.02.2014			
<b>6</b>	<b>Bond XXXIII</b>				
	Gross loan opening	<b>18.98</b>	<b>18.98</b>	<b>18.98</b>	<b>18.98</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	18.98	18.98	18.98	18.98
	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	18.98	18.98	18.98	18.98
	Average Loan	18.98	18.98	18.98	18.98
	Rate of Interest	8.64%	8.64%	8.64%	8.64%
	Interest	1.64	1.64	1.64	1.64
	Rep Schedule	12 annual installments from 08.07.2014			
	<b>Total Loan</b>				
	Gross loan opening	<b>275.98</b>	<b>275.98</b>	<b>275.98</b>	<b>275.98</b>
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	8.17
	Net Loan-Opening	275.98	275.98	275.98	267.81
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	8.17	21.42
	Net Loan-Closing	275.98	275.98	267.81	246.40
	Average Loan	275.98	275.98	271.90	257.11
	Rate of Interest	<b>8.9660%</b>	<b>8.9660%</b>	<b>8.9622%</b>	<b>8.9569%</b>
	<b>Interest</b>	24.74	24.74	24.37	23.03



**Annexure-III**

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR</b>					
<b>Asset-III</b>					
(₹ in lakh)					
	<b>Details of Loan</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>
<b>1</b>	<b>Bond XXVIII</b>				
	Gross loan opening	<b>423.00</b>	<b>423.00</b>	<b>423.00</b>	<b>423.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>35.25</b>
	Net Loan-Opening	423.00	423.00	423.00	387.75
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	35.25	35.25
	Net Loan-Closing	423.00	423.00	387.75	352.50
	Average Loan	423.00	423.00	405.38	370.13
	Rate of Interest	9.33%	9.33%	9.33%	9.33%
	Interest	39.47	39.47	37.82	34.53
	Rep Schedule	12 annual installments from 15.12.2012			
<b>2</b>	<b>Bond XXIX</b>				
	Gross loan opening	<b>786.00</b>	<b>786.00</b>	<b>786.00</b>	<b>786.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>65.50</b>
	Net Loan-Opening	786.00	786.00	786.00	720.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	65.50	65.50
	Net Loan-Closing	786.00	786.00	720.50	655.00
	Average Loan	786.00	786.00	753.25	687.75
	Rate of Interest	9.20%	9.20%	9.20%	9.20%
	Interest	72.31	72.31	69.30	63.27
	Rep Schedule	12 annual installments from 12.03.2013			
<b>3</b>	<b>Bond XXX</b>				
	Gross loan opening	<b>2150.00</b>	<b>2150.00</b>	<b>2150.00</b>	<b>2150.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	2150.00	2150.00	2150.00	2150.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	179.17
	Net Loan-Closing	2150.00	2150.00	2150.00	1970.83
	Average Loan	2150.00	2150.00	2150.00	2060.42
	Rate of Interest	8.80%	8.80%	8.80%	8.80%
	Interest	189.20	189.20	189.20	181.32
	Rep Schedule	12 annual installments from 29.9.2013			



<b>4</b>	<b>Bond XXXI</b>				
	Gross loan opening	<b>2309.35</b>	<b>2309.35</b>	<b>2309.35</b>	<b>2309.35</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	2309.35	2309.35	2309.35	2309.35
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	192.45
	Net Loan-Closing	2309.35	2309.35	2309.35	2116.90
	Average Loan	2309.35	2309.35	2309.35	2213.13
	Rate of Interest	8.90%	8.90%	8.90%	8.90%
	Interest	205.53	205.53	205.53	196.97
	Rep Schedule	12 annual installments from 25.2.2014			
	<b>Total Loan</b>				
	Gross loan opening	<b>5668.35</b>	<b>5668.35</b>	<b>5668.35</b>	<b>5668.35</b>
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	100.75
	Net Loan-Opening	5668.35	5668.35	5668.35	5567.60
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	100.75	472.36
	Net Loan-Closing	5668.35	5668.35	5567.60	5095.24
	Average Loan	5668.35	5668.35	5617.98	5331.42
	Rate of Interest	<b>8.9358%</b>	<b>8.9358%</b>	<b>8.9330%</b>	<b>8.9299%</b>
	<b>Interest</b>	506.51	506.51	501.85	476.09



**Annexure-IV**

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR Asset-IV</b>		
		<b>(₹ in lakh)</b>
	<b>Details of Loan</b>	<b>2010-2011</b>
<b>1</b>	<b>Bond XXVIII</b>	
	Gross loan opening	<b>68.80</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>
	Net Loan-Opening	68.80
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	68.80
	Average Loan	68.80
	Rate of Interest	9.33%
	Interest	6.42
	Rep Schedule	12 annual installments from 15.12.2012
<b>2</b>	<b>Bond XXIX</b>	
	Gross loan opening	<b>673.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>
	Net Loan-Opening	673.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	673.00
	Average Loan	673.00
	Rate of Interest	9.20%
	Interest	61.92
	Rep Schedule	12 annual installments from 12.3.2013
<b>3</b>	<b>Bond XXX</b>	
	Gross loan opening	<b>200.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>
	Net Loan-Opening	200.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	200.00
	Average Loan	200.00
	Rate of Interest	8.80%
	Interest	17.60
	Rep Schedule	12 annual installments from



		29.09.2013
<b>4</b>	<b>Bond XXXI</b>	
	Gross loan opening	<b>50.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>
	Net Loan-Opening	50.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	50.00
	Average Loan	50.00
	Rate of Interest	8.90%
	Interest	4.45
	Rep Schedule	12 annual installments from 25.2.2014
<b>5</b>	<b>Bond XXXIII</b>	
	Gross loan opening	<b>605.20</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>
	Net Loan-Opening	605.20
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	605.20
	Average Loan	605.20
	Rate of Interest	8.64%
	Interest	52.29
	Rep Schedule	12 annual installments from 8.7.2014
	<b>Total Loan</b>	
	Gross loan opening	<b>1597.00</b>
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1597.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1597.00
	Average Loan	1597.00
	Rate of Interest	<b>8.9339%</b>
	<b>Interest</b>	142.67

## Annexure-V

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR Asset-IV&amp;V</b>					
(₹ in lakh)					
	<b>Details of Loan</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
<b>1</b>	<b>Bond XXVIII</b>				
	Gross loan opening	<b>168.80</b>	<b>168.80</b>	<b>168.80</b>	<b>168.80</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>14.07</b>
	Net Loan-Opening	168.80	168.80	168.80	154.73
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	14.07	14.07
	Net Loan-Closing	168.80	168.80	154.73	140.67
	Average Loan	168.80	168.80	161.77	147.70
	Rate of Interest	9.33%	9.33%	9.33%	9.33%
	Interest	15.75	15.75	15.09	13.78
	Rep Schedule	12 annual installments from 15.12.2012			
<b>2</b>	<b>Bond XXIX</b>				
	Gross loan opening	<b>773.00</b>	<b>773.00</b>	<b>773.00</b>	<b>773.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>64.42</b>
	Net Loan-Opening	773.00	773.00	773.00	708.58
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	64.42	64.42
	Net Loan-Closing	773.00	773.00	708.58	644.17
	Average Loan	773.00	773.00	740.79	676.38
	Rate of Interest	9.20%	9.20%	9.20%	9.20%
	Interest	71.12	71.12	68.15	62.23
	Rep Schedule	12 annual installments from 12.03.2013			
<b>3</b>	<b>Bond XXX</b>				
	Gross loan opening	<b>1155.00</b>	<b>1155.00</b>	<b>1155.00</b>	<b>1155.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	1155.00	1155.00	1155.00	1155.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	96.25
	Net Loan-Closing	1155.00	1155.00	1155.00	1058.75
	Average Loan	1155.00	1155.00	1155.00	1106.88
	Rate of Interest	8.80%	8.80%	8.80%	8.80%
	Interest	101.64	101.64	101.64	97.41
	Rep Schedule	12 annual installments from 29.09.2013			
<b>4</b>	<b>Bond XXXI</b>				



	Gross loan opening	<b>361.00</b>	<b>361.00</b>	<b>361.00</b>	<b>361.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	361.00	361.00	361.00	361.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	30.08
	Net Loan-Closing	361.00	361.00	361.00	330.92
	Average Loan	361.00	361.00	361.00	345.96
	Rate of Interest	8.90%	8.90%	8.90%	8.90%
	Interest	32.13	32.13	32.13	30.79
	Rep Schedule	12 annual installments from 25.02.2014			
<b>5</b>	<b>Bond XXXIII</b>				
	Gross loan opening	<b>1211.43</b>	<b>1211.43</b>	<b>1211.43</b>	<b>1211.43</b>
	Cumulative Repayment upto DOCO/previous year	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	1211.43	1211.43	1211.43	1211.43
	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	1211.43	1211.43	1211.43	1211.43
	Average Loan	1211.43	1211.43	1211.43	1211.43
	Rate of Interest	8.64%	8.64%	8.64%	8.64%
	Interest	104.67	104.67	104.67	104.67
	Rep Schedule	12 annual installments from 08.07.2014			
	<b>Total Loan</b>				
	Gross loan opening	<b>3669.23</b>	<b>3669.23</b>	<b>3669.23</b>	<b>3669.23</b>
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	78.48
	Net Loan-Opening	3669.23	3669.23	3669.23	3590.75
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	78.48	204.82
	Net Loan-Closing	3669.23	3669.23	3590.75	3385.93
	Average Loan	3669.23	3669.23	3629.99	3488.34
	Rate of Interest	<b>8.8657%</b>	<b>8.8657%</b>	<b>8.8618%</b>	<b>8.8544%</b>
	<b>Interest</b>	325.30	325.30	321.68	308.87

