

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 177/TT/2014**

**Coram:  
Shri A.K. Singhal, Member  
Shri A.S. Bakshi, Member**

**Date of Hearing: 26.02.2016  
Date of Order : 14 .03.2016**

**In the Matter of**

Approval under Regulation-86 of CERC (Conduct of Business) Regulations'1999, CERC (Terms and Conditions of Tariff) Regulations, 2009 and CERC (Terms and Conditions of Tariff) Regulations' 2014 for determination of (i) Truing up Transmission tariff for 2009-14 tariff block and (ii) Transmission tariff for 2014-19 tariff block for 132/220 kV Jalandhar-Hamirpur D/C transmission line along with associated bays in Northern Region

And in the Matter of

Power Grid Corporation of India Ltd,  
Registered office: B-9, Qutab Institutional Area,  
Katwaria Sarai, New Delhi. 110 016.  
Corporate Centre : 'SAUDAMINI', Plot No-2,  
Sector-29, Gurgaon-122 001 (Haryana).

**.....Petitioner**

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.  
Vidyut Bhawan, Vidyut Marg,  
Jaipur – 302 005.
2. Ajmer Vidyut Vitran Nigam Ltd.,  
400 kV GSS Building (Ground Floor),  
Ajmer Road, Heerapura, Jaipur
3. Jaipur Vidyut Vitran Nigam Ltd.  
400 kV GSS Building (Ground Floor),  
Ajmer Road, Heerapura, Jaipur



4. Jodhpur Vidyut Vitran Nigam Ltd.  
400 kV GSS Building (Ground Floor),  
Ajmer Road, Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan,  
Kumar House Complex Building II  
Shimla – 171 004
6. Punjab State Power Corporation Ltd.  
Thermal SHED TIA  
Near 22 PHATAK  
Patiala – 147 001
7. Haryana Power Purchase Centre  
Shakti Bhawan, Sector – 6  
Panchkula (Haryana) 134109
8. Power Development Deptt.  
Govt. of Jammu & Kashmir  
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Ltd.  
(Formerly Uttar Pradesh State Electricity Board)  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow – 226 001
10. Delhi Transco Ltd.  
Shakti Sadan, Kotla Road,  
New Delhi – 110 002
11. BSES Yamuna Power Ltd.  
BSES Bhawan, Nehru Place,  
New Delhi
12. BSES Rajdhani Power Ltd.  
BSES Bhawan, Nehru Place,  
New Delhi
13. Tata Power Delhi Distribution Ltd.  
33 kV Substation, Building,  
Hudson Lane, Kingsway Camp  
New Delhi – 110 009
14. Chandigarh Administration  
Sector – 9,  
Chandigarh



15. Uttarakhand Power Corporation Ltd.  
Urja Bhawan  
Kanwali Road, Dehradun

16. North Central Railway  
Allahabad (U.P.)

17. New Delhi Municipal Council  
Palika Kendra, Sansad Marg,  
New Delhi – 110 002

.....Respondents

The following were present:

For Petitioner : Ms. Sangeeta Edwards, PGCIL  
Sh. S.S.Raju, PGCIL  
Sh. Jasbir Singh, PGCIL  
Sh. M.M.Mondal, PGCIL

For Respondents : Sh. Gaurav Gupta, PSPCL

### **ORDER**

The petition has been preferred by Power Grid Corporation of India Ltd, a transmission licensee, for revision of tariff under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) based on truing up of expenditure for the period 1.4.2009 to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019 in respect of 132/220 kV Jalandhar-Hamirpur D/C transmission line along with associated bays in Northern Region (hereinafter referred to as “transmission system”).



2. The respondents are distribution licensees, who are procuring transmission service from the petitioner, mainly beneficiaries of Northern Region.

3. The petitioner has built the transmission system in Northern Region and the same has been put under commercial operation w.e.f. dated 1.9.2001. The petitioner had approached the Commission vide Petition No. 148/2009 for determination of tariff for 2009-14 tariff period. The Commission, on 11.1.2011 had approved the tariff based on the admitted capital cost of ₹ 4452.18 lakh for the instant asset as on 31.3.2009 as given:

(₹in Lakh)

<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Depreciation	235.53	235.53	235.53	235.53	235.53
Interest on Loan	94.39	77.76	61.48	45.71	33.26
Return on Equity	74.82	74.82	74.82	74.82	74.82
Interest on Working Capital	17.44	17.61	17.82	18.07	18.41
O & M Expenses	180.08	190.34	201.32	212.79	224.94
<b>Total</b>	<b>602.26</b>	<b>596.06</b>	<b>590.97</b>	<b>586.92</b>	<b>586.96</b>

4. As per Regulation 6 of the 2009 Tariff Regulations, the Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up. Further, as per Regulation 15 of the 2009 Tariff Regulations, the petitioner is required to adjust the yearly impact of MAT rate in the truing up petition for 2009-14 tariff period. The petitioner has submitted that in case interest on loan was calculated on basis of prevailing rates for the determination of tariff, any change in the rate of interest subsequently during the tariff period will be considered at the time of truing up. In this context, the petitioner has relied upon the Commission's order dated 11.1.2011 in Petition No. 148/2009.

5. The petitioner has made following submissions in regard to revision of tariff in accordance with Regulation 6 of the 2009 Tariff Regulations for 2009-14:

- a) The additional capital expenditure during the 2009-14 tariff period is NIL and hence, the tariff has been claimed based on the admitted capital cost of ₹4452.18 lakh for the instant asset by the Commission in order dated 11.1.2011 in Petition No. 148/2009;
- b) The variation in the tax rate during the 2009-14 tariff period applicable to the petitioner as per the Finance Act of the relevant year for the purpose of grossing up of ROE has been furnished as follows:

Year	MAT Rate (in %)	Grossed up ROE (Base rate/(1-t) (in %)
2009-10	16.995	18.674
2010-11	19.931	19.358
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.961	19.610

- c) The petitioner has claimed the interest on loan based on actual interest rates for each year during the 2009-14 period and also submitted relevant documents vide affidavit dated 26.6.2014.

6. Based on aforesaid, the petitioner has claimed the revision of tariff for 2009-14 tariff period as under:

Particulars	(₹ in lakh)				
	2009-10	2010 – 11	2011 -12	2012 – 13	2013 - 14
Revised AFC based on truing up	606.61	603.72	600.06	595.49	596.05

7. The petitioner has further claimed the transmission tariff for the period 2014-19 in accordance with the 2014 Tariff Regulations as follows:

(₹ in Lakh)

Period	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Cost	387.02	391.57	396.71	402.29	408.49

8. The petitioner has made following submissions in regard to determination of tariff for 2014-19 :

- a) The depreciation has been claimed in accordance with Regulation 27 of the 2014 Tariff Regulations;
- b) The petitioner has prayed for grossing up of ROE at MAT rate of 20.961% prevailing in 2013-14 which shall be trued up with actual tax rate in accordance with clause 25 (3) of the 2014 Tariff Regulations;
- c) The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future;
- d) The petitioner has considered interest on loan on the basis of rate prevailing as on 1.4.2014 and prayed that the change in Interest Rate due to floating rate of interest applicable, if any, during 2014-19 period will be adjusted;
- e) The wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike will be effective from a future date. The scheme of wage revision applicable to CPSUs being binding on the petitioner, the petitioner sought liberty to approach the Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during 2014-19.

- f) The petitioner has prayed for recovery of deferred tax liability before 1.4.2009 from the beneficiaries or the long term customers / DICs as and when the same gets materialized.
- g) The petitioner has prayed for recovery of the application fee, filing fee, expenses incurred on publication of Notices in News papers and License fee from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014. The fees and charges to be paid by the petitioner as ISTS licensee (deemed ISTS licensee) under CERC (Fees and Charges of RLDC and other matters) Regulations as amended from time to time have also been prayed to be recoverable from the DICs as provided under clause 52(2) (a).

9. The petitioner has served the petition to the respondents and notice of this application has been published in the news paper in accordance with the CERC (Procedure for making of application for determination of tariff, Publication of the application and other related matters) Regulations, 2004. Further, submissions were made vide affidavit dated 12.9.2014 and 24.02.2016. No submissions have been made by the Respondents. No comments/objections have been received from the public in response to the notice in newspaper. The hearing in this matter was held on 26.2.2016.

#### **TRUE UP ANNUAL FIXED CHARGES FOR 2009-14 PERIOD**

10. We have considered the submissions of the petitioner in respect of truing up of annual fixed charged for 2009-14 tariff period. The revision of tariff for 2009-14 period has been determined as discussed below:



- a) The capital cost of ₹4452.18 lakh for the instant Asset admitted by the Commission as on 31.3.2009 has been considered as opening capital cost as on 1.4.2009 for determination of tariff in accordance with Regulation 7 of the 2009 Tariff Regulations;
- b) The petitioner has not claimed any additional capital expenditure for 2009-14 period;
- c) The Regulation 15 of the 2009 Tariff Regulations provides for the grossing up of ROE with the actual tax rate for the purpose of return on equity. The petitioner has submitted the MAT rate applicable during the various years. Return on equity has been worked out by considering year wise MAT rate submitted by the petitioner in accordance with Regulation 15 of the 2009 Tariff Regulations;
- d) Regulation 16 of the 2009 Tariff Regulations provide the methodology for working out weighted average rate of interest on loan. The Commission in its earlier order dated 11.1.2011 in Petition No. 148/2009 has held that in case of floating rate of interest, any change in the rates of interest during the tariff period will be considered at the time of true up. Accordingly, the interest on loan has been worked out and details of weighted average rate of interest are placed at Annexure-1.
- e) Depreciation, Interest on Working Capital and Operation & Maintenance Expenses has been considered in accordance with the 2009 Regulations.





11. Accordingly, the annual fixed charges for the transmission system under the petition has been worked out and allowed as under:

(₹in lakh)

<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
<b>Gross Block</b>					
Opening Gross Block	4452.18	4452.18	4452.18	4452.18	4452.18
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	4452.18	4452.18	4452.18	4452.18	4452.18
Average Gross Block	4452.18	4452.18	4452.18	4452.18	4452.18
<b>Depreciation</b>					
Rate of Depreciation	5.2902%	5.2902%	5.2902%	5.2902%	5.2902%
Depreciable Value	4006.96	4006.96	4006.96	4006.96	4006.96
Elapsed Life (Beginning of the year)	7	8	9	10	11
Weighted Balance Useful life of the combine assets	26	25	24	23	22
Remaining Depreciable Value	2323.10	2087.57	1852.04	1616.51	1380.98
Depreciation	235.53	235.53	235.53	235.53	235.53
<b>Interest on Loan</b>					
Gross Normative Loan	4024.17	4024.17	4024.17	4024.17	4024.17
Cumulative Repayment upto Previous Year	2075.70	2311.23	2546.76	2782.29	3017.82
Net Loan-Opening	1948.47	1712.94	1477.41	1241.88	1006.35
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	235.53	235.53	235.53	235.53	235.53
Net Loan-Closing	1712.94	1477.41	1241.88	1006.35	770.82
Average Loan	1830.70	1595.17	1359.64	1124.11	888.58
Weighted Average Rate of Interest on Loan	5.1101%	4.8420%	4.5793%	4.0922%	3.7197%
Interest	<b>93.55</b>	<b>77.24</b>	<b>62.26</b>	<b>46.00</b>	<b>33.05</b>
<b>Return on Equity</b>					
Opening Equity	428.01	428.01	428.01	428.01	428.01
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	428.01	428.01	428.01	428.01	428.01
Average Equity	428.01	428.01	428.01	428.01	428.01
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the respective year (%)	16.995	19.931	20.008	20.008	20.961
Rate of Return on Equity	18.674%	19.358%	19.377%	19.377%	19.610%
Return on Equity	<b>79.93</b>	<b>82.85</b>	<b>82.94</b>	<b>82.94</b>	<b>83.93</b>



<b>Interest on Working Capital</b>					
Maintenance Spares	27.01	28.55	30.20	31.92	33.74
O & M expenses	15.01	15.86	16.78	17.73	18.75
Receivables	101.10	100.62	100.01	99.25	99.34
Total	143.12	145.03	146.98	148.90	151.83
Interest	<b>17.53</b>	<b>17.77</b>	<b>18.01</b>	<b>18.24</b>	<b>18.60</b>
<b>Annual Transmission Charges</b>					
Depreciation	235.53	235.53	235.53	235.53	235.53
Interest on Loan	93.55	77.24	62.26	46.00	33.05
Return on Equity	79.93	82.85	82.94	82.94	83.93
Interest on Working Capital	17.53	17.77	18.01	18.24	18.60
O & M Expenses	180.08	190.34	201.32	212.79	224.94
<b>Total</b>	<b>606.62</b>	<b>603.73</b>	<b>600.05</b>	<b>595.50</b>	<b>596.05</b>

### **ANNUAL FIXED CHARGES FOR 2014-19**

12. We have considered the submissions of the petitioner in respect of tariff for 2014-19 tariff period. The tariff for 2014-19 period has been determined as discussed below:

- a) The capital cost of ₹4452.18 lakh for the instant Asset admitted by the Commission as on 31.3.2014 has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations;
- b) The petitioner has not claimed any projected additional capital expenditure during 2014-19 period;
- c) The Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides the grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee paying Minimum Alternative Tax (MAT), the



MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during the 2013-14 has been considered for the purpose of return on equity which shall be trued up with actual tax rate in accordance with clause 25 (3) of the 2014 Tariff Regulations;

- d) The weighted average interest on loan has been considered on the basis of rate prevailing as on 1.4.2014. The petitioner has prayed that the change in Interest rate due to floating rate of interest applicable, if any, during 2014-19 period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. By considering above, the interest on loan has been worked out in accordance with Regulation 26 of the 2014 Regulations and details of weighted average rate of interest are placed at Annexure-2.
- e) As in the present petition, Transmission Assets had completed 12 years prior to 1.4.2014. Accordingly, depreciation has been spread over based on the remaining depreciable value to be recovered in the balance useful life from 2014-15 onwards.
- f) Interest on Working Capital and Operation & Maintenance Expenses have been considered in accordance with the 2014 Regulations.

13. Accordingly, the annual fixed charges for the transmission asset under the petition has been worked out and allowed as under:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Gross Block</b>					
Opening Gross Block	4452.18	4452.18	4452.18	4452.18	4452.18
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	4452.18	4452.18	4452.18	4452.18	4452.18
Average Gross Block	4452.18	4452.18	4452.18	4452.18	4452.18
<b>Depreciation</b>					
Rate of Depreciation	1.2251%	1.2251%	1.2251%	1.2251%	1.2251%
Depreciable Value	4006.96	4006.96	4006.96	4006.96	4006.96
Elapsed Life (Beginning of the year)	12	13	14	15	16
Weighted Balance Useful life of the combine assets	21	20	19	18	17
Remaining Depreciable Value	1145.45	1090.91	1036.36	981.81	927.27
Depreciation	<b>54.55</b>	<b>54.55</b>	<b>54.55</b>	<b>54.55</b>	<b>54.55</b>
<b>Interest on Loan</b>					
Gross Normative Loan	4024.17	4024.17	4024.17	4024.17	4024.17
Cumulative Repayment upto Previous Year	3253.35	3307.90	3362.44	3416.99	3471.53
Net Loan-Opening	770.82	716.27	661.73	607.18	552.64
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	54.55	54.55	54.55	54.55	54.55
Net Loan-Closing	716.27	661.73	607.18	552.64	498.09
Average Loan	743.55	689.00	634.46	579.91	525.36
Weighted Average Rate of Interest on Loan	3.6217%	3.5294%	3.4601%	3.4446%	3.4493%
Interest	<b>26.93</b>	<b>24.32</b>	<b>21.95</b>	<b>19.98</b>	<b>18.12</b>
<b>Return on Equity</b>					
Opening Equity	428.01	428.01	428.01	428.01	428.01
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	428.01	428.01	428.01	428.01	428.01
Average Equity	428.01	428.01	428.01	428.01	428.01
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for FY 2014-15 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity	<b>83.93</b>	<b>83.93</b>	<b>83.93</b>	<b>83.93</b>	<b>83.93</b>
<b>Interest on Working Capital</b>					
Maintenance Spares	30.96	31.99	33.06	34.14	35.30
O & M expenses	17.20	17.77	18.37	18.97	19.61
Receivables	64.50	65.26	66.12	67.05	68.08
Total	112.67	115.02	117.55	120.16	122.99
Interest	<b>15.21</b>	<b>15.53</b>	<b>15.87</b>	<b>16.22</b>	<b>16.60</b>



<b>Annual Transmission Charges</b>					
Depreciation	54.55	54.55	54.55	54.55	54.55
Interest on Loan	26.93	24.32	21.95	19.98	18.12
Return on Equity	83.93	83.93	83.93	83.93	83.93
Interest on Working Capital	15.21	15.53	15.87	16.22	16.60
O & M Expenses	206.41	213.25	220.42	227.62	235.30
<b>Total</b>	<b>387.03</b>	<b>391.57</b>	<b>396.72</b>	<b>402.30</b>	<b>408.50</b>

14. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 52 (1) of the 2014 Tariff Regulations.

15. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. In our view, the petitioner's prayer is premature at this stage and cannot be entertained.

16. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Tariff Regulations for 2009-14 period and in accordance with Regulation 52 (2) (b) of the 2014 Tariff Regulations. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with 42 A (1) (a) of 2009 Tariff Regulations for 2009-14 period and Regulations 52 (2) (a) of the Tariff 2014 Tariff Regulations for 2014-19 period.

17. The petitioner has submitted that O&M Expenses for the year 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of



wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rate specified for the tariff block 2014-19. The petitioner has also prayed that it will approach the Commission for suitable revision in the norms of O&M expenses for claiming the impact of such increase. We have considered the submission of the petitioner. We would like to clarify that any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

### **Sharing of Transmission Charges**

18. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of the 2014 Tariff Regulations.

19. This order disposes of Petition No.177/TT/2014.

**Sd/-**  
**(A.S. Bakshi)**  
**Member**

**Sd/-**  
**(A.K. Singhal)**  
**Member**



## CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
<b>1</b>	<b>Bond- VII</b>					
	Gross loan opening	183.00	183.00	183.00	183.00	183.00
	Cumulative Repayment upto DOCO/previous year	183.00	183.00	183.00	183.00	183.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	0.00%	0.00%	0.00%	0.00%	0.00%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Repaid in 2007-2008				
<b>2</b>	<b>Bond- IX</b>					
	Gross loan opening	550.00	550.00	550.00	550.00	550.00
	Cumulative Repayment upto DOCO/previous year	330.00	385.00	440.00	495.00	550.00
	Net Loan-Opening	220.00	165.00	110.00	55.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	55.00	55.00	55.00	55.00	0.00
	Net Loan-Closing	165.00	110.00	55.00	0.00	0.00
	Average Loan	192.50	137.50	82.50	27.50	0.00
	Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
	Interest	23.58	16.84	10.11	3.37	0.00
	Rep Schedule	10 ANNAUL INSTALMENT FROM 22.08.2003				
<b>3</b>	<b>Bond- X</b>					
	Gross loan opening	54.00	54.00	54.00	54.00	54.00
	Cumulative Repayment upto DOCO/previous year	22.50	27.00	31.50	36.00	40.50
	Net Loan-Opening	31.50	27.00	22.50	18.00	13.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	4.50	4.50	4.50	4.50	4.50
	Net Loan-Closing	27.00	22.50	18.00	13.50	9.00
	Average Loan	29.25	24.75	20.25	15.75	11.25
	Rate of Interest	10.90%	10.90%	10.90%	10.90%	10.90%
	Interest	3.19	2.70	2.21	1.72	1.23
	Rep Schedule	12 Annual Instalments from 21.06.2004				
<b>4</b>	<b>Bond- XI- Option-I</b>					
	Gross loan opening	58.00	58.00	58.00	58.00	58.00
	Cumulative Repayment upto DOCO/previous year	19.33	24.16	28.99	33.82	38.65



	Net Loan-Opening	38.67	33.84	29.01	24.18	19.35
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	4.83	4.83	4.83	4.83	4.83
	Net Loan-Closing	33.84	29.01	24.18	19.35	14.52
	Average Loan	36.26	31.43	26.60	21.77	16.94
	Rate of Interest	9.80%	9.80%	9.80%	9.80%	9.80%
	Interest	3.55	3.08	2.61	2.13	1.66
	Rep Schedule	12 Annual Instalments from 07.12.2005				
5	<b>Bond- XII</b>					
	Gross loan opening	4.00	4.00	4.00	4.00	4.00
	Cumulative Repayment upto DOCO/previous year	1.33	1.66	1.99	2.32	2.65
	Net Loan-Opening	2.67	2.34	2.01	1.68	1.35
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.33	0.33	0.33	0.33	0.33
	Net Loan-Closing	2.34	2.01	1.68	1.35	1.02
	Average Loan	2.51	2.18	1.85	1.52	1.19
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	0.24	0.21	0.18	0.15	0.11
	Rep Schedule	12 Annual Instalments from 28.03.2006				
6	<b>Bond- XIII- Option-II</b>					
	Gross loan opening	142.00	142.00	142.00	142.00	142.00
	Cumulative Repayment upto DOCO/previous year	142.00	142.00	142.00	142.00	142.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	7.85%	7.85%	7.85%	7.85%	7.85%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	6 Annual Instalments from 31.07.2003				
7	<b>OBC</b>					
	Gross loan opening	27.00	27.00	27.00	27.00	27.00
	Cumulative Repayment upto DOCO/previous year	11.25	13.50	15.75	18.00	20.25
	Net Loan-Opening	15.75	13.50	11.25	9.00	6.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	2.25	2.25	2.25	2.25	2.25
	Net Loan-Closing	13.50	11.25	9.00	6.75	4.50
	Average Loan	14.63	12.38	10.13	7.88	5.63
	Rate of Interest	9.60%	10.22%	12.32%	12.37%	12.35%
	Interest	1.40	1.26	1.25	0.97	0.69
	Rep Schedule	12 Annual Instalments from 26.03.2005				





<b>8</b>	<b>ICICI</b>					
	Gross loan opening	<b>78.00</b>	<b>78.00</b>	<b>78.00</b>	<b>78.00</b>	<b>78.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>46.80</b>	<b>54.60</b>	<b>62.40</b>	<b>70.20</b>	<b>78.00</b>
	Net Loan-Opening	31.20	23.40	15.60	7.80	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	7.80	7.80	7.80	7.80	0.00
	Net Loan-Closing	23.40	15.60	7.80	0.00	0.00
	Average Loan	27.30	19.50	11.70	3.90	0.00
	Rate of Interest	7.32%	7.32%	7.32%	7.32%	7.32%
	Interest	2.00	1.43	0.86	0.29	0.00
	Rep Schedule	10 Annual Instalments from 29.06.2003				
<b>9</b>	<b>Corporation Bank</b>					
	Gross loan opening	<b>91.00</b>	<b>91.00</b>	<b>91.00</b>	<b>91.00</b>	<b>91.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>50.05</b>	<b>59.15</b>	<b>68.25</b>	<b>77.35</b>	<b>86.45</b>
	Net Loan-Opening	40.95	31.85	22.75	13.65	4.55
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	9.10	9.10	9.10	9.10	4.55
	Net Loan-Closing	31.85	22.75	13.65	4.55	0.00
	Average Loan	36.40	27.30	18.20	9.10	2.28
	Rate of Interest	10.60%	10.57%	12.55%	13.00%	13.00%
	Interest	3.86	2.88	2.28	1.18	0.30
	Rep Schedule	20 half yearly Instalments from 10.03.2004				
<b>10</b>	<b>Punjab National Bank -I</b>					
	Gross loan opening	<b>183.00</b>	<b>183.00</b>	<b>183.00</b>	<b>183.00</b>	<b>183.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>109.80</b>	<b>128.10</b>	<b>146.40</b>	<b>164.70</b>	<b>183.00</b>
	Net Loan-Opening	73.20	54.90	36.60	18.30	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	18.30	18.30	18.30	18.30	0.00
	Net Loan-Closing	54.90	36.60	18.30	0.00	0.00
	Average Loan	64.05	45.75	27.45	9.15	0.00
	Rate of Interest	8.95%	9.72%	11.86%	11.90%	0.00%
	Interest	5.73	4.45	3.26	1.09	0.00
	Rep Schedule	10 Annual Instalments from 30.03.2004				
<b>11</b>	<b>Punjab National Bank -II</b>					
	Gross loan opening	<b>32.00</b>	<b>32.00</b>	<b>32.00</b>	<b>32.00</b>	<b>32.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>13.33</b>	<b>16.00</b>	<b>18.67</b>	<b>21.34</b>	<b>24.01</b>
	Net Loan-Opening	18.67	16.00	13.33	10.66	7.99
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	2.67	2.67	2.67	2.67	2.67
	Net Loan-Closing	16.00	13.33	10.66	7.99	5.32
	Average Loan	17.34	14.67	12.00	9.33	6.66
	Rate of Interest	8.89%	9.65%	11.80%	11.84%	11.60%



	Interest	1.54	1.42	1.42	1.10	0.77
	Rep Schedule	12 Annual Instalments from 18.03.2005				
12	<b>BOI (Foreign Currency)</b>					
	Gross loan opening	<b>94.82</b>	<b>94.82</b>	<b>94.82</b>	<b>94.82</b>	<b>94.82</b>
	Cumulative Repayment upto DOCO/previous year	<b>24.95</b>	<b>29.94</b>	<b>34.93</b>	<b>39.93</b>	<b>44.92</b>
	Net Loan-Opening	69.87	64.88	59.89	54.90	49.91
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	4.99	4.99	4.99	4.99	4.99
	Net Loan-Closing	64.88	59.89	54.90	49.91	44.92
	Average Loan	67.37	62.38	57.39	52.40	47.41
	Rate of Interest	2.77%	2.17%	2.11%	2.28%	2.02%
	Interest	1.87	1.35	1.21	1.20	0.96
	Rep Schedule	38 equal half yearly Instalments from 10.06.2004				
13	<b>JBIC/OECF</b>					
	Gross loan opening	<b>2527.35</b>	<b>2527.35</b>	<b>2527.35</b>	<b>2527.35</b>	<b>2527.35</b>
	Cumulative Repayment upto DOCO/previous year	<b>1118.61</b>	<b>1196.87</b>	<b>1275.14</b>	<b>1353.40</b>	<b>1431.66</b>
	Net Loan-Opening	1408.74	1330.47	1252.21	1173.95	1095.68
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	78.26	78.26	78.26	78.26	78.26
	Net Loan-Closing	1330.47	1252.21	1173.95	1095.68	1017.42
	Average Loan	1369.61	1291.34	1213.08	1134.82	1056.55
	Rate of Interest	3.50%	3.50%	3.50%	3.50%	3.50%
	Interest	47.94	45.20	42.46	39.72	36.98
	Rep Schedule	41 equal half yearly Instalments from 20.02.2007				
	<b>Total Loan</b>					
	Gross loan opening	4024.17	4024.17	4024.17	4024.17	4024.17
	Cumulative Repayment upto DOCO/previous year	2072.96	2260.99	2449.02	2637.06	2825.09
	Net Loan-Opening	1951.22	1763.18	1575.15	1387.11	1199.08
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	188.03	188.03	188.03	188.03	102.38
	Net Loan-Closing	1763.18	1575.15	1387.11	1199.08	1096.70
	Average Loan	1857.20	1669.17	1481.13	1293.10	1147.89
	Rate of Interest	<b>5.1101%</b>	<b>4.8420%</b>	<b>4.5793%</b>	<b>4.0922%</b>	<b>3.7197%</b>
	<b>Interest</b>	94.90	80.82	67.83	52.92	42.70



## CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	Details of Loan	2014-15	2015-16	2016-17	2017-18	2018-19
<b>1</b>	<b>Bond- VII</b>					
	Gross loan opening	183.00	183.00	183.00	183.00	183.00
	Cumulative Repayment upto DOCO/previous year	183.00	183.00	183.00	183.00	183.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	0.00%	0.00%	0.00%	0.00%	0.00%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Repaid in 2007-2008				
<b>2</b>	<b>Bond- IX</b>					
	Gross loan opening	550.00	550.00	550.00	550.00	550.00
	Cumulative Repayment upto DOCO/previous year	550.00	550.00	550.00	550.00	550.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	10 ANNUAL INSTALMENT FROM 22.08.2003				
<b>3</b>	<b>Bond- X</b>					
	Gross loan opening	54.00	54.00	54.00	54.00	54.00
	Cumulative Repayment upto DOCO/previous year	45.00	49.50	54.00	54.00	54.00
	Net Loan-Opening	9.00	4.50	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	4.50	4.50	0.00	0.00	0.00
	Net Loan-Closing	4.50	0.00	0.00	0.00	0.00
	Average Loan	6.75	2.25	0.00	0.00	0.00
	Rate of Interest	10.90%	10.90%	10.90%	10.90%	10.90%
	Interest	0.74	0.25	0.00	0.00	0.00
	Rep Schedule	12 Annual Instalments from 21.06.2004				
<b>4</b>	<b>Bond- XI- Option-I</b>					
	Gross loan opening	58.00	58.00	58.00	58.00	58.00
	Cumulative Repayment upto DOCO/previous year	43.48	48.31	53.15	57.98	57.98



	Net Loan-Opening	14.52	9.69	4.85	0.02	0.02
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	4.83	4.83	4.83	0.00	0.00
	Net Loan-Closing	9.69	4.85	0.02	0.02	0.02
	Average Loan	12.10	7.27	2.44	0.02	0.02
	Rate of Interest	9.80%	9.80%	9.80%	9.80%	9.80%
	Interest	1.19	0.71	0.24	0.00	0.00
	Rep Schedule	12 Annual Instalments from 07.12.2005				
<b>5</b>	<b>Bond- XII</b>					
	Gross loan opening	<b>4.00</b>	<b>4.00</b>	<b>4.00</b>	<b>4.00</b>	<b>4.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>2.98</b>	<b>3.31</b>	<b>3.65</b>	<b>3.98</b>	<b>3.98</b>
	Net Loan-Opening	1.02	0.69	0.35	0.02	0.02
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.33	0.33	0.33	0.00	0.00
	Net Loan-Closing	0.69	0.35	0.02	0.02	0.02
	Average Loan	0.85	0.52	0.19	0.02	0.02
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	0.08	0.05	0.02	0.00	0.00
	Rep Schedule	12 Annual Instalments from 28.03.2006				
<b>6</b>	<b>Bond- XIII- Option-II</b>					
	Gross loan opening	<b>142.00</b>	<b>142.00</b>	<b>142.00</b>	<b>142.00</b>	<b>142.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>142.00</b>	<b>142.00</b>	<b>142.00</b>	<b>142.00</b>	<b>142.00</b>
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	7.85%	7.85%	7.85%	7.85%	7.85%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	6 Annual Instalments from 31.07.2003				
<b>7</b>	<b>OBC</b>					
	Gross loan opening	<b>27.00</b>	<b>27.00</b>	<b>27.00</b>	<b>27.00</b>	<b>27.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>22.50</b>	<b>24.75</b>	<b>27.00</b>	<b>27.00</b>	<b>27.00</b>
	Net Loan-Opening	4.50	2.25	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	2.25	2.25	0.00	0.00	0.00
	Net Loan-Closing	2.25	0.00	0.00	0.00	0.00
	Average Loan	3.38	1.13	0.00	0.00	0.00
	Rate of Interest	12.35%	12.35%	12.35%	12.35%	12.35%
	Interest	0.42	0.14	0.00	0.00	0.00
	Rep Schedule	12 Annual Instalments from 26.03.2005				



<b>8</b>	<b>ICICI</b>					
	Gross loan opening	<b>78.00</b>	<b>78.00</b>	<b>78.00</b>	<b>78.00</b>	<b>78.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>78.00</b>	<b>78.00</b>	<b>78.00</b>	<b>78.00</b>	<b>78.00</b>
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	7.32%	7.32%	7.32%	7.32%	7.32%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	10 Annual Instalments from 29.06.2003				
<b>9</b>	<b>Corporation Bank</b>					
	Gross loan opening	<b>91.00</b>	<b>91.00</b>	<b>91.00</b>	<b>91.00</b>	<b>91.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>91.00</b>	<b>91.00</b>	<b>91.00</b>	<b>91.00</b>	<b>91.00</b>
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	13.00%	13.00%	13.00%	13.00%	13.00%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	20 half yearly Instalments from 10.03.2004				
<b>10</b>	<b>Punjab National Bank -I</b>					
	Gross loan opening	<b>183.00</b>	<b>183.00</b>	<b>183.00</b>	<b>183.00</b>	<b>183.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>183.00</b>	<b>183.00</b>	<b>183.00</b>	<b>183.00</b>	<b>183.00</b>
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	0.00%	0.00%	0.00%	0.00%	0.00%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	10 Annual Instalments from 30.03.2004				
<b>11</b>	<b>Punjab National Bank -II</b>					
	Gross loan opening	<b>32.00</b>	<b>32.00</b>	<b>32.00</b>	<b>32.00</b>	<b>32.00</b>
	Cumulative Repayment upto DOCO/previous year	<b>26.68</b>	<b>29.35</b>	<b>32.01</b>	<b>32.01</b>	<b>32.01</b>
	Net Loan-Opening	5.32	2.65	-0.01	-0.01	-0.01
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	2.67	2.67	0.00	0.00	0.00
	Net Loan-Closing	2.65	-0.01	-0.01	-0.01	-0.01
	Average Loan	3.99	1.32	-0.01	-0.01	-0.01
	Rate of Interest	11.60%	11.60%	11.60%	11.60%	11.60%



	Interest	0.46	0.15	0.00	0.00	0.00
	Rep Schedule	12 Annual Instalments from 18.03.2005				
12	<b>BOI (Foreign Currency)</b>					
	Gross loan opening	<b>94.82</b>	<b>94.82</b>	<b>94.82</b>	<b>94.82</b>	<b>94.82</b>
	Cumulative Repayment upto DOCO/previous year	<b>49.91</b>	<b>54.90</b>	<b>59.89</b>	<b>64.88</b>	<b>69.87</b>
	Net Loan-Opening	44.92	39.93	34.93	29.94	24.95
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	4.99	4.99	4.99	4.99	4.99
	Net Loan-Closing	39.93	34.93	29.94	24.95	19.96
	Average Loan	42.42	37.43	32.44	27.45	22.46
	Rate of Interest	1.94%	1.94%	1.94%	1.94%	1.94%
	Interest	0.82	0.73	0.63	0.53	0.44
	Rep Schedule	38 equal half yearly Instalments from 10.06.2004				
13	<b>JBIC/OECF</b>					
	Gross loan opening	<b>2527.35</b>	<b>2527.35</b>	<b>2527.35</b>	<b>2527.35</b>	<b>2527.35</b>
	Cumulative Repayment upto DOCO/previous year	<b>1509.92</b>	<b>1588.18</b>	<b>1666.45</b>	<b>1744.71</b>	<b>1822.97</b>
	Net Loan-Opening	1017.43	939.17	860.90	782.64	704.38
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	78.26	78.26	78.26	78.26	78.26
	Net Loan-Closing	939.17	860.90	782.64	704.38	626.11
	Average Loan	978.30	900.03	821.77	743.51	665.24
	Rate of Interest	3.50%	3.50%	3.50%	3.50%	3.50%
	Interest	34.24	31.50	28.76	26.02	23.28
	Rep Schedule	41 equal half yearly Instalments from 20.02.2007				
	<b>Total Loan</b>					
	Gross loan opening	4024.17	4024.17	4024.17	4024.17	4024.17
	Cumulative Repayment upto DOCO/previous year	2927.47	3025.30	3123.14	3211.56	3294.82
	Net Loan-Opening	1096.70	998.87	901.03	812.61	729.36
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	97.84	97.84	88.42	83.25	83.25
	Net Loan-Closing	998.87	901.03	812.61	729.36	646.10
	Average Loan	1047.79	949.95	856.82	770.98	687.73
	Rate of Interest	<b>3.6217%</b>	<b>3.5294%</b>	<b>3.4601%</b>	<b>3.4446%</b>	<b>3.4493%</b>
	<b>Interest</b>	37.95	33.53	29.65	26.56	23.72