

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 26/TT/2015

Coram:

**Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member
Dr. M.K. Iyer, Member**

**Date of Hearing : 26.02.2016
Date of Order : 03.06.2016**

In the matter of:

Truing up of transmission tariff for 2009-14 tariff period and determination of transmission tariff for 2014-19 tariff period for Combined elements of Asset-1: 315 MVA ICT-II at Malerkotla Sub-station, 400 kV Hissar-Jaipur line with associated bays, 400 kV Bawana-Bhiwani-I and Bawana-Bhiwani-II lines with associated bays (COD: 1.2.1998), Asset-2: 400 kV Abdullapur-Bawana and Nalagarh-Hissar line with associated bays, ICT-I at Nalagarh with associated bays, ICT-II at Nalagarh with associated bays, ICT-II at Jalandhar with associated bays, Bus Reactor at Nalagarh with associated bays, ICT-I at Jaipur (bassi), Two nos. LILO bays associated with ICT-Jaipur, ICT-II at Jaipur with associated bays, LILO of Chamera-Moga line and ICT-I at Jalandhar with associated bays and 220 kV Jalandhar-Dasuya line (COD: 1.3.2001) and Asset-3: 400 kV D/C Nathpa-Jhakri-Abdullapur line and 400 kV D/C Nathpa-Jhakri-Nalagarh line (COD: 1.4.2003) under Nathpa-Jhakri Transmission System in Northern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

And in the matter of:

Power Grid Corporation of India Ltd
'Saudamini', Plot No-2,
Sector-29, Gurgaon -122 001 (Haryana)

.....**Petitioner**

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur- 302 005



2. Ajmer Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur
4. Jodhpur Vidyut Vitran Nigam Limited,
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 Limited,
Thermal Shed TIA, Near 22 Phatak,
Patiala-147 001
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134 109
8. Power Development Department,
Govt. of Jammu and Kashmir,
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226 001
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110 002
11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place,
New Delhi
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi



13. North Delhi Power Limited,
Power Trading & Load Dispatch Group,
Cennet Building,
Adjacent to 66/11kV Pitampura-3 Grid Building,
Near PP Jewellers,
Pitampura, New Delhi-110 034
14. Chandigarh Administration,
Sector-9, Chandigarh
15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun
16. North Central Railway,
Allahabad
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110 002

.....Respondents

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

For Respondents: Shri Gaurav Gupta, Advocate for PSPCL

ORDER

The present petition has been filed by Power Grid Corporation of India Limited ('the petitioner'), for truing up of capital expenditure and tariff for Combined elements of Asset-1: 315 MVA ICT-II at Malerkotla Sub-station, 400 kV Hissar-Jaipur line with associated bays, 400 kV Bawana-Bhiwani-I and Bawana-Bhiwani-II lines with associated bays, Asset-2: 400 kV Abdullapur-Bawana and Nalagarh-Hissar line with associated bays, ICT-I at Nalagarh with associated bays, ICT-II at



Nalagarh with associated bays, ICT-II at Jalandhar with associated bays, Bus Reactor at Nalagarh with associated bays, ICT-I at Jaipur (bassi), Two nos. LILO bays associated with ICT-Jaipur, ICT-II at Jaipur with associated bays, LILO of Chamera-Moga line and ICT-I at Jalandhar with associated bays and 220 kV Jalandhar-Dasuya line and Asset-3: 400 kV D/C Nathpa-Jhakri-Abdullapur line and 400 kV D/C Nathpa-Jhakri-Nalagarh line (hereinafter referred as “transmission assets”) under Nathpa-Jhakri Transmission System in Northern Region 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 actual 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.

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

3. This order has been issued after considering the petitioner’s affidavit dated 13.4.2016.

4. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act, 2003 (“the Act”). The petitioner has served the petition to the respondents. None of the respondents have filed any reply to the petition.



5. The hearing in the matter was held on 26.2.2016. Having heard the representatives of the parties and perused the material on record, we proceed to dispose of the petition.

6. The brief facts of the case are as follows:-

a. The investment approval for the transmission system was accorded by the Ministry of Power, Central Government vide letter dated 5.4.1989 at an estimated cost of ₹88995 lakh, including IDC of ₹9559 lakh (1st quarter 1989 price level), which was subsequently revised vide letter dated 25.5.2001 with the revised cost estimate of ₹156163 lakh, including IDC of ₹35358 lakh. The Combined Asset-1, Combined Asset-2 and Combined Asset-3 were put under commercial operation w.e.f. 1.2.1998, 1.3.2001 and 1.4.2003 respectively.

b. The tariff for the period from 1.4.2009 to 31.3.2014 was allowed vide order dated 13.10.2011 in Petition No. 16/2011 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.

c. Further, the tariff was revised for tariff period 2009-14 while approving Add-cap and De-cap on account of replacement of existing Insulators by Polymer Insulators vide order dated 7.2.2013 in Petition No. 305/2010 in accordance with the 2009 Tariff Regulations. The revised tariff allowed vide order dated 7.2.2013 for the tariff period 2009-14 is as follows:-



(₹ in lakh)

Particulars	Asset-1				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	1051.58	293.32	307.49	307.49	307.49
Interest on Loan	267.81	250.96	231.65	212.16	194.55
Return on Equity	748.42	771.18	771.18	771.18	771.18
Interest on Working Capital	66.88	52.56	53.90	55.01	56.25
O & M Expenses	475.54	502.64	531.51	561.94	593.98
Total	2610.24	1870.67	1895.73	1907.78	1923.44
Particulars	Asset-2				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3397.94	3403.80	3404.78	3404.78	617.96
Interest on Loan	1300.50	1055.06	802.16	556.44	413.66
Return on Equity	1812.87	1818.69	1819.67	1819.67	1819.67
Interest on Working Capital	224.03	224.21	224.33	224.85	169.75
O & M Expenses	1765.58	1866.69	1973.58	2086.35	2205.49
Total	8500.91	8368.46	8224.52	8092.08	5226.53
Particulars	Asset-3				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3598.45	3598.45	3598.83	3599.21	3599.21
Interest on Loan	1396.16	1115.82	837.06	565.67	322.55
Return on Equity	2731.91	2731.91	2732.29	2732.66	2732.66
Interest on Working Capital	205.01	201.69	198.55	195.72	193.62
O & M Expenses	879.06	929.42	982.63	1038.76	1098.05
Total	8810.59	8577.29	8349.36	8132.03	7946.09

d. The final tariff was determined vide order dated 13.10.2011 in Petition No. 16/2011 based on admitted capital cost of ₹19445.67 lakh, ₹65619.37 lakh and ₹68664.38 lakh as on 31.3.2009 in case of Asset-1, Asset-2 and Asset-3 respectively. The revised final tariff was determined vide order dated 7.2.2013 in Petition No. 305/2010 after consideration of additional capital expenditure of ₹2113.26 lakh, ₹1207.90 lakh and ₹307.62 lakh as well as decapitalisation of ₹1255.95 lakh, ₹985.77 lakh and ₹293.19 lakh on account of replacement of Insulators in case of Asset-1, Asset-2 and Asset-3 respectively. The details of add-cap and decapitalisation proposed during 2009-10, 2010-11 and 2011-12 for the tariff period 2009-14 are as follows:-



(₹ in lakh)

Particulars	Additional capital expenditure			De-capitalisation		
	2009-10	2010-11	2011-12	2009-10	2010-11	2011-12
Asset-1	1311.18	802.08	-	443.12	812.83	-
Asset-2	602.66	605.24	-	417.68	568.09	-
Asset-3	-	-	307.62	-	-	293.19

e. The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be adjusted as per the actual MAT rate applicable for the respective year at the time of truing up of tariff for 2009-14 tariff period.

f. The instant petition was filed on 26.2.2015.

Truing-up of Annual Fixed Charges for Tariff Period 2009-14

7. The truing up of tariff for 2009-14 tariff period has been determined as discussed below.

Capital Cost and Additional Capital Expenditure

8. Last proviso to Clause (2) of Regulation 7 of the 2009 Tariff Regulations provides that:-

“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff”.

9. The petitioner has claimed admitted capital cost of ₹19445.67 lakh, ₹65619.37 lakh and ₹68664.38 lakh as on 31.3.2009 in case of Asset-1, Asset-2 and Asset-3 respectively as on 31.3.2009 for the purpose of tariff. In addition to this, the petitioner for truing-up of tariff has submitted Auditors' Certificate dated



23.7.2014 for revised figures of add-cap and decapitalisation on account of replacement of Insulators and has claimed as under:-

(₹ in lakh)

Asset	Expenditure									
	2009-10		2010-11		2011-12		2012-13		2013-14	
	Add-cap	De-cap	Add-cap	De-cap	Add-cap	De-cap	Add-cap	De-cap	Add-cap	De-cap
1	868.63	-308.45	-	-	125.30	-50.33	-	-	-	-
2	724.24	-421.38	890.35	-812.83	-	-	234.21	-	-	-
3	-	-	-	-	-	-	161.83	-252.43	79.04	-119.13

10. It has been observed that there is huge variation in the above actual figures now submitted vide Auditors' Certificate in the instant petition by the petitioner on a comparison with duly certified actual figures submitted earlier in Petition No. 305/2010. The petitioner was directed to reconcile the capital cost stated in the Auditors' Certificates dated 27.9.2014 and 10.2.2012 but the petitioner has not submitted any valid reasons for the variation.

11. In view of above, the same add-cap and de-cap in respect of Asset-1 and Asset-2 allowed vide order dated 7.2.2013 in petition no. 305/2010 has been considered in the instant petition for truing up as these were allowed on actual basis based on the then Auditors' Certificate submitted by the petitioner. The add-cap and de-cap claimed in the instant petition in respect of Asset-3 vide Auditors' Certificate dated 23.7.2014 is now allowed as the add-cap/de-cap in Petition No. 305/2010 was allowed on projected basis.

12. Thus, the capital cost admitted as on 31.3.2009 vide order dated 7.2.2013 in Petition No. 305/2010 has been considered as the opening capital cost as on 1.4.2009 for determination of tariff in accordance with Regulation 7 of the 2009



Tariff Regulations. The admitted capital cost of ₹19445.67 lakh, ₹65619.37 lakh and ₹68664.38 lakh as on 31.3.2009 in case of Asset-1, Asset-2 and Asset-3 respectively has been considered as on 1.4.2009 to work out the trued-up tariff for the tariff period 2009-14.

13. The total capital cost of the transmission assets including additional capitalisation on account of replacement of Insulators incurred during 2009-14 works out to ₹154678.17 lakh, which is within the overall approved cost of ₹156163 lakh given in the investment approval. The additional capitalisation is on account of replacement of Insulators for which the petitioner had separately submitted, total estimated completion cost of ₹14300 lakh before the Ministry of Power, Government of India, as approved in order dated 7.2.2013 in Petition No. 305/2010. As such, the additional capitalisation and de-capitalisation during 2009-14 is allowed in accordance with Clause 2(viii) of Regulation 9 of the 2009 Tariff Regulations. Accordingly the capital cost allowed as on 31.3.2014 is as under:-

(₹ in lakh)

Particulars	Asset-1			
	As on 31.3.2009	2009-10	2010-11	Admitted cost as on 31.3.2014
Freehold Land	-	-	-	-
Leasehold Land	-	-	-	-
Building & Other Civil Works	-	-	-	-
Transmission Line	14984.66	868.06	-10.75	15841.97
Sub-Station Equipments	4277.22	-	-	4277.22
PLCC	183.79	-	-	183.79
Total	19445.67	868.06	-10.75	20302.98
Particulars	Asset-2			
	As on 31.3.2009	2009-10	2010-11	Admitted cost as on 31.3.2014
Freehold Land	929.18	-	-	929.18
Leasehold Land	-	-	-	-
Building & Other Civil Works	1404.61	-	-	1404.61



Transmission Line	42442.64	184.98	37.15	42664.77
Sub-Station Equipments	20399.07	-	-	20399.07
PLCC	443.87	-	-	443.87
Total	65619.37	184.98	37.15	65841.50
Particulars	Asset-3			
	As on 31.3.2009	2012-13	2013-14	Admitted cost as on 31.3.2014
Freehold Land	-	-	-	-
Leasehold Land	-	-	-	-
Building & Other Civil Works	1676.86	-	-	1676.86
Transmission Line	61103.05	-90.60	-40.09	60972.36
Sub-Station Equipments	5360.40	-	-	5360.40
PLCC	524.07	-	-	524.07
Total	68664.38	-90.60	-40.09	68533.69

14. Thus, the summary of capital cost as on 31.3.2009/1.4.2009 and 31.3.2014 allowed earlier vide orders dated 13.10.2011 in Petition No. 16/2011 and 7.2.2013 in Petition No. 305/2010 and considered now for truing-up is as under:-

(₹ in lakh)							
Capital cost as on 1.4.2009	Claimed/ Approved	Net additional capital expenditure during 2009-14					Capital cost as on 31.3.2014
		2009-10	2010-11	2011-12	2012-13	2013-14	
Asset-1							
19445.67	vide order dated 13.10.2011	-	-	-	-	-	19445.67
19445.67	vide order dated 7.2.2013	868.06	-10.75	-	-	-	20302.98
19445.67	Allowed in the instant petition	868.06	-10.75	-	-	-	20302.98
Capital cost as on 1.4.2009	Claimed/ Approved	Net additional capital expenditure during 2009-14					Capital cost as on 31.3.2014
		2009-10	2010-11	2011-12	2012-13	2013-14	
Asset-2							
65619.37	vide order dated 13.10.2011	-	-	-	-	-	65619.37
65619.37	vide order dated 7.2.2013	184.98	37.15	-	-	-	65841.50
65619.37	Allowed in the instant petition	184.98	37.15	-	-	-	65841.50



Capital cost as on 1.4.2009	Claimed/ Approved	Net additional capital expenditure during 2009-14					Capital cost as on 31.3.2014
		2009-10	2010-11	2011-12	2012-13	2013-14	
Asset-3							
68664.38	vide order dated 13.10.2011	-	-	-	-	-	68664.38
68664.38	vide order dated 7.2.2013	-	-	13.43	-	-	68677.81
68664.38	Allowed in the instant petition	-	-	-	-90.60	-40.09	68533.69

Debt: Equity

15. Clause (2) of Regulation 12 of the 2009 Tariff Regulations provides that:-

“12. Debt-Equity Ratio. (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:

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

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

16. The petitioner has claimed trued up Annual Fixed Charge based on average debt: equity ratio of 78.65:21.35, 84.24:15.76 and 77.24:22.76 in case of Asset-1, Asset-2 and Asset-3 respectively, considered in order dated 13.10.2011 in Petition No. 16/2011 as the transmission assets covered in the instant petition were commissioned prior to 1.4.2009 and debt: equity ratio of 70: 30 as admitted for add-cap on account of replacement of Insulators vide order dated 7.2.2013 in Petition No. 305/2010. The admitted debt: equity ratio of 78.65:21.35, 84.24:15.76 and 77.24:22.76 in case of Asset-1, Asset-2 and Asset-3 respectively as on



31.3.2009 as opening debt: equity ratio as on 1.4.2009 and debt: equity ratio of 70:30 for add-cap admitted vide order dated 7.2.2013 in Petition No. 305/2010 has been considered for the purpose of truing up of the approved tariff for tariff period 2009-14. Debt: equity ratio of 70:30 in respect of the additional capitalisation has been considered in line with the 2009 Tariff Regulations.

17. The details of the debt: equity considered for the purpose of tariff for 2009-14 tariff period is as follows:-

(₹ in lakh)

Particulars	Asset-1					
	Cost as on 1.4.2009		Net add-cap during 2009-14		Cost as on 31.3.2014	
	Amount	%	Amount	%	Amount	%
Debt	15294.54	78.65	600.12	70.00	15894.65	78.29
Equity	4151.14	21.35	257.19	30.00	4408.33	21.71
Total	19445.67	100.00	857.31	100.00	20302.98	100.00
Particulars	Asset-2					
	Cost as on 1.4.2009		Net add-cap during 2009-14		Cost as on 31.3.2014	
	Amount	%	Amount	%	Amount	%
Debt	55276.60	84.24	155.49	70.00	55432.09	84.19
Equity	10342.76	15.76	66.64	30.00	10409.40	15.81
Total	65619.37	100.00	222.13	100.00	65841.49	100.00
Particulars	Asset-3					
	Cost as on 1.4.2009		Net add-cap during 2009-14		Cost as on 31.3.2014	
	Amount	%	Amount	%	Amount	%
Debt	53036.51	77.24	-91.48	70.00	52945.03	77.25
Equity	15627.87	22.76	-39.21	30.00	15588.66	22.75
Total	68664.38	100.00	-130.69	100.00	68533.69	100.00

Interest on Loan ("IOL")

18. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The Commission in its earlier order dated 13.10.2011 in Petition No. 16/2011 has held that:-



“25. (e).....Any change in the rate of interest subsequent to the above will be considered at the time of truing up”.

19. The petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest.

20. We have considered the submissions of the petitioner and accordingly calculated the IOL based on actual interest rate submitted by the petitioner, in accordance with Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest are attached at Annexure-1 to Annexure-3 to this order and the IOL has been worked out and allowed as follows:-

(₹ in lakh)					
Particulars	Asset-1				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	267.81	250.96	231.65	212.16	194.55
Allowed after trued up	262.83	239.73	217.78	197.97	180.34
Particulars	Asset-2				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	1300.50	1055.06	802.16	556.44	413.66
Allowed after trued up	1249.83	977.43	745.86	509.81	355.62
Particulars	Asset-3				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	1396.16	1115.82	837.06	565.67	322.55
Allowed after trued up	1380.02	1097.41	827.14	553.44	306.33

21. The IOL allowed herein is marginally lower than IOL allowed vide order dated 7.2.2013 due to decrease in actual weighted average interest rate.



Return on Equity (“RoE”)

22. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provide that:-

“(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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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 year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.”

23. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 7.2.2013. However, for truing up purpose, the computation of RoE for the tariff period 2009-14 has been done on the basis of actual MAT rate applicable during 2009-14. The petitioner has submitted the variation in the MAT rate during 2009-14 as per the Finance Act of the relevant year for the purpose of grossing up of RoE, as below:-

Particulars	MAT Rate	Grossed up RoE (Base rate/(1-t))
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%



24. Accordingly, the RoE as trued up is shown in the table as under:-

(₹ in lakh)

Particulars	Asset-1				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	748.42	771.18	771.18	771.18	771.18
Allowed after trued up	799.50	853.68	854.20	854.20	864.47
Particulars	Asset-2				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	1812.87	1818.69	1819.67	1819.67	1819.67
Allowed after trued up	1936.59	2013.97	2017.03	2017.03	2041.28
Particulars	Asset-3				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	2731.91	2731.91	2732.29	2732.66	2732.66
Allowed after trued up	2918.35	3025.24	3028.21	3025.58	3058.12

25. The return on equity allowed in the instant order is higher than the return on equity allowed vide order dated 7.2.2013 due to increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.

Depreciation

26. Clause (42) of Regulation 3 of the 2009 Tariff Regulations defines useful life as follows:-

“‘useful life’ in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:-

.....

- | | |
|------------------------------|-----------|
| (c) AC and DC sub-station | 25 years |
| (d) Hydro generating station | 35 years |
| (e) Transmission line | 35 years” |

27. Further, Clause (4) of Regulation 17 of the 2009 Tariff Regulations provide as follows:-

“17. **Depreciation** (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.



Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site;

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(4) 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 31st 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 assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.”

28. The Commission, in its order dated 7.2.2013, has worked out the depreciation in accordance with Regulation 17 of the 2009 Tariff Regulations.

29. As per Regulations 3(42) and 17 (4) of the 2009 Tariff Regulations, useful life for transmission line and sub-station is 35 years and 25 years, respectively. For the purpose of calculation, the life of PLCC has been considered as 25 years. The actual COD is 1.2.1998, 1.3.2001 and 1.4.2003 of Asset-1, Asset-2 and Asset-3 respectively. Hence, Asset-1, Asset-2 and Asset-3 have completed their 12 years on 31.1.2010, 28.2.2013 and 31.3.2015 respectively. Accordingly, in



respect of Asset-1 and Asset-2, the remaining depreciable value has been spread over the balance useful from 2010-11 and 2013-14 onwards respectively.

30. The depreciation for the tariff period 2009-14 has been worked out in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure and additional capitalisation as under:-

(₹ in lakh)

Particulars	Asset-1				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	1051.58	293.32	307.49	307.49	307.49
Allowed after trued up	1051.58	293.32	307.49	307.49	307.49
Particulars	Asset-2				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	3397.94	3403.80	3404.78	3404.78	617.96
Allowed after trued up	3397.94	3403.80	3404.78	3404.78	617.96
Particulars	Asset-3				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	3598.45	3598.45	3598.83	3599.21	3599.21
Allowed after trued up	3598.45	3598.45	3598.45	3596.06	3592.61

31. The depreciation allowed in the instant order is same in case of Asset-1 and Asset-2 as the depreciation allowed vide order dated 7.2.2013 for the tariff period 2009-14. However, the depreciation allowed in case of Asset-3 has decreased compared to the depreciation allowed vide order dated 7.2.2013, on account of net de-cap for the tariff period 2009-14



Operation & Maintenance Expenses (“O&M Expenses”)

32. The O&M Expenses claimed by the petitioner for tariff period 2009-14 are same as that approved in the tariff order dated 7.2.2013 in Petition No. 305/2010.

Accordingly, the O&M Expenses allowed and trued up are the same as follows:-

(₹ in lakh)

Particulars	Asset-1				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	475.54	502.64	531.51	561.94	593.98
Allowed after trued up	475.54	502.64	531.51	561.94	593.98
Particulars	Asset-2				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	1765.58	1866.69	1973.58	2086.35	2205.49
Allowed after trued up	1765.58	1866.69	1973.58	2086.35	2205.49
Particulars	Asset-3				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	879.06	929.42	982.63	1038.76	1098.05
Allowed after trued up	879.06	929.42	982.63	1038.76	1098.05

Interest on working capital (“IWC”)

33. Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations provides the components of the working capital for the transmission system and clause (3) of Regulation 18 of the 2009 Tariff Regulations provides for the rate of interest of working capital.

34. The petitioner has submitted that the rate of interest on working capital has been considered as 12.25% as per Clause (3) of Regulation 18 of the 2009 Tariff Regulations and the components of working capital are also considered in accordance with Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Regulations.



35. The Commission in its order dated 7.2.2013 in Petition No. 305/2010 approved rate of interest on working capital of 12.25% applicable for 2008-09. In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation prior to 1.4.2009, shall be equal to short-term Prime Lending Rate as applicable as on 1.4.2009. State Bank of India short-term Prime Lending Rate on 1.4.2009 was 12.25%. Therefore, interest rate of 12.25% has been considered to work out the interest on working capital in the instant case.

36. The IWC tried up is as under:-

(₹ in lakh)					
Particulars	Asset-1				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	71.33	75.40	79.73	84.29	89.10
O & M Expenses	39.63	41.89	44.29	46.83	49.50
Receivables	442.88	323.90	327.72	329.67	334.03
Total	553.84	441.19	451.74	460.79	472.63
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	67.85	54.05	55.34	56.45	57.90
Particulars	Asset-2				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	264.84	280.00	296.04	312.95	330.82
O & M Expenses	147.13	155.56	164.47	173.86	183.79
Receivables	1429.25	1414.76	1394.75	1374.33	898.92
Total	1841.22	1850.32	1855.25	1861.14	1413.53
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	225.55	226.66	227.27	227.99	173.16
Particulars	Asset-3				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	131.86	139.41	147.39	155.81	164.71
O & M Expenses	73.26	77.45	81.89	86.56	91.50
Receivables	1497.41	1476.32	1440.16	1402.56	1375.84
Total	1702.52	1693.19	1669.44	1644.93	1632.05
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	208.56	207.42	204.51	201.50	199.93



37. The summary of IWC allowed and trued up are as shown in the table below:-

(₹ in lakh)

Particulars	Asset-1				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	66.88	52.56	53.90	55.01	56.25
Allowed after true up	67.85	54.05	55.34	56.45	57.90
Particulars	Asset-2				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	224.03	224.21	224.33	224.85	169.75
Allowed after true up	225.55	226.66	227.27	227.99	173.16
Particulars	Asset-3				
	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	205.01	201.69	198.55	195.72	193.62
Allowed after true up	208.56	207.42	204.51	201.50	199.93

38. The IWC has increased on account of increase in receivables due to variation in RoE on account of applicable MAT rate during the 2009-14 tariff period.

Annual Fixed Charges for 2009-14 Tariff Period

39. The detailed computation of the various components of the trued up annual fixed charges for the transmission assets for the tariff period 2009-14 is summarised below:-

(₹ in lakh)

Particulars	Asset-1				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block					
Opening Gross Block	19445.67	20313.73	20302.98	20302.98	20302.98
Additional Capitalisation	868.06	-10.75	0.00	0.00	0.00
Closing Gross Block	20313.73	20302.98	20302.98	20302.98	20302.98
Average Gross Block	19879.70	20308.36	20302.98	20302.98	20302.98
Depreciation					
Rate of Depreciation	5.2897%	1.4444%	1.5145%	1.5145%	1.5145%
Depreciable Value	17891.73	18277.52	18272.68	18272.68	18272.68



Elapsed Life (Beginning of the year)	11	12	13	14	15
Weighted Balance Useful life of the assets	22	21	20	19	18
Remaining Depreciable Value	6654.55	6159.81	6149.73	5842.24	5534.76
Depreciation	1051.58	293.32	307.49	307.49	307.49
Interest on Loan					
Gross Normative Loan	15294.54	15902.18	15894.65	15894.65	15894.65
Cumulative Repayment upto Previous Year	11160.02	12211.60	12504.92	12812.41	13119.90
Net Loan-Opening	4134.51	3690.58	3389.73	3082.24	2774.76
Addition due to Additional Capitalisation	607.64	-7.53	0.00	0.00	0.00
Repayment during the year	1051.58	293.32	307.49	307.49	307.49
Net Loan-Closing	3690.58	3389.73	3082.24	2774.76	2467.27
Average Loan	3912.55	3540.15	3235.98	2928.50	2621.01
Weighted Average Rate of Interest on Loan	6.72%	6.77%	6.73%	6.76%	6.88%
Interest	262.83	239.73	217.78	197.97	180.34
Return on Equity					
Opening Equity	4151.14	4411.56	4408.33	4408.33	4408.33
Addition due to Additional Capitalisation	260.42	-3.23	0.00	0.00	0.00
Closing Equity	4411.56	4408.33	4408.33	4408.33	4408.33
Average Equity	4281.35	4409.94	4408.33	4408.33	4408.33
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year (MAT)	16.995%	19.931%	20.008%	20.008%	20.961%
Rate of Return on Equity (Pre Tax)	18.674%	19.358%	19.377%	19.377%	19.610%
Return on Equity (Pre Tax)	799.50	853.68	854.20	854.20	864.47
Interest on Working Capital					
Maintenance Spares	71.33	75.40	79.73	84.29	89.10
O & M expenses	39.63	41.89	44.29	46.83	49.50
Receivables	442.88	323.90	327.72	329.67	334.03
Total	553.84	441.19	451.74	460.79	472.63
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	67.85	54.05	55.34	56.45	57.90
Annual Transmission Charges					
Depreciation	1051.58	293.32	307.49	307.49	307.49
Interest on Loan	262.83	239.73	217.78	197.97	180.34
Return on Equity	799.50	853.68	854.20	854.20	864.47
Interest on Working Capital	67.85	54.05	55.34	56.45	57.90
O & M Expenses	475.54	502.64	531.51	561.94	593.98
Total	2657.29	1943.42	1966.32	1978.04	2004.18



(₹ in lakh)

Particulars	Asset-2				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block					
Opening Gross Block	65619.37	65804.35	65841.50	65841.50	65841.50
Additional Capitalisation	184.98	37.15	0.00	0.00	0.00
Closing Gross Block	65804.35	65841.50	65841.50	65841.50	65841.50
Average Gross Block	65711.86	65822.92	65841.50	65841.50	65841.50
Depreciation					
Rate of Depreciation	5.1710%	5.1711%	5.1712%	5.1712%	0.9386%
Depreciable Value	58304.41	58404.37	58421.09	58421.09	58421.09
Elapsed Life (Beginning of the year)	8	9	10	11	12
Weighted Balance Useful life of the combine assets	24	23	22	21	20
Remaining Depreciable Value	25527.04	22353.22	19168.72	15763.94	12359.16
Depreciation	3397.94	3403.80	3404.78	3404.78	617.96
Interest on Loan					
Gross Normative Loan	55276.60	55406.09	55432.09	55432.09	55432.09
Cumulative Repayment upto Previous Year	33038.58	36436.52	39840.32	43245.10	46649.88
Net Loan-Opening	22238.02	18969.57	15591.78	12186.99	8782.21
Addition due to Additional Capitalisation	129.49	26.01	0.00	0.00	0.00
Repayment during the year	3397.94	3403.80	3404.78	3404.78	617.96
Net Loan-Closing	18969.57	15591.78	12186.99	8782.21	8164.25
Average Loan	20603.80	17280.67	13889.39	10484.60	8473.23
Weighted Average Rate of Interest on Loan	6.0660%	5.6562%	5.3700%	4.8624%	4.1970%
Interest	1249.83	977.43	745.86	509.81	355.62
Return on Equity					
Opening Equity	10342.76	10398.26	10409.40	10409.40	10409.40
Addition due to Additional Capitalisation	55.49	11.15	0.00	0.00	0.00
Closing Equity	10398.26	10409.40	10409.40	10409.40	10409.40
Average Equity	10370.51	10403.83	10409.40	10409.40	10409.40
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year (MAT)	16.995%	19.931%	20.008%	20.008%	20.961%
Rate of Return on Equity (Pre Tax)	18.674%	19.358%	19.377%	19.377%	19.610%
Return on Equity (Pre Tax)	1936.59	2013.97	2017.03	2017.03	2041.28
Interest on Working Capital					



Maintenance Spares	264.84	280.00	296.04	312.95	330.82
O & M expenses	147.13	155.56	164.47	173.86	183.79
Receivables	1429.25	1414.76	1394.75	1374.33	898.92
Total	1,841.22	1,850.32	1,855.25	1,861.14	1,413.53
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	225.55	226.66	227.27	227.99	173.16
Annual Transmission Charges					
Depreciation	3397.94	3403.80	3404.78	3404.78	617.96
Interest on Loan	1249.83	977.43	745.86	509.81	355.62
Return on Equity	1936.59	2013.97	2017.03	2017.03	2041.28
Interest on Working Capital	225.55	226.66	227.27	227.99	173.16
O & M Expenses	1765.58	1866.69	1973.58	2086.35	2205.49
Total	8575.48	8488.56	8368.52	8245.96	5393.51

(₹ in lakh)

Particulars	Asset-3				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block					
Opening Gross Block	68664.38	68664.38	68664.38	68664.38	68573.78
Additional Capitalisation	0.00	0.00	0.00	-90.60	-40.09
Closing Gross Block	68664.38	68664.38	68664.38	68573.78	68533.69
Average Gross Block	68664.38	68664.38	68664.38	68619.08	68553.73
Depreciation					
Rate of Depreciation	5.2406%	5.2406%	5.2406%	5.2406%	5.2406%
Depreciable Value of Combined Assets	61797.94	61797.94	61797.94	61716.40	61680.32
Elapsed Life (Beginning of the year)	6	7	8	9	10
Weighted Balance Useful life of the combine assets	28	27	26	25	24
Remaining Depreciable Value	35582.02	31983.57	28385.12	24705.12	21221.92
Depreciation	3598.45	3598.45	3598.45	3596.06	3592.61
Interest on Loan					
Gross Normative Loan	53036.51	53036.51	53036.51	53036.51	52973.09
Cumulative Repayment upto Previous Year	31477.57	35076.02	38674.47	42272.92	45868.98
Net Loan-Opening	21558.94	17960.49	14362.04	10763.59	7104.11
Addition due to Additional Capitalisation	0.00	0.00	0.00	-63.42	-28.06
Repayment during the year	3598.45	3598.45	3598.45	3596.06	3592.61
Net Loan-Closing	17960.49	14362.04	10763.59	7104.11	3483.43
Average Loan	19759.71	16161.26	12562.81	8933.85	5293.77
Weighted Average Rate of Interest on Loan	6.9840%	6.7903%	6.5841%	6.1948%	5.7867%
Interest	1380.02	1097.41	827.14	553.44	306.33



Return on Equity					
Opening Equity	15627.87	15627.87	15627.87	15627.87	15600.69
Addition due to Additional Capitalisation	0.00	0.00	0.00	-27.18	-12.03
Closing Equity	15627.87	15627.87	15627.87	15600.69	15588.66
Average Equity	15627.87	15627.87	15627.87	15614.28	15594.68
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year (MAT)	16.995%	19.931%	20.008%	20.008%	20.961%
Rate of Return on Equity (Pre Tax)	18.674%	19.358%	19.377%	19.377%	19.610%
Return on Equity (Pre Tax)	2918.35	3025.24	3028.21	3025.58	3058.12
Interest on Working Capital					
Maintenance Spares	131.86	139.41	147.39	155.81	164.71
O & M expenses	73.26	77.45	81.89	86.56	91.50
Receivables	1497.41	1476.32	1440.16	1402.56	1375.84
Total	1,702.52	1,693.19	1,669.44	1,644.93	1,632.05
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	208.56	207.42	204.51	201.50	199.93
Annual Transmission Charges					
Depreciation	3598.45	3598.45	3598.45	3596.06	3592.61
Interest on Loan	1380.02	1097.41	827.14	553.44	306.33
Return on Equity	2918.35	3025.24	3028.21	3025.58	3058.12
Interest on Working Capital	208.56	207.42	204.51	201.50	199.93
O & M Expenses	879.06	929.42	982.63	1038.76	1098.05
Total	8984.44	8857.93	8640.94	8415.34	8255.03

Determination of Annual Transmission Charges for 2014-19

40. The true-up tariff for the instant transmission system up to 2009-14 tariff period has been granted based on the actual COD of individual elements irrespective of the project as whole is completed or not. This leads to granting of multiple tariffs for the assets covered under the single project/transmission system. The Commission, vide Regulation 6 of the 2014 Tariff Regulations has brought in the concept of a single consolidated petition to be submitted by a petitioner where



if all the elements of a transmission system have been declared under commercial operation prior to 1.4.2014, then a single tariff can be granted for all the assets covered under such a single project/transmission system. However, to determine a single transmission tariff for different assets after combining them, as per the 2014 Tariff Regulations, the concept of effective date of commercial operation and weighted average life has also been introduced in Regulation 27 (Depreciation) of the 2014 Tariff Regulations. The relevant portions of Regulation 6 and Regulation 27 of the 2014 Tariff Regulations are as under:-

“6. Tariff determination

(1) Tariff in respect of a generating station may be determined for the whole of the generating station or stage or generating unit or block thereof, and tariff in respect of a transmission system may be determined for the whole of the transmission system or transmission line or sub-station or communication system forming part of transmission system:

Provided that:

(i) where all the generating units of a stage of a generating station or all elements of a transmission system have been declared under commercial operation prior to 1.4.2014, the generating company or the transmission licensee, as the case may be, shall file consolidated petition in respect of the entire generating station or transmissions system for the purpose of determination of tariff for the period 2014-15 to 2018-19:

Xxx

Xxx”

“27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.



(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

Xxx
Xxx”

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

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

Xxx
Xxx”

41. The instant petition relates to the transmission system associated with 400 kV Nathpa-Jhakri Transmission System in Northern Region. The final tariff of each of the assets was approved separately vide order dated: 7.2.2013 in Petition No. 305/2010. Hence, the tariff for Asset-1, Asset-2 and Asset-3 for period 2009-14 has been trued-up separately in the above paragraphs. Now, as these three assets, represent the Project as whole, as stated by the petitioner in the petition, these assets need to be combined into a single asset and accordingly single tariff for the project as a whole to be worked out for the tariff period 2014-19. For the purpose of calculation of single tariff, the Effective COD and Weighted Average life of the project as a whole has been computed as discussed in the following paragraphs.

Effective Date of Commercial Operation (E-COD)

42. The Effective Date of Commercial Operation (E-COD) for the project as a whole has been worked out based on the admitted capital cost of individual assets



as on 31.3.2014 and the actual COD of individual assets. Accordingly, the Effective Date of Commercial Operation (E-COD) for the instant project as a whole has been worked out as 6.9.2001 as follows:-

(₹ in lakh)

Project Name	Asset No.	Actual COD	Admitted capital cost as on 31.3.2014	Weight of the cost	No. of days from last COD	Weighted days	Effective COD (Latest COD-Weighted days)
400 kV Nathpa-Jhakri Transmission System in Northern Region	1	1.2.1998	20302.98	13.13%	1885	247.42	6.9.2001
	2	1.3.2001	65841.50	42.57%	761	323.93	
	3	1.4.2003	68533.69	44.31%		0.00	
TOTAL			154678.17	100.00%		571.36	

Thus, the E-COD has been used to determine the lapsed life of the project as whole which, works out as 12 years as on 1.4.2014. (i.e. the No. of completed years as on 1.4.2014 from E-COD).

Weighted Average Life (WAL)

43. The project as a whole has multiple elements (i.e. Land, Building, Transmission line, Substation and PLCC) and each element may have different span of life. Therefore, in the 2014 Tariff Regulations, the concept of Weighted Average Life (WAL) has been introduced which has been used as the useful life of the project as whole. The Weighted Average Life (WAL) has been determined based on the admitted capital cost of individual elements as on 31.3.2014 and their respective life as stipulated in the 2014 Tariff Regulations. The element wise life as it was defined in Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2014 Tariff Regulations has been considered for determination of WAL.



Accordingly, the Weighted Average Life of the project as whole has been worked out as 32 years as follows:-

Determination of Weighted Average Life						
Particulars	Admitted Capital Cost as on 31.3.2014			Capital Cost of Project as whole (a)	Life as per the 2014 Tariff Regulations (b)	Weight (a) x (b)
	Asset-1	Asset-2	Asset-3			
Freehold Land	0.00	929.18	-	929.18	-	-
Leasehold Land	-	-	-	0.00	25	-
Building & Other Civil Works	-	1404.61	1676.86	3081.46	25	77036.62
Transmission Line	15841.97	42664.77	60972.36	119479.09	35	4181768.27
Sub-Station Equipments	4277.22	20399.07	5360.40	30036.70	25	750917.42
PLCC	183.79	443.87	524.07	1151.73	15	17275.98
Total	20302.98	65841.50	68533.69	154678.17	32	5026998.29
Weighted Average life=Total of Weight/capital of project				32 Years		

44. Further, it is assumed that, the Weighted average life of the project as whole as on 1.4.2014 as determined above is applicable prospectively (i.e. for 2014-19 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required. Accordingly, the WAL has been used to determine the remaining useful life as on 31.3.2014 as 20 years.

45. The petitioner has claimed the transmission charges as under:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4482.38	1528.59	1528.59	1528.60	1528.59
Interest on Loan	562.42	387.01	327.71	289.54	251.67
Return on Equity	5972.71	5972.71	5972.71	5972.71	5972.71
Interest on Working Capital	451.13	385.69	391.11	397.22	403.57



O&M Expenses	3575.79	3695.03	3817.63	3944.18	4075.12
Total	15044.43	11969.03	12037.75	12132.25	12231.66

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	536.37	554.26	572.65	591.63	611.26
O & M Expenses	297.99	307.92	318.14	328.69	339.60
Receivables	2507.41	1994.84	2006.29	2022.04	2038.61
Total	3341.77	2857.02	2897.08	2942.36	2989.47
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	451.13	385.69	391.11	397.22	403.57

Capital Cost

47. Clause (1) and (3) of Regulation 9 of the 2014 Tariff Regulations provides as follows:-

“(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects.”

(2) The Capital Cost of a new project shall include the following:

(a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (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 funds deployed;

(c) Increase in cost in contract packages as approved by the Commission;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;

(e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;

(f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations; 39



(g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and

(h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.

“ (3) The Capital cost of an existing project shall include the following:

(a) the capital cost admitted by the Commission prior to 1.4.2014 duly tried up by excluding liability, if any, as on 1.4.2014;

(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and

(c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”

48. The element wise capital cost (Land, Building, Transmission line, Sub-station and PLCC) as admitted as on 31.3.2014 for Asset-1, Asset-2 and Asset-3 are clubbed together and the combined cost has been considered as capital cost of the project as a whole as on 1.4.2014. Thus, ₹154678.17 lakh has been considered as the admitted capital cost of the project as on 1.4.2014 as per details as under:-

Particulars	Capital cost as on 31.3.2014 as determined in true up of 2009-14			Combined cost for the project as a whole as on 1.4.2014
	Asset-1	Asset-2	Asset-3	
Freehold Land	-	929.18	-	929.18
Leasehold Land	-	-	-	-
Building & Other Civil Works	-	1404.61	1676.86	3081.46
Transmission Line	15841.97	42664.77	60972.36	119479.09
Sub-Station Equipments	4277.22	20399.07	5360.40	30036.70
PLCC	183.79	443.87	524.07	1151.73
Total	20302.98	65841.50	68533.69	154678.17



Additional Capital Expenditure

49. The petitioner has not projected any additional capital expenditure during the tariff period 2014-19. Thus, capital cost as on 31.3.2019 has been considered same as on 1.4.2014 i.e. ₹154678.17 lakh.

Debt: Equity Ratio

50. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-

“(3) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2014, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.”

51. The debt: equity ratio of 78.29: 21.71, 84.19: 15.81 and 77.25: 22.75 was admitted after true-up for the tariff period ending 31.3.2014 for Asset-1, Asset-2 and Asset-3 respectively. The debt: equity ratio of combined asset has been worked out as 80.34: 19.66 based on combined normative equity and combined normative loan as on 1.4.2014. The details of the debt: equity as on 1.4.2014 considered for the purpose of tariff for the 2014-19 tariff period are as follows:-

Particulars	Details as on 31.3.2014, as determined during true-up of 2009-14 tariff			Considered for single tariff for Project as whole as on 1.4.2014
	Asset-1	Asset-2	Asset-3	
Admitted Capital Cost	20302.98	65841.50	68533.69	154678.17
Gross Normative Loan	15894.65	55432.09	52945.03	124271.77
Gross Normative Equity	4408.33	10409.40	15588.66	30406.39
Debt Equity Ratio	78.29 21.71	84.19:15.81	77.25 : 22.75	80.34:19.66



52. As no additional capital expenditure has been claimed by the petitioner, the debt: equity ratio of the project as a whole shall remain same as on 31.3.2019, i.e. 80.34: 19.66, which is subject to truing-up.

Interest on Loan (“IOL”)

53. Regulation 26 of the 2014 Tariff Regulations with regard to Interest on Loan specifies as under:-

“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalisation of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.

(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 depreciation allowed for the year or part of the year.

5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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.”



54. The actual loans as on 31.3.2014 in respect of Asset-1, Asset-2 and Asset-3 have been combined and have been considered as actual loan portfolio of the combined asset as on 1.4.2014. Accordingly, weighted average rate of interest has been worked out on the basis of the actual loan portfolio of the combined asset, which is subject to truing-up.

55. The normative loan as on 1.4.2014 for the combined asset has been worked out by deducting the cumulative repayment of individual assets as admitted upto 31.3.2014 from the gross normative loan of individual assets as per details as under:-

Particulars	Asset-1	Asset-2	Asset-3	Considered for single tariff for the project as whole as on 1.4.2014
Gross Loan	15894.65	55432.09	52945.03	124271.77
Cumulative Re-payment	13427.38	47267.84	49461.59	110156.81
Normative loan outstanding as on 1.4.2014	2467.27	8164.25	3483.44	14114.96

56. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest are placed at Annexure-4 and the IOL has been worked out and allowed as follows:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross loan opening	124271.77	124271.77	124271.77	124271.77	124271.77
Cumulative Repayment upto COD/previous year	110156.81	111890.52	113624.24	115357.95	117091.66
Net Loan-Opening	14114.96	12381.25	10647.54	8913.82	7180.11
Additions during the year	-	-	-	-	-
Repayment during the year	1733.71	1733.71	1733.71	1733.71	1733.71
Net Loan-Closing	12381.25	10647.54	8913.82	7180.11	5446.40



Average Loan	13248.10	11514.39	9780.68	8046.97	6313.26
Weighted Rate of Interest	4.6506%	3.8554%	2.8824%	2.9071%	2.9657%
Interest	616.11	443.92	281.92	233.93	187.23

Return on Equity (“ROE”)

57. Clause (1) and (2) of Regulation 24 and Clause (1) and (2) of Regulation 25 of the 2014 Tariff Regulations specify as follows:-

“ **24. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

(i) in case of projects commissioned on or after 1st April, 2014, an additional return of **0.50 %** shall be allowed, if such projects are completed within the timeline specified in **Appendix-I**:

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(i) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.”

“**25. Tax on Return on Equity:**



(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”.

“(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

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

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

58. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE with MAT rate as per the above Regulations. The petitioner has submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

59. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including



interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.

60. The Gross Normative Equity as on 31.3.2014 of individual assets as admitted has been added together and the total amount has been considered as Gross Normative Equity of Project/Combined Asset as on 1.4.2014. Additional ROE has not been allowed for any of the individual assets. Hence, the Gross Normative Equity of the Project has been considered as the basis for Return on Equity. The details are as follows:-

(₹ in lakh)

Particulars	Details as on 31.3.2014 as determined during true-up of 2009-14 tariff			Gross normative equity for the project as a whole as on 1.4.2014
	Asset-1	Asset-2	Asset-3	
Gross equity	4408.33	10409.40	15588.66	30406.39

61. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for 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 is 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 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the ROE determined is given overleaf:-



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	30406.39	30406.39	30406.39	30406.39	30406.39
Addition due to Additional Capitalisation	-	-	-	-	-
Closing Equity	30406.39	30406.39	30406.39	30406.39	30406.39
Average Equity	30406.39	30406.39	30406.39	30406.39	30406.39
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the year (%)	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre Tax) (%)	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	5962.69	5962.69	5962.69	5962.69	5962.69

Depreciation

62. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation specifies as follows:-

"27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:



Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

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

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.”

63. The Capital Cost, Effective Date of Commercial Operation and Weighted Average Life (WAL) for the project as a whole as determined in preceding paragraphs have been considered for determination of depreciation during the tariff period 2014-19. Accordingly, 12 years from the effective date of commercial operation is completed during 2013-14. The depreciation from 2014-15, has been worked out by spreading the remaining depreciable value. The cumulative depreciation for the project as whole has been computed as overleaf:-



(₹ in lakh)

Particulars	Details as on 31.3.2014 as determined during true-up of 2009-14 tariff			Considered for single tariff for the project as a whole as on 1.4.2014
	Asset-1	Asset-2	Asset-3	
Cumulative depreciation	13045.41	46679.89	43974.57	103699.87

64. We have considered the submission made by the petitioner with reference to depreciation. Depreciation is allowed as provided under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	154678.17	154678.17	154678.17	154678.17	154678.17
Additions during the year due to projected additional capitalization	-	-	-	-	-
Closing Gross block	154678.17	154678.17	154678.17	154678.17	154678.17
Average gross block	154678.17	154678.17	154678.17	154678.17	154678.17
Rate of Depreciation (%)	1.1209%	1.1209%	1.1209%	1.1209%	1.1209%
Depreciable Value	138374.09	138374.09	138374.09	138374.09	138374.09
Elapsed Life of the assets at beginning of the year	12	13	14	15	16
Weighted Balance Useful life of the assets	20	19	18	17	16
Remaining Depreciable Value	34674.22	32940.51	31206.80	29473.09	27739.37
Depreciation	1733.71	1733.71	1733.71	1733.71	1733.71

Operation & Maintenance Expenses (“O&M Expenses”)

65. Regulation 29 (4) (a) of the 2014 Tariff Regulations specifies the norms for operation and maintenance expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition are as follows:-



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
D/C twin and triple conductor (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
D/C Single conductor (₹ lakh/km)	0.303	0.313	0.324	0.334	0.346
S/C twin conductor (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
400 kV bay (₹ lakh/km)	60.30	62.30	64.37	66.51	68.71
220 kV bay (₹ lakh/bay)	42.21	43.61	45.06	46.55	48.10

66. The petitioner has computed normative O&M Expenses as per sub-clause (a) of clause (3) of Regulation 29 of the 2014 Tariff Regulations. Accordingly, the petitioner's entitlement to O&M Expenses has been worked out for Asset-1, Asset-2 and Asset-3 and are combined and considered as O&M Expenses of project as a whole for the purpose of tariff. The details are as given hereunder:-

(₹ in lakh)

Particulars	Asset-1				
	2014-15	2015-16	2016-17	2017-18	2018-19
98.98 km D/C twin conductor Bawana-Bhiwani ckt I & II T/L (COD 1.2.1998)	69.98	72.35	74.75	77.20	79.777
276.77 km S/C twin conductor Hissar-Bassi T/L (COD 1.2.1998)	111.81	115.69	119.56	123.44	127.59
6 nos. 400 kV bays (COD 1.2.1998)	361.80	373.80	386.22	399.06	412.26
Total	543.59	561.84	580.51	599.70	619.63
Particulars	Asset-2				
	2014-15	2015-16	2016-17	2017-18	2018-19
49.74 km D/C Single conductor Jalandhar-Dasuya T/L	15.07	15.57	16.11	16.61	17.21
166.64 km D/C triple conductor Abdullapur Bawana T/L	117.81	121.81	125.81	129.98	134.31
249.28 km D/C triple conductor Nalagarh-Hissar T/L	176.24	182.22	188.21	194.44	200.92
5.2 km D/C twin conductor LILO of Chamera-Moga at Jalandhar T/L	3.68	3.80	3.93	4.06	4.19



20 no. 400 kV bays	1206.00	1246.00	1287.40	1330.20	1374.00
12 nos. 220 kV bays	506.52	523.32	540.72	558.60	577.20
Total	2025.32	2092.73	2162.18	2233.89	2308.03
Particulars	Asset-3				
	2014-15	2015-16	2016-17	2017-18	2018-19
179.93 km D/C Triple conductor Nathpa Jhakri-Abdullapur T/L (COD 1.4.2003)	127.21	131.53	135.85	140.34	145.02
143.99 km D/C Triple conductor Nathpa Jhakri-Nalagarh T/L (COD 1.4.2003)	101.8	105.25	108.71	112.32	116.06
8 nos. 400 kV bays (COD 1.4.2003)	482.40	498.40	514.96	532.08	549.68
7 nos. 220 kV bays (COD 1.4.2003)	295.47	305.28	315.42	325.85	336.70
Total	1006.88	1040.46	1074.94	1110.59	1147.46

67. The petitioner has submitted that O&M Expenses for the tariff period 2014-19 have been arrived 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 at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

68. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, 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.



69. The details of O&M Expenses allowed are as given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses allowed	3575.59	3695.03	3817.63	3944.18	4075.12

Interest on Working Capital (“IWC”)

70. Clause 1 (c) and 3 of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify as follows:-

“**28. Interest on Working Capital:** (1) The working capital shall cover:

(a)-----

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

(i) Receivables equivalent to two months of fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and

(iii) Operation and maintenance expenses for one month”

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later”

“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

71. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points). The interest on working capital as determined is as follows:-



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	536.34	554.25	572.64	591.63	611.27
O & M expenses	297.97	307.92	318.14	328.68	339.59
Receivables	2046.16	2037.81	2031.75	2045.82	2060.89
Total	2880.47	2899.98	2922.53	2966.13	3011.75
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	388.86	391.50	394.54	400.43	406.59

Annual Transmission Charges

72. The Annual Transmission Charges allowed for the combined transmission asset is as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1733.71	1733.71	1733.71	1733.71	1733.71
Interest on Loan	616.11	443.92	281.92	233.93	187.23
Return on Equity	5962.69	5962.69	5962.69	5962.69	5962.69
Interest on Working Capital	388.86	391.50	394.54	400.43	406.59
O&M Expenses	3575.59	3695.03	3817.63	3944.18	4075.12
Total	12276.97	12226.86	12190.49	12274.94	12365.35

Filing Fee and Publication Expenses

73. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. 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 clause (1) of Regulation 52 of the 2014 Tariff Regulations.

Licence Fee and RLDC Fees and Charges

74. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and



charges in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

Service Tax

75. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if notification regarding granting of exemption to transmission service is withdrawn at a later date and it is subjected to such service tax in future the beneficiaries shall have to share the service tax paid by the petitioner. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Deferred Tax Liability

76. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when materialized under Regulation 49 of the 2014 Tariff Regulations. The deferred tax liability shall be dealt as per Regulations 49 of the 2014 Tariff Regulations, as amended. Accordingly, the petitioner is entitled to recover the deferred tax liability upto 31.3.2009 whenever the same materializes, directly from the beneficiaries or long term transmission customers /DICs.

Sharing of Transmission Charges

77. 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.



78. This order disposes of Petition No. 26/TT/2015.

sd/-
(M.K. Iyer)
Member

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member



Annexure-1

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	BOND VI					
	Gross loan opening	699.00	699.00	699.00	699.00	699.00
	Cumulative Repayment upto DOCO/previous year	489.30	559.20	629.10	699.00	699.00
	Net Loan-Opening	209.70	139.80	69.90	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	69.90	69.90	69.90	0.00	0.00
	Net Loan-Closing	139.80	69.90	0.00	0.00	0.00
	Average Loan	174.75	104.85	34.95	0.00	0.00
	Rate of Interest	13.13%	13.13%	13.13%	13.13%	13.13%
	Interest	22.94	13.77	4.59	0.00	0.00
	Rep Schedule	10 Annual Instalments from 06.12.2002				
2	BOND XI Option -II					
	Gross loan opening	1398.00	1398.00	1398.00	1398.00	1398.00
	Cumulative Repayment upto DOCO/previous year	1398.00	1398.00	1398.00	1398.00	1398.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	6 Annual Instalments from 07.12.2003				
3	NHPC Bond					
	Gross loan opening	2.59	2.59	2.59	2.59	2.59
	Cumulative Repayment upto DOCO/previous year	2.59	2.59	2.59	2.59	2.59
	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	Bullet on 24.02.2002				
4	Bond V					
	Gross loan opening	1631.00	1631.00	1631.00	1631.00	1631.00
	Cumulative Repayment upto DOCO/previous year	1631.00	1631.00	1631.00	1631.00	1631.00
	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	Bullet on 24.02.2002				
5	Bond III SERIES (2nd)					
	Gross loan opening	66.21	66.21	66.21	66.21	66.21
	Cumulative Repayment upto DOCO/previous year	66.21	66.21	66.21	66.21	66.21
	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	Bullet on 24.02.2002				
6	Bond I (Issue -III)					
	Gross loan opening	39.00	39.00	39.00	39.00	39.00
	Cumulative Repayment upto DOCO/previous year	39.00	39.00	39.00	39.00	39.00
	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	Bullet on 24.02.2002				
7	Bond IV (1st Tranch)					
	Gross loan opening	407.00	407.00	407.00	407.00	407.00
	Cumulative Repayment upto DOCO/previous year	407.00	407.00	407.00	407.00	407.00
	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	Bullet on 24.02.2002				
8	Bond III SERIES-I					
	Gross loan opening	113.79	113.79	113.79	113.79	113.79
	Cumulative Repayment upto DOCO/previous year	113.79	113.79	113.79	113.79	113.79
	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					
9	Bond I (Issue I)					
	Gross loan opening	37.00	37.00	37.00	37.00	37.00
	Cumulative Repayment upto DOCO/previous year	37.00	37.00	37.00	37.00	37.00
	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					
10	Bond II					
	Gross loan opening	31.00	31.00	31.00	31.00	31.00
	Cumulative Repayment upto DOCO/previous year	31.00	31.00	31.00	31.00	31.00
	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					
11	UTI					
	Gross loan opening	19.00	19.00	19.00	19.00	19.00
	Cumulative Repayment upto DOCO/previous year	19.00	19.00	19.00	19.00	19.00
	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					
12	LIC Tr.I Loan					
	Gross loan opening	7323.16	7323.16	7323.16	7323.16	7323.16
	Cumulative Repayment upto DOCO/previous year	3379.92	3943.24	4506.56	5069.88	5633.20
	Net Loan-Opening	3943.24	3379.92	2816.60	2253.28	1689.96
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	563.32	563.32	563.32	563.32	563.32
	Net Loan-Closing	3379.92	2816.60	2253.28	1689.96	1126.64
	Average Loan	3661.58	3098.26	2534.94	1971.62	1408.30
	Rate of Interest	6.30%	6.30%	6.30%	6.30%	6.30%
	Interest	230.68	195.19	159.70	124.21	88.72
	Rep Schedule	13 Annual instalments from 31.03.2004				
13	BOND XXX					
	Gross loan opening	0.00	392.13	392.13	444.61	444.61



	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	392.13	392.13	444.61	444.61
	Additions during the year	392.13	0.00	52.48	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	37.05
	Net Loan-Closing	392.13	392.13	444.61	444.61	407.56
	Average Loan	196.07	392.13	418.37	444.61	426.09
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	17.25	34.51	36.82	39.13	37.50
	Rep Schedule	12 Annual instalments from 29.09.2013				
14	BOND XXXIII					
	Gross loan opening	0.00	0.00	0.00	0.00	0.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	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	8.64%	8.64%	8.64%	8.64%	8.64%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	12 Annual instalments from 08.07.2014				
	Total Loan					
	Gross loan opening	11766.75	12158.88	12158.88	12211.36	12211.36
	Cumulative Repayment upto DOCO/previous year	7613.81	8247.03	8880.25	9513.47	10076.79
	Net Loan-Opening	4152.94	3911.85	3278.63	2697.89	2134.57
	Additions during the year	392.13	0.00	52.48	0.00	0.00
	Repayment during the year	633.22	633.22	633.22	563.32	600.37
	Net Loan-Closing	3911.85	3278.63	2697.89	2134.57	1534.20
	Average Loan	4032.40	3595.24	2988.26	2416.23	1834.39
	Weighted Average Rate of Interest	6.7175%	6.7719%	6.7299%	6.7600%	6.8807%
	Interest	270.88	243.46	201.11	163.34	126.22



Annexure-2

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	BOND VI					
	Gross loan opening	1296.00	1296.00	1296.00	1296.00	1296.00
	Cumulative Repayment upto DOCO/previous year	907.20	1036.80	1166.40	1296.00	1296.00
	Net Loan-Opening	388.80	259.20	129.60	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	129.60	129.60	129.60	0.00	0.00
	Net Loan-Closing	259.20	129.60	0.00	0.00	0.00
	Average Loan	324.00	194.40	64.80	0.00	0.00
	Rate of Interest	13.13%	13.13%	13.13%	13.13%	13.13%
	Interest	42.54	25.52	8.51	0.00	0.00
	Rep Schedule	10 Annual Instalments from 06.12.2002				
2	BOND VII					
	Gross loan opening	2375.00	2375.00	2375.00	2375.00	2375.00
	Cumulative Repayment upto DOCO/previous year	2375.00	2375.00	2375.00	2375.00	2375.00
	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	13.64%	13.64%	13.64%	13.64%	13.64%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	5 Annual Instalments from 04.08.2003				
3	Bond XI- Option -II					
	Gross loan opening	2748.00	2748.00	2748.00	2748.00	2748.00
	Cumulative Repayment upto DOCO/previous year	2748.00	2748.00	2748.00	2748.00	2748.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	6 Annual Instalments from 07.12.2003				
4	Bond XIII- Option -II					
	Gross loan opening	2232.00	2232.00	2232.00	2232.00	2232.00
	Cumulative Repayment upto DOCO/previous year	2232.00	2232.00	2232.00	2232.00	2232.00
	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				
5	Corporation Bank					
	Gross loan opening	1728.00	1728.00	1728.00	1728.00	1728.00
	Cumulative Repayment upto DOCO/previous year	950.40	1123.20	1296.00	1468.80	1641.60
	Net Loan-Opening	777.60	604.80	432.00	259.20	86.40
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	172.80	172.80	172.80	172.80	86.40
	Net Loan-Closing	604.80	432.00	259.20	86.40	0.00
	Average Loan	691.20	518.40	345.60	172.80	43.20
	Rate of Interest	10.60%	10.57%	12.55%	13.00%	13.00%
	Interest	73.27	54.79	43.37	22.46	5.62
	Rep Schedule	20 Half yearly Instalments from 10.03.2004				
6	Punjab National Bank-I					
	Gross loan opening	3291.00	3291.00	3291.00	3291.00	3291.00
	Cumulative Repayment upto DOCO/previous year	1974.60	2303.70	2632.80	2961.90	3291.00
	Net Loan-Opening	1316.40	987.30	658.20	329.10	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	329.10	329.10	329.10	329.10	0.00
	Net Loan-Closing	987.30	658.20	329.10	0.00	0.00
	Average Loan	1151.85	822.75	493.65	164.55	0.00
	Rate of Interest	8.95%	9.72%	11.86%	11.90%	0.00%
	Interest	103.09	79.97	58.55	19.58	0.00
	Rep Schedule	10 Annual Instalments from 30.03.2004				
7	BOI					
	Gross loan opening	9627.23	9627.23	9627.23	9627.23	9627.23
	Cumulative Repayment upto DOCO/previous year	2533.71	3040.39	3547.07	4053.75	4560.43
	Net Loan-Opening	7093.52	6586.84	6080.16	5573.48	5066.80
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	506.68	506.68	506.68	506.68	506.68
	Net Loan-Closing	6586.84	6080.16	5573.48	5066.80	4560.12
	Average Loan	6840.18	6333.50	5826.82	5320.14	4813.46
	Rate of Interest	2.77%	2.17%	2.11%	2.28%	2.02%
	Interest	189.47	137.44	122.95	121.30	97.23
	Rep Schedule	38 Equal Half yearly instalments from 10.06.2004				
8	Bond IV(IIst Tranch)					
	Gross loan opening	1737.00	1737.00	1737.00	1737.00	1737.00
	Cumulative Repayment upto DOCO/previous year	1737.00	1737.00	1737.00	1737.00	1737.00
	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	17.84%	17.84%	17.84%	17.84%	17.84%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Bullet on 16.07.2001				



9	Bond V					
	Gross loan opening	1677.00	1677.00	1677.00	1677.00	1677.00
	Cumulative Repayment upto DOCO/previous year	1677.00	1677.00	1677.00	1677.00	1677.00
	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	15.80%	15.80%	15.80%	15.80%	15.80%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Bullet on 24.02.2002				
10	Bond III Series(2nd) 9.75%					
	Gross loan opening	8.69	8.69	8.69	8.69	8.69
	Cumulative Repayment upto DOCO/previous year	8.69	8.69	8.69	8.69	8.69
	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	13.50%	13.50%	13.50%	13.50%	13.50%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Bullet on 28.10.2001				
11	LIC-II					
	Gross loan opening	19444.99	19444.99	19444.99	19444.99	19444.99
	Cumulative Repayment upto DOCO/previous year	8974.61	10470.38	11966.14	13461.91	14957.68
	Net Loan-Opening	10470.38	8974.61	7478.85	5983.08	4487.31
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1495.77	1495.77	1495.77	1495.77	1495.77
	Net Loan-Closing	8974.61	7478.85	5983.08	4487.31	2991.55
	Average Loan	9722.50	8226.73	6730.96	5235.20	3739.43
	Rate of Interest	6.30%	6.30%	6.30%	6.30%	6.30%
	Interest	612.52	518.28	424.05	329.82	235.58
	Rep Schedule	13 Annual instalments from 31.03.2004				
12	BOND IX					
	Gross loan opening	4728.00	4728.00	4728.00	4728.00	4728.00
	Cumulative Repayment upto DOCO/previous year	2836.80	3309.60	3782.40	4255.20	4728.00
	Net Loan-Opening	1891.20	1418.40	945.60	472.80	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	472.80	472.80	472.80	472.80	0.00
	Net Loan-Closing	1418.40	945.60	472.80	0.00	0.00
	Average Loan	1654.80	1182.00	709.20	236.40	0.00
	Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
	Interest	202.71	144.80	86.88	28.96	0.00
	Rep Schedule	10 Annual Instalments from 22.08.2003				



13	Bond VIII					
	Gross loan opening	360.00	360.00	360.00	360.00	360.00
	Cumulative Repayment upto DOCO/previous year	144.00	180.00	216.00	252.00	288.00
	Net Loan-Opening	216.00	180.00	144.00	108.00	72.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	36.00	36.00	36.00	36.00	36.00
	Net Loan-Closing	180.00	144.00	108.00	72.00	36.00
	Average Loan	198.00	162.00	126.00	90.00	54.00
	Rate of Interest	10.35%	10.35%	10.35%	10.35%	10.35%
	Interest	20.49	16.77	13.04	9.32	5.59
	Rep Schedule	10 Annual Instalments from 27.04.2005				
14	BOND III Series -I					
	Gross loan opening	78.65	78.65	78.65	78.65	78.65
	Cumulative Repayment upto DOCO/previous year	78.65	78.65	78.65	78.65	78.65
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	9.75%	9.75%	9.75%	9.75%	9.75%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	10 Annual Instalments from 27.04.2005				
15	Indian Overseas Bank II					
	Gross loan opening	129.00	129.00	129.00	129.00	129.00
	Cumulative Repayment upto DOCO/previous year	77.40	90.30	103.20	116.10	129.00
	Net Loan-Opening	51.60	38.70	25.80	12.90	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	12.90	12.90	12.90	12.90	0.00
	Net Loan-Closing	38.70	25.80	12.90	0.00	0.00
	Average Loan	45.15	32.25	19.35	6.45	0.00
	Rate of Interest	9.48%	9.81%	11.94%	12.57%	0.00%
	Interest	4.28	3.16	2.31	0.81	0.00
	Rep Schedule	10 Annual Instalments from 11.02.2004				
16	BOND I (Issue-I)					
	Gross loan opening	153.00	153.00	153.00	153.00	153.00
	Cumulative Repayment upto DOCO/previous year	153.00	153.00	153.00	153.00	153.00
	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	16.75%	16.75%	16.75%	16.75%	16.75%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Bullet on 10.03.2002				
17	BOND I (Issue-III)					
	Gross loan opening	1.00	1.00	1.00	1.00	1.00
	Cumulative Repayment	1.00	1.00	1.00	1.00	1.00



	upto DOCO/previous year					
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	9.00%	9.00%	9.00%	9.00%	9.00%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Bullet on 10.03.2002				
18	BOND XXX					
	Gross loan opening	0.00	212.00	266.26	266.26	275.53
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	212.00	266.26	266.26	275.53
	Additions during the year	212.00	54.26	0.00	9.27	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	22.96
	Net Loan-Closing	212.00	266.26	266.26	275.53	252.57
	Average Loan	106.00	239.13	266.26	270.90	264.05
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	9.33	21.04	23.43	23.84	23.24
	Rep Schedule	12 annual instalments from 29.09.2013				
19	Bond XXXIII					
	Gross loan opening	0.00	0.00	0.00	0.00	154.68
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	154.68
	Additions during the year	0.00	0.00	0.00	154.68	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	154.68	154.68
	Average Loan	0.00	0.00	0.00	77.34	154.68
	Rate of Interest	8.64%	8.64%	8.64%	8.64%	8.64%
	Interest	0.00	0.00	0.00	6.68	13.36
	Rep Schedule	12 annual instalments from 08.07.2014				
	Total Loan					
	Gross loan opening	51614.56	51826.56	51880.82	51880.82	52044.77
	Cumulative Repayment upto DOCO/previous year	29409.06	32564.71	35720.35	38876.00	41902.05
	Net Loan-Opening	22205.50	19261.85	16160.47	13004.82	10142.72
	Additions during the year	212.00	54.26	0.00	9.27	0.00
	Repayment during the year	3155.65	3155.65	3155.65	3026.05	2147.81
	Net Loan-Closing	19261.85	16160.47	13004.82	10142.72	7994.92
	Average Loan	20733.68	17711.16	14582.64	11573.77	9068.82
	Weighted Average Rate of Interest	6.0660%	5.6562%	5.3700%	4.8624%	4.1970%
	Interest	1257.70	1001.78	783.08	562.77	380.62



Annexure-3

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	Indian Overseas Bank-II					
	Gross loan opening	144.00	144.00	144.00	144.00	144.00
	Cumulative Repayment upto DOCO/previous year	86.40	100.80	115.20	129.60	144.00
	Net Loan-Opening	57.60	43.20	28.80	14.40	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	14.40	14.40	14.40	14.40	0.00
	Net Loan-Closing	43.20	28.80	14.40	0.00	0.00
	Average Loan	50.40	36.00	21.60	7.20	0.00
	Rate of Interest	9.48%	9.81%	11.94%	12.57%	0.00%
	Interest	4.78	3.53	2.58	0.91	0.00
	Rep Schedule	10 annual instalments from 11.02.2004				
2	BOND VI					
	Gross loan opening	1420.00	1420.00	1420.00	1420.00	1420.00
	Cumulative Repayment upto DOCO/previous year	994.00	1136.00	1278.00	1420.00	1420.00
	Net Loan-Opening	426.00	284.00	142.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	142.00	142.00	142.00	0.00	0.00
	Net Loan-Closing	284.00	142.00	0.00	0.00	0.00
	Average Loan	355.00	213.00	71.00	0.00	0.00
	Rate of Interest	13.13%	13.13%	13.13%	13.13%	13.13%
	Interest	46.61	27.97	9.32	0.00	0.00
	Rep Schedule	10 Annual instalments from 06.12.2002				
3	BOND VII					
	Gross loan opening	1935.00	1935.00	1935.00	1935.00	1935.00
	Cumulative Repayment upto DOCO/previous year	1935.00	1935.00	1935.00	1935.00	1935.00
	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	13.64%	13.64%	13.64%	13.64%	13.64%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	5 Annual Instalments from 04.08.2003				
4	BOND IX					
	Gross loan opening	5300.00	5300.00	5300.00	5300.00	5300.00
	Cumulative Repayment upto DOCO/previous year	3180.00	3710.00	4240.00	4770.00	5300.00
	Net Loan-Opening	2120.00	1590.00	1060.00	530.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00



	Repayment during the year	530.00	530.00	530.00	530.00	0.00
	Net Loan-Closing	1590.00	1060.00	530.00	0.00	0.00
	Average Loan	1855.00	1325.00	795.00	265.00	0.00
	Rate of Interest	12.25%	12.25%	12.25%	12.25%	0.00%
	Interest	227.24	162.31	97.39	32.46	0.00
	Rep Schedule	10 Annual instalments from 22.08.2003				
5	BOND X					
	Gross loan opening	209.00	209.00	209.00	209.00	209.00
	Cumulative Repayment upto DOCO/previous year	87.08	104.50	121.92	139.33	156.75
	Net Loan-Opening	121.92	104.50	87.08	69.67	52.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	17.42	17.42	17.42	17.42	17.42
	Net Loan-Closing	104.50	87.08	69.67	52.25	34.83
	Average Loan	113.21	95.79	78.38	60.96	43.54
	Rate of Interest	10.90%	10.90%	10.90%	10.90%	10.90%
	Interest	12.34	10.44	8.54	6.64	4.75
	Rep Schedule	12 Annual Instalments from 21.06.2004				
6	BOND XI Option I					
	Gross loan opening	223.00	223.00	223.00	223.00	223.00
	Cumulative Repayment upto DOCO/previous year	74.35	92.93	111.51	130.10	148.68
	Net Loan-Opening	148.65	130.07	111.49	92.90	74.32
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	18.58	18.58	18.58	18.58	18.58
	Net Loan-Closing	130.07	111.49	92.90	74.32	55.74
	Average Loan	139.36	120.78	102.20	83.61	65.03
	Rate of Interest	9.80%	9.80%	9.80%	9.80%	9.80%
	Interest	13.66	11.84	10.02	8.19	6.37
	Rep Schedule	12 Annual Instalments from 07.12.2005				
7	BOND XI Option II					
	Gross loan opening	2683.00	2683.00	2683.00	2683.00	2683.00
	Cumulative Repayment upto DOCO/previous year	2683.00	2683.00	2683.00	2683.00	2683.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	6 Annual Instalments from 07.12.2003				
8	BOND XII					
	Gross loan opening	16.00	16.00	16.00	16.00	16.00
	Cumulative Repayment upto DOCO/previous year	5.33	6.67	8.00	9.33	10.67
	Net Loan-Opening	10.67	9.33	8.00	6.67	5.33



	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1.33	1.33	1.33	1.33	1.33
	Net Loan-Closing	9.33	8.00	6.67	5.33	4.00
	Average Loan	10.00	8.67	7.33	6.00	4.67
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	0.97	0.84	0.71	0.58	0.45
	Rep Schedule	12 Annual Instalments from 28.03.2006				
9	BOND XIII Option II					
	Gross loan opening	1367.00	1367.00	1367.00	1367.00	1367.00
	Cumulative Repayment upto DOCO/previous year	1367.00	1367.00	1367.00	1367.00	1367.00
	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				
10	Oriental Bank of Commerce					
	Gross loan opening	102.00	102.00	102.00	102.00	102.00
	Cumulative Repayment upto DOCO/previous year	42.50	51.00	59.50	68.00	76.50
	Net Loan-Opening	59.50	51.00	42.50	34.00	25.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	8.50	8.50	8.50	8.50	8.50
	Net Loan-Closing	51.00	42.50	34.00	25.50	17.00
	Average Loan	55.25	46.75	38.25	29.75	21.25
	Rate of Interest	9.60%	10.22%	12.32%	12.37%	12.35%
	Interest	5.30	4.78	4.71	3.68	2.62
	Rep Schedule	12 Annual instalments from 25.03.2005				
11	CORPORATION BANK					
	Gross loan opening	427.00	427.00	427.00	427.00	427.00
	Cumulative Repayment upto DOCO/previous year	234.85	277.55	320.25	362.95	405.65
	Net Loan-Opening	192.15	149.45	106.75	64.05	21.35
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	42.70	42.70	42.70	42.70	21.35
	Net Loan-Closing	149.45	106.75	64.05	21.35	0.00
	Average Loan	170.80	128.10	85.40	42.70	10.68
	Rate of Interest	10.60%	10.57%	12.55%	13.00%	13.00%
	Interest	18.10	13.54	10.72	5.55	1.39
	Rep Schedule	20 Half Yearly Instalments from 10.03.2004				
12	PNB-I					
	Gross loan opening	1019.00	1019.00	1019.00	1019.00	1019.00
	Cumulative Repayment	611.40	713.30	815.20	917.10	1019.00



	upto DOCO/previous year					
	Net Loan-Opening	407.60	305.70	203.80	101.90	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	101.90	101.90	101.90	101.90	0.00
	Net Loan-Closing	305.70	203.80	101.90	0.00	0.00
	Average Loan	356.65	254.75	152.85	50.95	0.00
	Rate of Interest	8.95%	9.72%	11.86%	11.90%	0.00%
	Interest	31.92	24.76	18.13	6.06	0.00
	Rep Schedule	10 Annual Instalments from 30.03.2004				
13	PNB-II					
	Gross loan opening	123.00	123.00	123.00	123.00	123.00
	Cumulative Repayment upto DOCO/previous year	51.25	61.50	71.75	82.00	92.25
	Net Loan-Opening	71.75	61.50	51.25	41.00	30.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	10.25	10.25	10.25	10.25	10.25
	Net Loan-Closing	61.50	51.25	41.00	30.75	20.50
	Average Loan	66.63	56.38	46.13	35.88	25.63
	Rate of Interest	8.89%	9.65%	11.80%	11.84%	11.60%
	Interest	5.92	5.44	5.44	4.25	2.97
	Rep Schedule	12 Annual instalments from 08.03.2005				
14	BOI					
	Gross loan opening	682.85	682.85	682.85	682.85	682.85
	Cumulative Repayment upto DOCO/previous year	200.66	235.10	269.55	304.00	338.44
	Net Loan-Opening	482.19	447.74	413.30	378.85	344.40
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	34.45	34.45	34.45	34.45	34.45
	Net Loan-Closing	447.74	413.30	378.85	344.40	309.96
	Average Loan	464.96	430.52	396.07	361.63	327.18
	Rate of Interest	2.77%	2.17%	2.11%	2.28%	2.02%
	Interest	12.88	9.34	8.36	8.25	6.61
	Rep Schedule	38 Equal Half Yearly Instalments from 10.06.2004				
15	LIC II					
	Gross loan opening	26972.02	26972.02	26972.02	26972.02	26972.02
	Cumulative Repayment upto DOCO/previous year	12566.35	14624.30	16682.25	18740.20	20798.15
	Net Loan-Opening	14405.68	12347.73	10289.78	8231.83	6173.88
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	2057.95	2057.95	2057.95	2057.95	2057.95
	Net Loan-Closing	12347.73	10289.78	8231.83	6173.88	4115.93
	Average Loan	13376.70	11318.75	9260.80	7202.85	5144.90
	Rate of Interest	6.30%	6.30%	6.30%	6.30%	6.30%
	Interest	842.73	713.08	583.43	453.78	324.13
	Rep Schedule	13 Annual Instalments from 31.03.2004				
16	IBRD II					
	Gross loan opening	989.44	989.44	989.44	989.44	989.44



	Cumulative Repayment upto DOCO/previous year	198.27	241.35	287.21	336.03	388.01
	Net Loan-Opening	791.18	748.09	702.23	653.41	601.43
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	43.09	45.86	48.82	51.98	55.32
	Net Loan-Closing	748.09	702.23	653.41	601.43	546.11
	Average Loan	769.63	725.16	677.82	627.42	573.77
	Rate of Interest	2.54%	1.98%	1.94%	2.10%	1.82%
	Interest	19.55	14.36	13.15	13.18	10.44
	Rep Schedule	30 Half Yearly Instalments from 15.12.2006				
17	BOND V					
	Gross loan opening	1841.00	1841.00	1841.00	1841.00	1841.00
	Cumulative Repayment upto DOCO/previous year	1841.00	1841.00	1841.00	1841.00	1841.00
	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	15.80%	15.80%	15.80%	15.80%	15.80%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Bullet on 24.02.2002				
18	BOND IV (Tranch)					
	Gross loan opening	1900.00	1900.00	1900.00	1900.00	1900.00
	Cumulative Repayment upto DOCO/previous year	1900.00	1900.00	1900.00	1900.00	1900.00
	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	17.84%	17.84%	17.84%	17.84%	17.84%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Repaid prior to 31.03.2004				
	Total Loan					
	Gross loan opening	47353.31	47353.31	47353.31	47353.31	47353.31
	Cumulative Repayment upto DOCO/previous year	28058.43	31081.00	34106.34	37134.64	40024.09
	Net Loan-Opening	19294.88	16272.31	13246.97	10218.67	7329.21
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	3022.57	3025.34	3028.30	2889.46	2225.15
	Net Loan-Closing	16272.31	13246.97	10218.67	7329.21	5104.06
	Average Loan	17783.59	14759.64	11732.82	8773.94	6216.64
	Weighted Average Rate of Interest	6.9840%	6.7903%	6.5841%	6.1948%	5.7867%
	Interest	1242.01	1002.23	772.50	543.53	359.74



Annexure-4

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
	Details of Loan	2014-15	2015-16	2016-17	2017-18	2018-19
1	Bond VI					
	Gross loan opening	3415.00	3415.00	3415.00	3415.00	3415.00
	Cumulative Repayment upto DOCO/previous year	3415.00	3415.00	3415.00	3415.00	3415.00
	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	13.13%	13.13%	13.13%	13.13%	13.13%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	12 equal annual instalments w-e-f 17.07.2004				
2	Bond VII					
	Gross loan opening	4310	4310	4310	4310	4310
	Cumulative Repayment upto DOCO/previous year	4310	4310	4310	4310	4310
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	13.64%	13.64%	13.64%	13.64%	13.64%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule					
3	Bond VIII					
	Gross loan opening	360.00	360.00	360.00	360.00	360.00
	Cumulative Repayment upto DOCO/previous year	324.00	360.00	360.00	360.00	360.00
	Net Loan-Opening	36.00	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	36.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	18.00	0.00	0.00	0.00	0.00
	Rate of Interest	10.35%	10.35%	10.35%	10.35%	10.35%
	Interest	1.863	0.00	0.00	0.00	0.00
	Rep Schedule					
4	Bond IX					
	Gross loan opening	10028.00	10028.00	10028.00	10028.00	10028.00
	Cumulative Repayment upto DOCO/previous year	10028.00	10028.00	10028.00	10028.00	10028.00
	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					
5	CORPORATION BANK					
	Gross loan opening	2155.00	2155.00	2155.00	2155.00	2155.00
	Cumulative Repayment upto DOCO/previous year	2155.00	2155.00	2155.00	2155.00	2155.00
	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	13.00%	13.00%	13.00%	13.00%	13.00%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule					
6	PUNJAB NATIONAL BANK					
	Gross loan opening	4310.00	4310.00	4310.00	4310.00	4310.00
	Cumulative Repayment upto DOCO/previous year	4310.00	4310.00	4310.00	4310.00	4310.00
	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	11.66%	11.66%	11.66%	11.66%	11.66%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule					
7	PUNJAB NATIONAL BANK II					
	Gross loan opening	123.00	123.00	123.00	123.00	123.00
	Cumulative Repayment upto DOCO/previous year	102.50	112.75	123.00	123.00	123.00
	Net Loan-Opening	20.50	10.25	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	10.25	10.25	0.00	0.00	0.00
	Net Loan-Closing	10.25	0.00	0.00	0.00	0.00
	Average Loan	15.38	5.13	0.00	0.00	0.00
	Rate of Interest	11.60%	11.60%	11.60%	11.60%	11.60%
	Interest	1.78	0.59	0.00	0.00	0.00
	Rep Schedule					
8	BOI					
	Gross loan opening	10310.09	10310.09	10310.09	10310.09	10310.09
	Cumulative Repayment	5439.84	5980.96	6522.08	7063.2	7604.32



	upto DOCO/previous year					
	Net Loan-Opening	4870.25	4329.13	3788.01	3246.89	2705.77
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	541.12	541.12	541.12	541.12	541.12
	Net Loan-Closing	4329.13	3788.01	3246.89	2705.77	2164.65
	Average Loan	4599.69	4058.57	3517.45	2976.33	2435.21
	Rate of Interest	1.93%	1.93%	1.93%	1.93%	1.93%
	Interest	88.77	78.33	67.89	57.44	47.00
	Rep Schedule					
9	INDIAN OVERSEAS BANK					
	Gross loan opening	273.00	273.00	273.00	273.00	273.00
	Cumulative Repayment upto DOCO/previous year	273.00	273.00	273.00	273.00	273.00
	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	12.90%	12.90%	12.90%	12.90%	12.90%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule					
10	BOND X					
	Gross loan opening	209.00	209.00	209.00	209.00	209.00
	Cumulative Repayment upto DOCO/previous year	174.18	191.6	209.00	209.00	209.00
	Net Loan-Opening	34.82	17.4	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	17.42	17.4	0.00	0.00	0.00
	Net Loan-Closing	17.4	0.00	0.00	0.00	0.00
	Average Loan	26.11	8.7	0.00	0.00	0.00
	Rate of Interest	10.90%	10.90%	10.90%	10.90%	10.90%
	Interest	2.85	0.95	0.00	0.00	0.00
	Rep Schedule					
11	BOND XII					
	Gross loan opening	16.00	16.00	16.00	16.00	16.00
	Cumulative Repayment upto DOCO/previous year	11.98	13.31	14.64	15.97	15.97
	Net Loan-Opening	4.02	2.69	1.36	0.03	0.03
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1.33	1.33	1.33	0.00	0.00
	Net Loan-Closing	2.69	1.36	0.03	0.03	0.03
	Average Loan	3.355	2.025	0.695	0.03	0.03
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	0.33	0.20	0.07	0.00	0.00
	Rep Schedule					



12	ORIENTAL BANK OF COMMERCE					
	Gross loan opening	102.00	102.00	102.00	102.00	102.00
	Cumulative Repayment upto DOCO/previous year	85.00	93.5	102.00	102.00	102.00
	Net Loan-Opening	17.00	8.5	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	8.50	8.50	0.00	0.00	0.00
	Net Loan-Closing	8.50	0.00	0.00	0.00	0.00
	Average Loan	12.75	4.25	0.00	0.00	0.00
	Rate of Interest	12.35%	12.35%	12.35%	12.35%	12.35%
	Interest	1.57	0.52	0.00	0.00	0.00
	Rep Schedule					
13	IBRD-II					
	Gross loan opening	989.44	989.44	989.44	989.44	989.44
	Cumulative Repayment upto DOCO/previous year	443.34	502.24	564.93	631.67	702.71
	Net Loan-Opening	546.10	487.20	424.51	357.77	286.73
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	58.9	62.69	66.74	71.04	75.62
	Net Loan-Closing	487.2	424.51	357.77	286.73	211.11
	Average Loan	516.65	455.855	391.14	322.25	248.92
	Rate of Interest	1.75%	1.75%	1.75%	1.75%	1.75%
	Interest	9.04	7.98	6.84	5.64	4.36
	Rep Schedule					
14	Bond III series (2nd) (9.75%)					
	Gross loan opening	74.90	74.90	74.90	74.90	74.90
	Cumulative Repayment upto DOCO/previous year	74.90	74.90	74.90	74.90	74.90
	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	13.50%	13.50%	13.50%	13.50%	13.50%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Bullet on 28.10.2001				
15	Bond III Series(1st)					
	Gross loan opening	192.44	192.44	192.44	192.44	192.44
	Cumulative Repayment upto DOCO/previous year	192.44	192.44	192.44	192.44	192.44
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00



	Rate of Interest	9.75%	9.75%	9.75%	9.75%	9.75%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Bullet on 28.02.2002				
16	Bond I (Issue -III)					
	Gross loan opening	40.00	40.00	40.00	40.00	40.00
	Cumulative Repayment upto DOCO/previous year	40.00	40.00	40.00	40.00	40.00
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	9.00%	9.00%	9.00%	9.00%	9.00%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Bullet on 10.03.2002				
17	Bond XXX for 2009-10 Add Cap					
	Gross loan opening	720.14	720.14	720.14	720.14	720.14
	Cumulative Repayment upto DOCO/previous year	60.01	120.02	180.03	240.04	300.05
	Net Loan-Opening	660.13	600.12	540.11	480.10	420.09
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	60.01	60.01	60.01	60.01	60.01
	Net Loan-Closing	600.12	540.11	480.10	420.09	360.08
	Average Loan	630.13	570.12	510.11	450.10	390.09
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	55.45	50.17	44.89	39.61	34.33
	Rep Schedule	12 equal annual instalments w-e-f 29.09.2013				
18	Bond XIII for 2011-12 Add Cap					
	Gross loan opening	3599.00	3599.00	3599.00	3599.00	3599.00
	Cumulative Repayment upto DOCO/previous year	3599.00	3599.00	3599.00	3599.00	3599.00
	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					
19	Bond XXXIII for 2012-13 Add Cap					
	Gross loan opening	154.68	154.68	154.68	154.68	154.68
	Cumulative Repayment upto DOCO/previous year	0.00	12.89	25.78	38.67	51.56
	Net Loan-Opening	154.68	141.79	128.90	116.01	103.12



	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	12.89	12.89	12.89	12.89	12.89
	Net Loan-Closing	141.79	128.90	116.01	103.12	90.23
	Average Loan	148.24	135.35	122.46	109.57	96.68
	Rate of Interest	8.64%	8.64%	8.64%	8.64%	8.64%
	Interest	12.81	11.69	10.58	9.47	8.35
	Rep Schedule					
20	BOND XI OPTION I					
	Gross loan opening	223.00	223.00	223.00	223.00	223.00
	Cumulative Repayment upto DOCO/previous year	167.23	185.81	204.39	222.97	222.97
	Net Loan-Opening	55.77	37.19	18.61	0.03	0.03
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	18.58	18.58	18.58	0.00	0.00
	Net Loan-Closing	37.19	18.61	0.03	0.03	0.03
	Average Loan	46.48	27.9	9.32	0.03	0.03
	Rate of Interest	9.80%	9.80%	9.80%	9.80%	9.80%
	Interest	4.56	2.73	0.91	0.00	0.00
	Rep Schedule					
21	Bond II					
	Gross loan opening	31.00	31.00	31.00	31.00	31.00
	Cumulative Repayment upto DOCO/previous year	31.00	31.00	31.00	31.00	31.00
	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	10.50%	10.50%	10.50%	10.50%	10.50%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Repaid Before 31.03.2001				
22	UTI - DOCO					
	Gross loan opening	19.00	19.00	19.00	19.00	19.00
	Cumulative Repayment upto DOCO/previous year	19.00	19.00	19.00	19.00	19.00
	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	13.50%	13.50%	13.50%	13.50%	13.50%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule					
23	BOND XI OPTION II					
	Gross loan opening	6829.00	6829.00	6829.00	6829.00	6829.00
	Cumulative Repayment upto DOCO/previous year	6829.00	6829.00	6829.00	6829.00	6829.00



	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule					
24	BOND IV (1st TRANCH)					
	Gross loan opening	4044.00	4044.00	4044.00	4044.00	4044.00
	Cumulative Repayment upto DOCO/previous year	4044.00	4044.00	4044.00	4044.00	4044.00
	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	17.84%	17.84%	17.84%	17.84%	17.84%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule					
25	BOND V					
	Gross loan opening	5149.00	5149.00	5149.00	5149.00	5149.00
	Cumulative Repayment upto DOCO/previous year	5149.00	5149.00	5149.00	5149.00	5149.00
	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	15.80%	15.80%	15.80%	15.80%	15.80%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule					
26	NHPC BONDS					
	Gross loan opening	2.59	2.59	2.59	2.59	2.59
	Cumulative Repayment upto DOCO/previous year	2.59	2.59	2.59	2.59	2.59
	Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
	Average Loan	0.00	0.00	0.00	0.00	0.00
	Rate of Interest	9.00%	9.00%	9.00%	9.00%	9.00%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule					
27	LIC II					
	Gross loan opening	53740.17	53740.17	53740.17	53740.17	53740.17
	Cumulative Repayment	45506.08	49623.12	53740.16	53740.16	53740.16



	upto DOCO/previous year					
	Net Loan-Opening	8234.09	4117.05	0.01	0.01	0.01
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	4117.04	4117.04	0.00	0.00	0.00
	Net Loan-Closing	4117.05	0.01	0.01	0.01	0.01
	Average Loan	6175.57	2058.53	0.01	0.01	0.01
	Rate of Interest	6.30%	6.30%	6.30%	6.30%	6.30%
	Interest	389.06	129.69	0.00	0.00	0.00
	Rep Schedule					
28	BOND I (ISSUE I)					
	Gross loan opening	190.00	190.00	190.00	190.00	190.00
	Cumulative Repayment upto DOCO/previous year	190.00	190.00	190.00	190.00	190.00
	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	16.75%	16.75%	16.75%	16.75%	16.75%
	Interest	0.00	0.00	0.00	0.00	0.00
	Rep Schedule	Repaid Before 31.03.2001				
	Total Loan					
	Gross loan opening	111486.45	111486.45	111486.45	111486.45	111486.45
	Cumulative Repayment upto DOCO/previous year	96873.59	101745.38	106584.94	107285.61	107970.67
	Net Loan-Opening	14612.86	9741.07	4901.51	4200.84	3515.78
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	4871.79	4839.56	700.67	685.06	689.64
	Net Loan-Closing	9741.07	4901.51	4200.84	3515.78	2826.14
	Average Loan	12176.97	7321.29	4551.18	3858.31	3170.96
	Rate of Interest	4.65%	3.86%	2.88%	2.91%	2.97%
	Interest	566.30	282.26	131.18	112.16	94.04

