

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 516/TT/2014

Coram:

Shri Gireesh B. Pradhan, Chairperson

Shri A.K. Singhal, Member

Shri A.S. Bakshi, Member

Dr. M.K. Iyer, Member

Date of Order : 18.04.2017

In the matter of:

Truing up of transmission tariff for 2013-14 in tariff period 2009-14 and determination of transmission tariff for 2014-19 tariff period, for **Asset-I:** 400 kV D/C Gorakhpur-Lucknow Transmission line (COD: 1.8.2006) and **Asset-II:** 400 kV D/C Bareilly-Mandola transmission line (COD: 1.5.2006), in Northern region associated with Tala Hydro Electric Project, East-North Inter-Connector and Northern Region Transmission System, 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:

Powerlinks Transmission Ltd
10th Floor, DLF Tower A,
District Centre, Jasola,
New Delhi-110 025

.....**Petitioner**

Vs

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

.....**Respondent**

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

3. Ajmer Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur



4. Jaipur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor)
Ajmer Road, Heerapura, Jaipur
5. Jodhpur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
6. Punjab State Electricity Board,
The Mall, Patiala-147 001
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6, IInd Floor,
Panchkula (Haryana)-134 109
8. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
10th Floor, Shakti Bhawan Extn-14, Ashok Marg,
Lucknow-226 001
9. Power Development Department,
Government of Jammu and Kashmir,
Mini Secretariat, Jammu
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road (Near ITO),
New Delhi-110 002
11. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171 004 (HP)
12. Chandigarh Administration,
Sector-9, Chandigarh
13. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road, Dehradun
14. Northern Central Railway,
Allahabad
15. BSES Yamuna Power Limited,
BSES Bhawan, Building No.-20,
Nehru Place, New Delhi
16. BSES Rajdhani Power Limited,
BSES Bhawan, Building No.-20,
Nehru Place, New Delhi



17. North Delhi Power Limited,
Grid Substation Building, Hudson Line,
Near Kingsway Camp,
New Delhi-110 088

18. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110 002

.....**Proforma Respondents**

For Petitioner: Shri Amit Kapur, Advocate for PTL
Shri Janmau. M, Advocate for PTL
Ms Nita Jha, Advocate for PTL
Shri Gajender Bhandari, Advocate for PTL
Shri Dilip Kumar, PTL

For Respondents: none

ORDER

The present petition has been filed by Powerlinks Transmission Limited ('the petitioner'), for truing up of capital expenditure of 2009-14 tariff period of **Asset-I:** 400 kV D/C Gorakhpur-Lucknow Transmission line and **Asset-II:** 400 kV D/C Bareilly-Mandola transmission line (hereinafter referred as "transmission assets"), in Northern Region associated with Tala Hydro Electric Project, East-North Inter-Connector and Northern Region Transmission System, 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 1.4.2013 to 31.3.2014 and for determination of tariff for the period from 1.4.2014 to 31.3.2019 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

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



- a. The petitioner was granted license vide order dated 13.11.2003 to transmit electricity as a transmission licensee and for that purpose to construct, maintain and operate Inter-state transmission system associated with the Tala Hydro Electric Project (HEP) East-north Inter Connector and Northern Region Transmission System.
- b. The COD of Asset-I and Asset-II was 1.8.2006 and 1.5.2006 respectively. The capital cost as on the date of commercial operation for Assets-I and II was approved at ₹18878.01 lakh and ₹18156.46 lakh and additional capitalisation of ₹765.22 lakh and ₹1233.16 lakh respectively for the period from COD to 31.3.2007, vide order dated 30.4.2008 in Petition No.149/2007 alongwith ATC for the period 2006-09.
- c. Subsequently, vide order dated 30.7.2009 in Petition No.64/2009, additional capital expenditure of ₹1152.32 lakh and ₹198.20 lakh in case of Asset-I and of ₹1289.57 lakh and ₹228.60 lakh in case of Asset-II for 2007-08 and 2008-09 respectively were approved.
- d. In order dated 17.3.2011 in Petition No.287/2009, the additional capital expenditure on projected basis and ATC for the period 2009-14 have been approved for the instant assets.
- e. In order dated 23.5.2016 in Petition No.20/TT/2014, after reconciling the capital cost for 2006-09 tariff period, the trued-up ATC for the period 2009-13 and revised ATC for 2013-14 was approved for the instant assets.
- f. The final tariff allowed for instant assets, vide order dated 23.5.2016 in Petition No.20/TT/2014, for 2013-14 is as under:-

Particulars	(₹ in lakh)	
	Asset-I 2013-14	Asset-II 2013-14
Depreciation	1116.49	1099.99



Interest on Loan	688.92	665.72
Return on Equity	1260.43	1242.11
Interest on Working Capital	73.53	71.97
O & M Expenses	192.62	185.57
Sub-Total	3331.99	3265.36
Transmission Majoration Factor	333.20	326.54
Total	3665.19	3591.90

g. Final tariff, in case of Asset-I, determined vide order dated 23.5.2016 in Petition No. 20/TT/2014 was based on admitted capital cost of ₹20976.94 lakh as on 1.4.2009 and ₹21424.90 lakh, as on 31.3.2013 after taking into consideration, additional capital expenditure of ₹7.97, ₹396.99 lakh and ₹43 lakh for 2009-10, 2010-11 and 2011-12 respectively, total being ₹447.96 lakh. Final tariff, in case of Asset-II, determined vide order dated 23.5.2016 in Petition No. 20/TT/2014 was based on admitted capital cost of ₹20891.60 lakh as on 1.4.2009 and ₹21113.55 lakh, as on 31.3.2013 after taking into consideration, additional capital expenditure of ₹96.02, ₹46.34 lakh and ₹79.59 lakh for 2009-10, 2010-11 and 2011-12 respectively, total being ₹221.95 lakh.

h. The MAT rate applicable for respective year was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be adjusted as at the time of truing up of tariff for 2013-14 in 2009-14 tariff period, only in case of any change.

3. The hearing in the matter was held on 20.9.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.



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 has filed reply.

5. This order has been issued after considering the petitioner's affidavit dated 20.10.2016.

Truing-up of Annual Fixed Charges for Period 2013-14

6. The truing up of tariff for 2013-14 has been determined as discussed below.

Capital Cost and Additional Capital Expenditure

7. Clause (1) and Clause (3) of Regulation 6 of the 2009 Tariff Regulations provide that:-

"(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.-----"

"(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors;"

8. The petitioner has not claimed any additional capital expenditure during 2013-14, therefore, capital cost of ₹21424.90 lakh and ₹21113.55 lakh for Assets-I and II respectively has been considered as on 1.4.2013 to true-up tariff for 2013-14 as per details overleaf:-



(₹ in lakh)

Particulars	Asset-I					
	As on 1.4.2009	Additional capital expenditure allowed vide order dated 23.5.2016				Admitted cost as on 1.4.2013
		2009-10	2010-11	2011-12	Total	
Freehold Land	-	-	-	-	-	-
Leasehold Land	-	-	-	-	-	-
Building & Other Civil Works	760.00	-	-	-	-	760.00
Transmission Line	20216.94	7.97	396.99	43.00	447.96	20664.90
Sub-Station Equipments	-	-	-	-	-	-
PLCC	-	-	-	-	-	-
Total	20976.94	7.97	396.99	43.00	447.96	21424.90
Particulars	Asset-II					
	As on 1.4.2009	Additional capital expenditure allowed vide order dated 23.5.2016				Admitted cost as on 1.4.2013
		2009-10	2010-11	2011-12	Total	
Freehold Land	-	-	-	-	-	-
Leasehold Land	-	-	-	-	-	-
Building & Other Civil Works	763.25	-	-	-	-	763.25
Transmission Line	20128.35	96.02	46.34	79.59	221.95	20350.30
Sub-Station Equipments	-	-	-	-	-	-
PLCC	-	-	-	-	-	-
Total	20891.60	96.02	46.34	79.59	221.95	21113.55

Debt: Equity Ratio

9. Clause (1) 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.”

10. The petitioner has claimed true-up Annual Fixed Charge based on debt: equity ratio of 70: 30 as admitted vide order dated 23.5.2016 in Petition No. 20/TT/2014. The debt: equity ratio of 70: 30 admitted vide order dated 23.5.2016 in Petition No.



20/TT/2014 has been considered for the purpose of truing-up of the approved tariff for 2013-14.

11. The details of the debt: equity considered for the purpose of tariff for 2013-14 is as under:-

(₹ in lakh)

Particulars	Asset-I			
	Cost as on 1.4.2013		Cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	14997.43	70.00	14997.43	70.00
Equity	6427.47	30.00	6427.47	30.00
Total	21424.90	100.00	21424.90	100.00
Particulars	Asset-II			
	Cost as on 1.4.2013		Cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	14779.48	70.00	14779.48	70.00
Equity	6334.06	30.00	6334.06	30.00
Total	21113.55	100.00	21113.55	100.00

Return on Equity ("RoE")

12. 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.”

13. The petitioner had submitted, applicable MAT rate of 20.961% and grossed up RoE of 19.610% for 2013-14 and the same was considered in the order dated 23.5.2016. As such, the trued-up RoE for 2013-14 remains the same. Accordingly, the RoE as trued-up is as under:-

Particulars	(₹ in lakh)	
	Asset-I 2013-14	Asset-II 2013-14
Approved vide order dated 23.5.2016	1260.43	1242.11
Allowed after trued up	1260.43	1242.11

Interest on Loan (“IOL”)

14. Regulation 16 of the 2009 Tariff Regulations provides that:-

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

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

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

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

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

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

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



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

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

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

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

15. In these calculations, interest on loan has been worked out as hereinafter:-

(a) The normative loan outstanding as on 1.4.2013 has been worked out by deducting the cumulative repayment as admitted vide order dated 23.5.2016 from the gross normative loan. The rate of interest is taken as weighted average rate of interest calculated on the basis of actual average loan portfolio for 2013-14;

(b) The repayment for 2013-14 in the tariff period 2009-14 has been considered to be equal to the depreciation allowed. Tariff for 2013-14 is worked out considering normative loan and normative repayments; and

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

16. The petitioner has considered actual repayment of loan for calculation of interest on loan instead of considering depreciation as repayment. However, as per the 2009 Tariff Regulations, repayment for 2013-14 shall be deemed to be equal to the depreciation allowed for the corresponding period and accordingly same has been



considered for tariff calculations. Further, the rates of interest, as submitted by the petitioner in the instant petition have been considered to work out interest on loan.

17. We have considered the submissions of the petitioner. The IOL has been calculated 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 and Annexure-2 to this order. The IOL worked out and allowed is the same, as approved vide order dated 23.5.2016 as under:-

Particulars	(₹ in lakh)	
	Asset-I 2013-14	Asset-II 2013-14
Approved vide order dated 23.5.2016	688.92	665.72
Allowed after truing-up	688.92	665.72

Depreciation

18. 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.”

19. The depreciation, in order dated 23.5.2016, had been approved in accordance with Regulation 17 of the 2009 Tariff Regulations. The depreciation for 2013-14 in the tariff period 2009-14 has been worked out based on admitted capital expenditure as on 1.4.2013 and remains the same as approved vide order dated 23.5.2016 as under:-

Particulars	(₹ in lakh)	
	Asset-I 2013-14	Asset-II 2013-14
Approved vide order dated 23.5.2016	1116.49	1099.99
Allowed after trued up	1116.49	1099.99

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

20. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The normative O&M Expenses are not required to be trued-up. Accordingly, the total O&M Expenses allowed for the instant assets vide order dated 23.5.2016 in Petition No. 20/TT/2014 are as under:-

Particulars	(₹ in lakh)				
	Asset-I				
	2009-10	2010--11	2011-12	2012-13	2013-14
Approved vide Order dated 23.5.2016	154.24	163.10	172.45	182.29	192.62
Particulars	Asset-II				
	2009-10	2010--11	2011-12	2012-13	2013-14
Approved vide Order dated 23.5.2016	148.60	157.13	166.14	175.62	185.57

21. However, the petitioner has claimed additional O&M Expenses of ₹47.67 lakh and ₹45.93 lakh in case of Assets-I and II respectively, for the 2009-14 tariff period, on



account of increase in employee cost due to revision in salaries during last three months of 2010-11 and for complete 2011-12. Therefore, the petitioner has considered the actual effect of salary revision in respective years for the purpose of recovering the additional O&M expenses and to be allowed in the tariff. The petitioner has submitted the allocation of actual expenditure as under:-

(₹ in lakh)					
Particulars	2010-11	2011-12	2012-13	2013-14	Total
Asset-I	3.11	13.86	14.83	15.87	47.67
Asset-II	3.00	13.35	14.29	15.29	45.93

22. During the hearing on 20.9.2016, the learned counsel submitted that the additional O&M Expenses may be allowed under Regulation 44 "Power to Relax" of the 2009 Tariff Regulations. We would like to clarify that while specifying the norms for the O & M Expenses, O & M Expenses for tariff period 2009-14 were arrived at on the basis of normalized actual O & M Expenses during the period 2003-04 to 2007-08 and the Commission has in the 2009 Tariff Regulations, given effect to impact of pay revision by factoring 50% on account of pay revision of the employees of PSUs after extensive consultations with the stakeholders, as one time compensation for employee cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. In this order, we have allowed additional O&M Expenses, as per norms specified in the 2009 Tariff Regulations.

Interest on working capital ("IWC")

23. 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.



24. The rate of interest on working capital of 12.25%, applicable as on 1.4.2009 was approved in order dated 23.5.2016 in Petition No. 20/TT/2014 for 2013-14. The same rate of 12.25% has been considered to work out the interest on working capital for 2013-14 in the instant petition. Therefore, the interest on working capital earlier allowed vide order dated 23.5.2016 in Petition No. 20/TT/2014 and in the instant order is same. The IWC trued up is as under:-

Particulars	(₹ in lakh)	
	Asset-I 2013-14	Asset-II 2013-14
Maintenance Spares	28.89	27.84
O & M Expenses	16.05	15.46
Receivables	555.33	544.23
Total	600.28	587.53
Rate of Interest	12.25%	12.25%
Interest	73.53	71.97

Transmission Majoration Factor (TMF)

25. The petitioner has submitted that Transmission Majoration Factor (TMF) was allowed vide order dated 1.7.2004 and 23.5.2016 in Petition No. 51 of 2004 and Petition No. 20/TT/2014 respectively. Thus, the petitioner has claimed Transmission Majoration Factor for 2013-14 and included the same in the proposed true-up of Annual Transmission Charges.

26. We have considered the submissions of the petitioner. TMF @ 10% mark up (pre-tax) on the Transmission Charges was approved as provided under Regulation 4.10A Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001 vide orders dated 30.7.2009 in Petition No.65/2009, 17.3.2011 in Petition No.288/2009 and 16.5.2016 in Petition No. 19/TT/2014. As per the above said Regulation, TMF should be allowed for the entire life of the transmission project. Accordingly, TMF is allowed @ of 10% mark up (pre-tax) on the Transmission Charges



for 2013-14. The Commission in its order dated 6.5.2016 in Petition No. 18/TT/2014 has directed the staff to examine the impact of TMF and submit a report to the Commission. On the basis of the report, the Commission will take a view whether to continue with the TMF or not.

Incentive

27. The petitioner has claimed the 'Incentive' (pre-tax) based on the actual availability during 2013-14 on Annual Fixed Charges (including Majoration Charges).

28. We have considered the submissions of the petitioner. Regulation-23 of the 2009 Tariff Regulations-2009 specifies as under:-

“23. Computation and Payment of Transmission Charge for Inter-State Transmission System

(1) The fixed cost of the transmission system shall be computed on annual basis, in accordance with norms contained in these regulations, aggregated as appropriate, and recovered on monthly basis as transmission charge from the users, who shall share these charges in the manner specified in Regulation 33.

(2) The transmission charge (inclusive of incentive) payable for a calendar month for a transmission system or part thereof shall be

xxxx
xxxx

(3) The transmission charges shall be calculated separately for part of the transmission system having differing NATAF, and aggregated thereafter, according to their sharing by the beneficiaries.

(4) The transmission licensee shall raise the bill for the transmission charge (inclusive of incentive) for a month based on its estimate of TAFM. Adjustments, if any, shall be made on the basis of the TAFM to be certified by the Member-Secretary of the Regional Power Committee of the concerned region within 30 days from the last day of the relevant month.”

29. Accordingly, the petitioner is allowed to calculate and bill incentive as per Regulation 23 of the 2009 Tariff Regulations for recovery.



Annual Fixed Charges (AFC) For 2013-14

30. The detailed computation of the various components of the trued-up annual fixed charges for the transmission assets for 2013-14 remain the same as approved in order dated 23.5.2016 in Petition No. 20/TT/2014 and is as under:-

Particulars	₹ in lakh)	
	Asset-I 2013-14	Asset-II 2013-14
Gross Block	21424.90	21113.55
Additional Capitalisation	-	-
Closing Gross Block	21424.90	21113.55
Average Gross Block	21424.90	21113.55
Depreciation		
Rate of Depreciation	5.2112%	5.2099%
Depreciable Value	19282.41	19002.19
Remaining Depreciable Value	12134.31	11837.85
Depreciation	1116.49	1099.99
Interest on Loan		
Gross Normative Loan	14997.43	14779.48
Cumulative Repayment upto Previous Year	7148.10	7183.97
Net Loan-Opening	7849.33	7595.51
Addition due to Additional Capitalisation	-	-
Repayment during the year	1116.49	1099.99
Net Loan-Closing	6732.84	6495.53
Average Loan	7291.09	7045.52
Weighted Average Rate of Interest on Loan	9.4488%	9.4489%
Interest	688.92	665.72
Return on Equity		
Opening Equity	6427.47	6334.06
Addition due to Additional Capitalisation	-	-
Closing Equity	6427.47	6334.06
Average Equity	6427.47	6334.06
Return on Equity (Base Rate)	15.50%	15.50%
Tax rate for the year (MAT)	20.961%	20.961%
Rate of Return on Equity (Pre Tax)	19.610%	19.610%
Return on Equity (Pre Tax)	1260.43	1242.11
Interest on Working Capital		
Maintenance Spares	28.89	27.84
O & M expenses	16.05	15.46
Receivables	555.33	544.23
Total	600.28	587.53
Rate of Interest	12.25%	12.25%
Interest	73.53	71.97
Annual Transmission Charges		



Depreciation	1116.49	1099.99
Interest on Loan	688.92	665.72
Return on Equity	1260.43	1242.11
Interest on Working Capital	73.53	71.97
O & M Expenses	192.62	185.57
Sub-Total	3331.99	3265.36
Transmission Majoration Factor	333.20	326.54
Total	3665.19	3591.90

Sharing of Transmission Charges

31. In view of Transmission Service Agreement entered into between the petitioner and respondent No. 1 and also BPTAs entered into between Respondent No. 1 and the beneficiaries, Respondent No. 1 shall raise bills for the charges, including the Transmission Majoration Factor approved in this order. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondents in accordance with Regulation 33 of the 2009 Tariff Regulations up to 30.6.2011. With effect from 1.7.2011, the billing, collection and disbursement of the transmission charges shall be governed by the provision of Central Electricity Regulatory Commission (Sharing of Inter-state Transmission Charges and Losses) Regulations, 2010 as amended from time to time.

Determination of Annual Transmission Charges for 2014-19

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

Particulars	Asset-I				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1119.03	1119.64	1119.64	1119.64	1119.64
Interest on Loan	588.98	483.29	376.77	270.16	162.93
Return on Equity	1263.29	1263.97	1263.97	1263.97	1263.97
Interest on Working Capital	78.00	75.92	73.80	71.68	69.57
O&M Expenses	173.92	179.83	185.73	191.88	198.28
Sub-Total	3223.22	3122.65	3019.91	2917.33	2814.38
Transmission Majoration Factor	322.32	312.27	301.99	291.73	281.44
Total	3545.54	3434.92	3321.90	3209.06	3095.82



Particulars	Asset-II				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1115.01	1119.91	1123.96	1123.96	1123.96
Interest on Loan	576.94	476.83	375.19	268.18	160.56
Return on Equity	1258.88	1264.34	1268.85	1268.85	1268.85
Interest on Working Capital	77.14	75.38	73.56	71.42	69.28
O&M Expenses	166.82	172.48	178.15	184.05	190.18
Sub-Total	3194.79	3108.94	3019.71	2916.46	2812.82
Transmission Majoration Factor	319.48	310.90	301.97	291.65	281.28
Total	3514.27	3419.84	3321.68	3208.11	3094.10

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

(₹ in lakh)

Particulars	Asset-I				
	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	26.09	26.97	27.86	28.78	29.74
O & M Expenses	14.49	14.99	15.48	15.99	16.52
Receivables	537.20	520.44	503.32	486.22	469.07
Total	577.78	562.40	546.66	530.99	515.33
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	78.00	75.92	73.80	71.68	69.57
Particulars	Asset-II				
	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	25.02	25.87	26.72	27.61	28.53
O & M Expenses	13.90	14.37	14.85	15.34	15.85
Receivables	532.46	518.16	503.28	486.08	468.81
Total	571.38	558.40	544.85	529.03	513.19
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	77.14	75.38	73.55	71.42	69.28

Capital Cost

34. 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) -----

(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.”

35. The element wise capital cost, admitted as on 31.3.2014 for instant assets has been considered as capital cost as on 1.4.2014. Thus, ₹21424.90 lakh and ₹21113.55 lakh in case of Assets-I and II respectively has been considered as the admitted capital cost of the instant assets as on 1.4.2014 as per details hereunder:-

Particulars	(₹ in lakh)	
	Asset-I	Asset-II
	Capital cost as on 31.3.2014 as determined in true up for 2013-14 in tariff period 2009-14	
Freehold Land	-	-
Leasehold Land	-	-
Building & Other Civil Works	760.00	763.25
Transmission Line	20664.90	20350.30
Sub-Station Equipments	-	-
PLCC	-	-
Total	21424.90	21113.55

Additional Capital Expenditure

36. Clause (1) and (3) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

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

- (i) Undischarged liabilities recognised to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law or compliance of any existing law.”

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.



“(3)The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check.”

“(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system; and”

37. The petitioner has claimed, add-cap (including normative IDC) of ₹23.24 lakh and ₹22.39 lakh, in case of Asset-I and Asset-II respectively, for 2014-15 being proportionate cost, on account of implementation of SAP. The total cost of SAP for all the lines is ₹110.13 lakh and the cost has been apportioned according to line length. The line length of Assets-I and II is 492 Ckt. km and 474 Ckt. km i.e. 21.10% and 20.33% respectively of the total line length of the project being 2332 Ckt. km. The petitioner has submitted reason for implementation of SAP is for its plans to have the robust ERP system as the existing ERP system is technically outdated and not capable for fulfilling the present requirement of business, like capturing the maintenance data and billing & collection recording after the implementation of PoC mechanism. Implementation of SAP has various benefits and systematic functionality, such as inventory management, financials, controlling, sales & distribution, plant maintenance, human capital management, and Governance Risk & Compliances etc. Accordingly, the proportionate implementation cost of SAP has been claimed under Regulation 14(3) (ix) of the 2014 Tariff Regulations. We have considered the submissions of the petitioner. We are of the view that the implementation of SAP would bring in efficiency and it is necessary for successful and efficient operation of transmission system. Accordingly,



the additional capitalisation of ₹23.24 lakh and ₹22.39 lakh, in respect of Assets-I and II respectively is allowed under Regulation 14(3) (ix) of the 2014 Tariff Regulations, which provides for expenditure towards 'replacement due to obsolescence of technology' which has become necessary for successful and efficient operation of transmission system.

38. The petitioner, vide affidavit dated 20.10.2016, has submitted that the additional capitalization projected to be incurred during the tariff period 2014-19 shall be funded through its internal accruals. It may be noted that the 2014 Tariff Regulations do not specifically provide for normative IDC in respect of additional capitalization. As the petitioner has not deployed any actual loan for additional capital expenditure, normative IDC has not been considered in our tariff calculation.

39. The petitioner has also claimed add-cap (including normative IDC) of ₹10 lakh and ₹153.36 lakh for 2014-15 and 2015-16 in case of Asset-II, on account of purchase of compressor machines and replacement of insulators respectively. Further, the petitioner vide affidavit dated 20.10.2016 has submitted that amount of ₹3.36 lakh on account of IDC is applicable for add-cap of ₹153.36 lakh being cost of insulators replacement.

40. In case of insulators replacement in respect of Asset-II, the petitioner has neither submitted Auditor's/Management Certificate indicating the replacement value of the insulators nor the capitalized value of the old Insulators. The petitioner has submitted Form-10B (Statement of De-capitalization) for both the assets with the remarks of "Not Required". The petitioner was directed to submit the details as per Form



10B on affidavit which was not submitted. Hence, ₹153.36 lakh for replacement of insulators during 2015-16 has not been allowed in the instant petition. However, the petitioner is at liberty to submit the details of additional capitalization along with Auditors' Certificate indicating value of the asset and capitalized value of the old assets, alongwith Form-10B on affidavit, at the time of true up of 2014-19 tariff.

41. As regards add-cap on account of compression machines, the petitioner has submitted that these are used to do the compression work on the conductors, however, the petitioner has submitted that it is presently using machines which are heavy in weight. These machines can only be used when they are on ground. During emergency operation and maintenance works, the compression work is required to be done on conductor and these machines are not suitable for this purpose due to their weight. To save the outage time of the line, light weight compression machines are required which may be used on the ground and conductor and hence replacement of compression machines may be allowed as per Regulation 14(3) (ix) of the 2014 Tariff Regulation.

42. We have considered the submission of petitioner regarding compression machines. The heavy weight compression machines are not useful for emergency O&M works and maintenance of conductor due to weight, therefore these compression machines are required to be replaced by light weight compression machines. As per first proviso of Regulation 14(3)(x) of the 2014 Tariff Regulations, any expenditure on acquiring the minor items like tools or tackles after the cut-off date are not to be considered for additional capitalization. The use of compression machine is a common practice under O&M and is not a special tool. Therefore, we are not inclined to allow add-cap on account of compression machines.



43. The details of add-cap allowed and estimated completion cost as on 31.3.2019 are as below:-

(₹ in lakh)

Asset-I		
Cost as on 1.4.2014	Projected additional capital expenditure	
	2014-15	
21424.90	23.24	21448.14
Asset-II		
Cost as on 1.4.2014	Projected additional capital expenditure	
	2014-15	
21113.55	22.39	21135.94

Debt: Equity Ratio

44. 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.”

45. The debt: equity ratio of 70: 30 was admitted after true-up for the tariff period ending 31.3.2014 for instant assets. The debt: equity ratio of 70: 30 has also been considered for add-cap during 2014-15. The details of the debt: equity as on 1.4.2014 and as on 31.3.2019 considered for the purpose of tariff for the 2014-19 tariff period are as under:-

(₹ in lakh)

Particulars	Asset-I			
	As on 1.4.2014		As on 31.3.2019	
	Amount	%	Amount	%
Debt	14997.43	70.00	15013.70	70.00
Equity	6427.47	30.00	6434.44	30.00
Total	21424.90	100.00	21448.14	100.00
Particulars	Asset-II			
	As on 1.4.2014		As on 31.3.2019	
	Amount	%	Amount	%
Debt	14779.48	70.00	14795.16	70.00



Equity	6334.06	30.00	6340.78	30.00
Total	21113.55	100.00	21135.94	100.00

Interest on Loan (“IOL”)

46. 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.”

47. The interest on loan has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations by considering latest available rates of interest for 2013-14 for arriving at the weighted average rate of interest. Any change in rate of interest subsequently is subject to truing-up on submission of actual rate of interest at the time



of truing-up.

48. The details of weighted average rate of interest are at Annexure-3 and Annexure-4 and the IOL has been worked out and allowed as under:-

(₹ in lakh)

Particulars	Asset-I				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross loan opening	14997.43	15013.70	15013.70	15013.70	15013.70
Cumulative Repayment upto previous year	8264.59	9381.70	10499.41	11617.13	12734.85
Net Loan-Opening	6732.84	5632.01	4514.29	3396.57	2278.85
Additions during the year	16.27	-	-	-	-
Repayment during the year	1117.10	1117.72	1117.72	1117.72	1117.72
Net Loan-Closing	5632.01	4514.29	3396.57	2278.85	1161.13
Average Loan	6182.42	5073.15	3955.43	2837.71	1719.99
Weighted Rate of Interest	9.4474%	9.4453%	9.4415%	9.4327%	9.4599%
Interest	584.08	479.18	373.45	267.67	162.71

Particulars	Asset-II				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross loan opening	14779.48	14795.16	14795.16	14795.16	14795.16
Cumulative Repayment upto previous year	8283.96	9384.54	10485.71	11586.88	12688.05
Net Loan-Opening	6495.53	5410.62	4309.45	3208.28	2107.11
Additions during the year	15.67	-	-	-	-
Repayment during the year	1100.58	1101.17	1101.17	1101.17	1101.17
Net Loan-Closing	5410.62	4309.45	3208.28	2107.11	1005.94
Average Loan	5953.07	4860.03	3758.86	2657.69	1556.52
Weighted Rate of Interest	9.4475%	9.4454%	9.4417%	9.4330%	9.4607%
Interest	562.42	459.05	354.90	250.70	147.26

Return on Equity ("ROE")

49. 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:

(vi) 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:

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

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.”

50. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE with MAT rate of 20.961% as per the above Regulations. 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. 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 and allowed is as under:-

(₹ in lakh)

Particulars	Asset-I				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	6427.47	6434.44	6434.44	6434.44	6434.44
Addition due to Additional Capitalisation	6.97	-	-	-	-
Closing Equity	6434.44	6434.44	6434.44	6434.44	6434.44
Average Equity	6430.96	6434.44	6434.44	6434.44	6434.44
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for 2013-14 (%)	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)	1261.11	1261.79	1261.79	1261.79	1261.79
Particulars	Asset-II				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	6334.06	6340.78	6340.78	6340.78	6340.78
Addition due to Additional Capitalisation	6.72	-	-	-	-
Closing Equity	6340.78	6340.78	6340.78	6340.78	6340.78
Average Equity	6337.42	6340.78	6340.78	6340.78	6340.78
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for 2013-14 (%)	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)	1242.77	1243.43	1243.43	1243.43	1243.43

Depreciation

51. 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."



52. We have considered the submission made by the petitioner with reference to depreciation. The instant assets shall complete their 12 years life in 2018-19. Therefore, remaining depreciable value of the instant assets has been spread over in the balance useful life after 2018-19 as provided under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereinafter:-

(₹ in lakh)

Particulars	Asset-I				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	21424.90	21448.14	21448.14	21448.14	21448.14
Additions during the year due to projected additional capitalization	23.24	-	-	-	-
Closing Gross block	21448.14	21448.14	21448.14	21448.14	21448.14
Average gross block	21436.52	21448.14	21448.14	21448.14	21448.14
Rate of Depreciation (%)	5.2112%	5.2113%	5.2113%	5.2113%	5.2113%
Depreciable Value	19292.87	19303.33	19303.33	19303.33	19303.33
Remaining Depreciable Value	11028.28	9921.63	8803.92	7686.20	6568.48
Depreciation	1117.10	1117.72	1117.72	1117.72	1117.72
Particulars	Asset-II				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	21113.55	21135.94	21135.94	21135.94	21135.94
Additions during the year due to projected additional capitalization	22.39	0.00	0.00	0.00	0.00
Closing Gross block	21135.94	21135.94	21135.94	21135.94	21135.94
Average gross block	21124.74	21135.94	21135.94	21135.94	21135.94
Rate of Depreciation (%)	5.2099%	5.2099%	5.2099%	5.2099%	5.2099%
Depreciable Value	19012.27	19022.34	19022.34	19022.34	19022.34
Remaining Depreciable Value	10747.93	9657.43	8556.26	7455.09	6353.92
Depreciation	1100.58	1101.17	1101.17	1101.17	1101.17

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

53. 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 under:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
D/C twin and triple conductor T/L (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806



54. The petitioner has submitted that as approved in 26th Standing Committee meeting of Northern region Transmission Planning, Bareilly-Mandola line has been split in two parts i.e. Bareilly-Merrut (considered as LILO) and Merrut-Mandola w.e.f. 1.4.2014. As such the line length of Bareilly-Mandola has reduced from 237 km to 235.952 km. Therefore, it has claimed O&M expenses for this line for 235.952 km only. The petitioner has further submitted that it has filed a civil appeal before the Hon'ble Supreme Court on the issue of O&M expenses allowed earlier and the present claim is without prejudice to its rights in the said appeal. As such, it has claimed normative O&M Expenses. The O&M Expenses claimed by the petitioner for the period 2014-19 are as under:-

Particulars	(₹ in lakh)				
	Asset-I				
	2014-15	2015-16	2016-17	2017-18	2018-19
246 km 400 kV D/C Gorakhpur-Lucknow T/L	173.92	179.83	185.73	191.88	198.28
	Asset-II				
235.952 km 400 kV D/C Bareilly-Mandola T/L	166.82	172.48	178.15	184.05	190.18

55. The O&M Expenses claimed by the petitioner are as specified in Regulation 29(4)(a) of the 2014 Tariff Regulations. The claim of the petitioner is allowed, subject to the outcome of the Civil Appeal filed by the petitioner before the Hon'ble Supreme Court. Accordingly, the petitioner's entitlement to O&M Expenses has been worked out for instant asset for the purpose of tariff. The details are as given hereunder:-

Particulars	(₹ in lakh)				
	Asset-I				
	2014-15	2015-16	2016-17	2017-18	2018-19
246 km 400 kV D/C Gorakhpur-Lucknow T/L	173.922	179.826	185.730	191.880	198.276
	Asset-II				
235.952 km 400 kV D/C Bareilly-Mandola T/L	166.818	172.481	178.144	184.042	190.180



Interest on Working Capital (“IWC”)

56. 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;”

57. 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 below:-

(₹ in lakh)

Particulars	Asset-I				
	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	26.09	26.97	27.86	28.78	29.74
O & M expenses	14.49	14.99	15.48	15.99	16.52
Receivables	535.67	519.04	502.05	485.10	468.33
Total	576.25	561.00	545.39	529.87	514.59
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	77.79	75.74	73.63	71.53	69.47
Particulars	Asset-II				
	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	25.02	25.87	26.72	27.61	28.53
O & M expenses	13.90	14.37	14.85	15.34	15.85
Receivables	524.78	508.37	491.60	474.87	458.32



Total	563.71	548.61	533.17	517.82	502.69
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	76.10	74.06	71.98	69.91	67.86

Transmission Majoration Factor (TMF)

58. The petitioner has claimed TMF of 2014-19 tariff period as well. As stated in para 26 above, TMF is allowed for 2014-19 tariff period as provided under Regulation 4.10A of Central Electricity Regulatory Commission (Terms and Conditions) Regulations. As stated earlier, the same will be reviewed by the Commission after the submissions of the report on TMF by the staff of the Commission.

Incentive

59. The petitioner has claimed the 'Incentive' (pre-tax) based on the estimated/projected availability during 2014-19 on Annual Fixed Charges (including Majoration Charges) under Regulation 33 of the 2014 Tariff Regulations. Accordingly, the petitioner is allowed to calculate and bill incentive as provided under Regulation 35 (1) read with Regulation 38 of the 2014 Tariff Regulations.

Annual Transmission Charges

60. The Annual Transmission Charges allowed for the instant transmission assets are as under:-

Particulars	Asset-I				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1117.10	1117.72	1117.72	1117.72	1117.72
Interest on Loan	584.08	479.18	373.45	267.67	162.71
Return on Equity	1261.11	1261.79	1261.79	1261.79	1261.79
Interest on Working Capital	77.79	75.74	73.63	71.53	69.47
O&M Expenses	173.92	179.83	185.73	191.88	198.28
Sub-Total	3214.01	3114.25	3012.32	2910.60	2809.97
Transmission Majoration Factor	321.40	311.42	301.23	291.06	281.00
Total	3535.41	3425.67	3313.56	3201.66	3090.97
Particulars	Asset-II				

(₹ in lakh)



	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1100.58	1101.17	1101.17	1101.17	1101.17
Interest on Loan	562.42	459.05	354.90	250.70	147.26
Return on Equity	1242.77	1243.43	1243.43	1243.43	1243.43
Interest on Working Capital	76.10	74.06	71.98	69.91	67.86
O&M Expenses	166.82	172.48	178.15	184.04	190.18
Sub-Total	3148.69	3050.19	2949.63	2849.24	2749.90
Transmission Majoration Factor	314.87	305.02	294.96	284.92	274.99
Total	3463.56	3355.21	3244.59	3134.16	3024.89

Sales Tax Liability

61. The petitioner has submitted that it applied for registration under U.P. Sales Tax Act in the State of Uttar Pradesh and it had mentioned its business as "Transmission of Electricity and Power" in the Application form under the heading "Business of the Company". Accordingly, the petitioner was granted Certificate of Registration on 3.3.2004. The U.P. Sales Tax Department issued a show cause notice dated 14.9.2011, under Section 7(4) of the Central Sales Tax Act, 1956, for canceling of registration alleging that registration can be issued only for the business of generation or distribution of electricity whereas the company is into transmission of electricity. The department issued a show-cause notice under Section 10(A) of the Central Sales Tax Act, 1956 on 2.5.2012 and 3.2.2014 as to why Differential Tax in form of penalty should not be levied for purchase of goods against the issue of Form C. The department contended that the petitioner is not entitled to issue Form C as it is into the business of transmission of electricity. Accordingly, the department raised a demand equivalent to the Differential Tax i.e. 12% to be paid less 4% Concessional Tax paid. The petitioner has submitted that a total demand of ₹26.44 crore has been raised for the years 2004-05 to 2008-09 out of which a demand of ₹1.49 crore pertains to 2008-09. The petitioner has not yet paid the amount and has preferred an appeal before the Hon'ble High Court of Allahabad. The petitioner has sought liberty to seek approval of the Commission for capitalization of such penal sales tax amount and recovery of the transmission charges



pertaining to corresponding capitalisation once the above liability is actually incurred by the petitioner.

62. We have considered the submissions of the petitioner. We are not expressing view as to whether the claim for reimbursement of Differentiate Tax shall be admissible in tariff or not. If the petitioner approaches the Commission after the disposal of the appeal by the Hon'ble High Court of Allahabad, its request will be considered in accordance with law.

Filing Fee and Publication Expenses

63. The petitioner has sought reimbursement of fee paid by it for filing the true-up petition for 2013-14 in tariff period 2009-14 as well as for filing the petition and publication expenses for tariff period 2014-19. The petitioner shall be entitled for reimbursement of the filing fees for true-up petition for tariff period 2009-14 as well as filing fees and publication expenses in connection with the tariff period 2014-19, directly from the beneficiaries on pro-rata basis in accordance with respective Tariff Regulations.

Licence Fee and RLDC Fees and Charges

64. The petitioner has requested to allow license fee/RLDC fees and charges both for tariff period 2009-14 and 2014-19. The petitioner shall be entitled for reimbursement of licence fee in accordance with respective Tariff Regulations.



Sharing of Transmission Charges

65. The billing, collection and disbursement of the transmission charges approved for 2014-19 tariff period 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.

66. This order disposes of Petition No. 516/TT/2014.

**sd/-
(M.K. Iyer)
Member**

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

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

**sd/-
(Gireesh B. Pradhan)
Chairperson**



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	IFC					
	Gross loan opening	4440.44	4524.42	4524.42	4524.42	4524.42
	Cumulative Repayment upto DOCO/previous year	736.59	1113.63	1490.66	1867.70	2244.73
	Net Loan-Opening	3703.85	3410.80	3033.76	2656.73	2279.69
	Additions during the year	83.98	0.00	0.00	0.00	0.00
	Repayment during the year	377.04	377.04	377.04	377.04	377.04
	Net Loan-Closing	3410.80	3033.76	2656.73	2279.69	1902.66
	Average Loan	3557.32	3222.28	2845.24	2468.21	2091.17
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	313.04	283.56	250.38	217.20	184.02
	Rep Schedule	24 equal half yearly instalments from 15.07.2007				
2	ADB					
	Gross loan opening	3948.31	4022.98	4022.98	4022.98	4022.98
	Cumulative Repayment upto DOCO/previous year	654.95	990.20	1325.45	1660.70	1995.94
	Net Loan-Opening	3293.36	3032.78	2697.53	2362.29	2027.04
	Additions during the year	74.67	0.00	0.00	0.00	0.00
	Repayment during the year	335.25	335.25	335.25	335.25	335.25
	Net Loan-Closing	3032.78	2697.53	2362.29	2027.04	1691.79
	Average Loan	3163.07	2865.16	2529.91	2194.66	1859.41
	Rate of Interest	9.14%	9.14%	9.14%	9.14%	9.14%
	Interest	289.10	261.88	231.23	200.59	169.95
	Rep Schedule	24 semi annual equal instalments from 15.07.2007				
3	IDFC					
	Gross loan opening	3336.12	3399.22	3399.22	3399.22	3399.22
	Cumulative Repayment upto DOCO/previous year	553.39	836.66	1119.93	1403.20	1686.46
	Net Loan-Opening	2782.73	2562.56	2279.29	1996.03	1712.76
	Additions during the year	63.10	0.00	0.00	0.00	0.00
	Repayment during the year	283.27	283.27	283.27	283.27	283.27
	Net Loan-Closing	2562.56	2279.29	1996.03	1712.76	1429.49
	Average Loan	2672.65	2420.93	2137.66	1854.39	1571.12
	Rate of Interest	10.48%	9.34%	9.20%	9.20%	10.08%
	Interest	280.09	226.11	196.66	170.60	158.37
	Rep Schedule	48 quarterly instalments from 15.04.2007				
4	SBI					
	Gross loan opening	2970.75	3026.94	3026.94	3026.94	3026.94
	Cumulative Repayment upto DOCO/previous year	552.44	804.69	1056.93	1309.18	1561.42
	Net Loan-Opening	2418.31	2222.26	1970.01	1717.77	1465.52
	Additions during the year	56.19	0.00	0.00	0.00	0.00
	Repayment during the year	252.25	252.25	252.25	252.25	252.25
	Net Loan-Closing	2222.26	1970.01	1717.77	1465.52	1213.28
	Average Loan	2320.28	2096.13	1843.89	1591.64	1339.40



	Rate of Interest	10.19%	9.16%	9.03%	9.03%	10.15%
	Interest	236.44	192.01	166.50	143.73	135.95
	Rep Schedule	48 quarterly instalments from 31.03.2007				
	Total Loan					
	Gross loan opening	14695.62	14973.56	14973.56	14973.56	14973.56
	Cumulative Repayment upto DOCO/previous year	2497.37	3745.17	4992.96	6240.76	7488.56
	Net Loan-Opening	12198.25	11228.39	9980.60	8732.80	7485.00
	Additions during the year	277.94	0.00	0.00	0.00	0.00
	Repayment during the year	1247.80	1247.80	1247.80	1247.80	1247.80
	Net Loan-Closing	11228.39	9980.60	8732.80	7485.00	6237.21
	Average Loan	11713.32	10604.50	9356.70	8108.90	6861.11
	Rate of Interest	9.5505%	9.0863%	9.0286%	9.0286%	9.4488%
	Interest	1118.68	963.56	844.78	732.12	648.29



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	IFC					
	Gross loan opening	4422.26	4512.49	4512.49	4512.49	4512.49
	Cumulative Repayment upto DOCO/previous year	733.03	1109.07	1485.11	1861.15	2237.19
	Net Loan-Opening	3689.23	3403.42	3027.38	2651.34	2275.30
	Additions during the year	90.23	0.00	0.00	0.00	0.00
	Repayment during the year	376.04	376.04	376.04	376.04	376.04
	Net Loan-Closing	3403.42	3027.38	2651.34	2275.30	1899.26
	Average Loan	3546.32	3215.40	2839.36	2463.32	2087.28
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	312.08	282.96	249.86	216.77	183.68
	Rep Schedule	24 equal half yearly instalments from 15.07.2007				
2	ADB					
	Gross loan opening	3932.14	4012.37	4012.37	4012.37	4012.37
	Cumulative Repayment upto DOCO/previous year	651.77	986.13	1320.50	1654.86	1989.23
	Net Loan-Opening	3280.37	3026.24	2691.87	2357.51	2023.14
	Additions during the year	80.23	0.00	0.00	0.00	0.00
	Repayment during the year	334.36	334.36	334.36	334.36	334.36
	Net Loan-Closing	3026.24	2691.87	2357.51	2023.14	1688.78
	Average Loan	3153.30	2859.05	2524.69	2190.33	1855.96
	Rate of Interest	9.14%	9.14%	9.14%	9.14%	9.14%
	Interest	288.21	261.32	230.76	200.20	169.63
	Rep Schedule	24 semi annual equal instalments from 15.07.2007				
3	IDFC					
	Gross loan opening	3322.45	3390.25	3390.25	3390.25	3390.25
	Cumulative Repayment upto DOCO/previous year	550.71	833.23	1115.75	1398.27	1680.79
	Net Loan-Opening	2771.74	2557.02	2274.50	1991.98	1709.46
	Additions during the year	67.80	0.00	0.00	0.00	0.00
	Repayment during the year	282.52	282.52	282.52	282.52	282.52
	Net Loan-Closing	2557.02	2274.50	1991.98	1709.46	1426.94
	Average Loan	2664.38	2415.76	2133.24	1850.72	1568.20
	Rate of Interest	10.48%	9.34%	9.20%	9.20%	10.08%
	Interest	279.23	225.63	196.26	170.27	158.07
	Rep Schedule	48 quarterly instalments from 15.04.2007				
4	SBI					
	Gross loan opening	2958.59	3018.95	3018.95	3018.95	3018.95
	Cumulative Repayment upto DOCO/previous year	549.29	800.87	1052.45	1304.03	1555.61
	Net Loan-Opening	2409.30	2218.08	1966.50	1714.92	1463.34
	Additions during the year	60.36	0.00	0.00	0.00	0.00
	Repayment during the year	251.58	251.58	251.58	251.58	251.58
	Net Loan-Closing	2218.08	1966.50	1714.92	1463.34	1211.76
	Average Loan	2313.69	2092.29	1840.71	1589.13	1337.55
	Rate of Interest	10.19%	9.16%	9.03%	9.03%	10.15%



Interest	235.77	191.65	166.22	143.50	135.76
Rep Schedule	48 quarterly instalments from 31.03.2007				
Total Loan					
Gross loan opening	14635.44	14934.06	14934.06	14934.06	14934.06
Cumulative Repayment upto DOCO/previous year	2484.80	3729.31	4973.81	6218.32	7462.82
Net Loan-Opening	12150.64	11204.76	9960.25	8715.75	7471.24
Additions during the year	298.62	0.00	0.00	0.00	0.00
Repayment during the year	1244.51	1244.51	1244.51	1244.51	1244.51
Net Loan-Closing	11204.76	9960.25	8715.75	7471.24	6226.74
Average Loan	11677.70	10582.50	9338.00	8093.49	6848.99
Rate of Interest	9.5505%	9.0863%	9.0286%	9.0286%	9.4489%
Interest	1115.28	961.56	843.09	730.73	647.15



Annexure-3

(₹ 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	IFC					
	Gross loan opening	4524.42	4524.42	4524.42	4524.42	4524.42
	Cumulative Repayment upto DOCO/previous year	2621.77	2998.81	3375.84	3752.88	4129.91
	Net Loan-Opening	1902.65	1525.62	1148.58	771.55	394.51
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	377.04	377.04	377.04	377.04	377.04
	Net Loan-Closing	1525.62	1148.58	771.55	394.51	17.47
	Average Loan	1714.13	1337.10	960.06	583.03	205.99
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	150.84	117.66	84.49	51.31	18.13
	Rep Schedule	24 semi annual equal instalments from 15.07.2007				
2	ADB					
	Gross loan opening	4022.98	4022.98	4022.98	4022.98	4022.98
	Cumulative Repayment upto DOCO/previous year	2331.19	2666.44	3001.69	3336.94	3672.18
	Net Loan-Opening	1691.79	1356.54	1021.29	686.05	350.80
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	335.25	335.25	335.25	335.25	335.25
	Net Loan-Closing	1356.54	1021.29	686.05	350.80	15.55
	Average Loan	1524.17	1188.92	853.67	518.42	183.17
	Rate of Interest	9.14%	9.14%	9.14%	9.14%	9.14%
	Interest	139.31	108.67	78.03	47.38	16.74
	Rep Schedule	24 semi annual equal instalments from 15.07.2007				
3	IDFC					
	Gross loan opening	3399.22	3399.22	3399.22	3399.22	3399.22
	Cumulative Repayment upto DOCO/previous year	1969.73	2253.00	2536.27	2819.54	3102.80
	Net Loan-Opening	1429.49	1146.22	862.95	579.69	296.42
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	283.27	283.27	283.27	283.27	267.84
	Net Loan-Closing	1146.22	862.95	579.69	296.42	28.58
	Average Loan	1287.86	1004.59	721.32	438.05	162.50
	Rate of Interest	10.08%	10.08%	10.08%	10.08%	10.08%
	Interest	129.82	101.26	72.71	44.16	16.38
	Rep Schedule	48 quarterly instalments from 15.04.2007				
4	SBI					
	Gross loan opening	3026.94	3026.94	3026.94	3026.94	3026.94
	Cumulative Repayment upto DOCO/previous year	1813.67	2065.92	2318.16	2570.41	2822.65
	Net Loan-Opening	1213.27	961.03	708.78	456.54	204.29
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	252.25	252.25	252.25	252.25	136.78
	Net Loan-Closing	961.03	708.78	456.54	204.29	67.52
	Average Loan	1087.15	834.90	582.66	330.41	135.90
	Rate of Interest	10.15%	10.15%	10.15%	10.15%	10.15%



	Interest	110.35	84.74	59.14	33.54	13.79
	Rep Schedule	48 quarterly instalments from 31.03.2007				
	Total Loan					
	Gross loan opening	14973.56	14973.56	14973.56	14973.56	14973.56
	Cumulative Repayment upto DOCO/previous year	8736.36	9984.16	11231.95	12479.75	13727.55
	Net Loan-Opening	6237.20	4989.40	3741.61	2493.81	1246.01
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1247.80	1247.80	1247.80	1247.80	1116.90
	Net Loan-Closing	4989.40	3741.61	2493.81	1246.01	129.12
	Average Loan	5613.30	4365.51	3117.71	1869.91	687.56
	Rate of Interest	9.4474%	9.4453%	9.4415%	9.4327%	9.4599%
	Interest	530.31	412.34	294.36	176.38	65.04



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	IFC					
	Gross loan opening	4512.49	4512.49	4512.49	4512.49	4512.49
	Cumulative Repayment upto DOCO/previous year	2613.23	2989.27	3365.31	3741.35	4117.39
	Net Loan-Opening	1899.26	1523.22	1147.18	771.14	395.10
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	376.04	376.04	376.04	376.04	376.04
	Net Loan-Closing	1523.22	1147.18	771.14	395.10	19.06
	Average Loan	1711.24	1335.20	959.16	583.12	207.08
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	150.59	117.50	84.41	51.31	18.22
	Rep Schedule	24 semi annual equal instalments from 15.07.2007				
2	ADB					
	Gross loan opening	4012.37	4012.37	4012.37	4012.37	4012.37
	Cumulative Repayment upto DOCO/previous year	2323.59	2657.95	2992.32	3326.68	3661.05
	Net Loan-Opening	1688.78	1354.42	1020.05	685.69	351.32
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	334.36	334.36	334.36	334.36	334.36
	Net Loan-Closing	1354.42	1020.05	685.69	351.32	16.96
	Average Loan	1521.60	1187.23	852.87	518.51	184.14
	Rate of Interest	9.14%	9.14%	9.14%	9.14%	9.14%
	Interest	139.07	108.51	77.95	47.39	16.83
	Rep Schedule	24 semi annual equal instalments from 15.07.2007				
3	IDFC					
	Gross loan opening	3390.25	3390.25	3390.25	3390.25	3390.25
	Cumulative Repayment upto DOCO/previous year	1963.31	2245.83	2528.35	2810.87	3093.39
	Net Loan-Opening	1426.94	1144.42	861.90	579.38	296.86
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	282.52	282.52	282.52	282.52	267.09
	Net Loan-Closing	1144.42	861.90	579.38	296.86	29.77
	Average Loan	1285.68	1003.16	720.64	438.12	163.31
	Rate of Interest	10.08%	10.08%	10.08%	10.08%	10.08%
	Interest	129.60	101.12	72.64	44.16	16.46
	Rep Schedule	48 quarterly instalments from 15.04.2007				
4	SBI					
	Gross loan opening	3018.95	3018.95	3018.95	3018.95	3018.95
	Cumulative Repayment upto DOCO/previous year	1807.19	2058.77	2310.35	2561.93	2813.51
	Net Loan-Opening	1211.76	960.18	708.60	457.02	205.44
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	251.58	251.58	251.58	251.58	136.11
	Net Loan-Closing	960.18	708.60	457.02	205.44	69.33
	Average Loan	1085.97	834.39	582.81	331.23	137.39
	Rate of Interest	10.15%	10.15%	10.15%	10.15%	10.15%



	Interest	110.23	84.69	59.16	33.62	13.94
	Rep Schedule	48 quarterly instalments from 31.03.2007				
	Total Loan					
	Gross loan opening	14934.06	14934.06	14934.06	14934.06	14934.06
	Cumulative Repayment upto DOCO/previous year	8707.32	9951.83	11196.33	12440.84	13685.34
	Net Loan-Opening	6226.74	4982.24	3737.73	2493.23	1248.72
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1244.51	1244.51	1244.51	1244.51	1113.61
	Net Loan-Closing	4982.24	3737.73	2493.23	1248.72	135.12
	Average Loan	5604.49	4359.98	3115.48	1870.97	691.92
	Rate of Interest	9.4475%	9.4454%	9.4417%	9.4330%	9.4607%
	Interest	529.49	411.82	294.15	176.49	65.46

