

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 78/TT/2016

Coram:

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

**Date of Hearing : 13.06.2016
Date of Order : 16.06.2016**

In the matter of:

Truing up of transmission tariff for 2009-14 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for 8 nos. of transmission assets under "Pallatana Gas Based Power Projects and Bongaigaon TPS Projects" in North Eastern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

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

.....**Petitioner**

Versus

1. Assam Electricity Grid Corporation Ltd.
(Formerly Assam State Electricity Board),
Bijulee Bhawan, Paltan Bazar,
Guwahai – 781001, Assam
2. Meghalaya Electricity Corporation Limited
(Formerly Meghalaya State Electricity Board),
Short Round Road,
Shillong - 793001
3. Government of Arunachal Pradesh,



Itanagar,
Arunachal Pradesh

4. Power & Electricity Department
Government of Mizoram,
Mizoram, Aizwal
5. Manipur State Electricity Distribution Company Limited
(Formerly Electricity Department, Govt. of Manipur),
Keishampat, Imphal, Manipur
6. Department of Power,
Govt. of Nagaland,
Kohima, Nagaland
7. Tripura State Electricity Corporation Limited,
Bidyut Bhawan, North Banamalipur,
Agartala, Tripura – 700001

.....Respondents

The following were present:-

For Petitioner:	Shri M. M. Mondal, PGCIL
	Shri S. S. Raju, PGCIL
	Shri Rakesh Prasad, PGCIL
	Shri Jasbir Singh, PGCIL

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("the petitioner") for truing up of capital expenditure and tariff for 8 nos. of transmission assets under "Pallatana Gas Based Power Projects and Bongaigaon TPS Projects" in North Eastern Region (hereinafter referred as "transmission asset"). The petitioner has filed this petition 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 capital expenditure for the period from COD of respective assets 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 for Combined Assets.

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

3. The petitioner has served the petition to the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of Electricity Act, 2003 (“the Act”). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 13.6.2016. None of the respondents have filed any reply to the petition. The petitioner was directed to file additional information which has been submitted by the petitioner vide affidavit dated 14.6.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

(a) The investment approval of the project was accorded by the Board of Directors of the petitioner company vide Memorandum No. C/CP/Pallatana-Bongaigaon dated 26.2.2010 at an estimated cost of



₹214400 lakh, including IDC of ₹17835 lakh. Subsequently, Revised Cost Estimate (RCE) was approved by Board of Directors of the petitioner company vide Memorandum No. C/CP/RCE: PB, dated 29.1.2016, at an estimated expenditure of ₹293288 lakh including an IDC of ₹38804 lakh, based on October, 2015 price level. The details of the assets along with COD and approved apportioned cost are as under:-

Assets name	Actual Date of commercial operation	Approved apportioned cost as per FR (₹ in lakh)	Approved apportioned cost as per RCE (₹ in lakh)
Asset-1: LILO of 220 kV Misa-Kathalguri Transmission line at Mariani alongwith Mariani Switching Station	1.4.2013	3095.64	2366.28
Asset-2: 4 x 6.67 MVAR, 132 kV, I-Ph Bus Reactor at 132 kV Ziro Sub-station	1.2.2013	772.89	603.05
Asset-3.1: 1 no. 50 MVA, 132/33 kV ICT-1 (2nd Transformer) alongwith associated bays at 132 kV Imphal Sub-station	1.5.2013	555.23	605.70
Asset-3.2: Loop-in line 132 kV Imphal Ningthoukhong T/L alongwith associated bays at Imphal Sub-station	1.4.2013	2089.80	547.11
Asset-3.3: Loop-out line 132 kV Imphal Ningthoukhong T/L alongwith associated bays at Imphal Sub-station	1.9.2013	388.76	395.62
Asset-3.4: 1 no. 50 MVA, 132/33 kV ICT alongwith associated bays at 132 kV Imphal (New) Sub-station	1.4.2013	569.16	635.18
Asset-3.5: 1 x 20 MVAR Bus Reactor alongwith associated bays at 132/33 kV Imphal (New) Sub-station	1.3.2013	466.15	667.15
Asset-4: 20 MVAR, Bus Reactor at 220 kV Mariani Switching Station	1.4.2013	545.56	1218.46



(b) The tariff from respective COD to 31.3.2014 was determined vide order dated 7.12.2015 in Petition No. 44/TT/2013 for the assets in accordance with the 2009 Tariff Regulations. The tariff allowed for the 2009-14 tariff period is as under:-

(₹ in lakh)

Particulars	Approved in order dated 7.12.2015 in Petition No. 44/TT/2013				
	Asset-1	Asset-2		Asset-3.1	Asset-3.2
	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)	2013-14
Depreciation	56.69	2.96	20.85	11.06	4.69
Interest on Loan	83.23	3.56	23.84	12.73	19.14
Return on equity	79.64	3.26	23.23	12.33	17.76
Interest on Working Capital	9.89	0.51	3.37	2.43	2.71
O & M Expenses	91.77	5.16	32.73	30.00	32.84
Total	321.22	15.46	104.02	68.55	77.13

(₹ in lakh)

Particulars	Approved in order dated 7.12.2015 in Petition No. 44/TT/2013				
	Asset-3.3	Asset-3.4	Asset-3.5		Asset-4
	2013-14 (Pro-rata)	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)
Depreciation	4.24	15.24	1.5	18.92	28.13
Interest on Loan	4.84	17.87	1.78	21.52	33.22
Return on equity	4.62	16.98	1.65	21.08	31.34
Interest on Working Capital	1.34	2.89	0.26	3.22	4.56
O & M Expenses	19.13	32.73	2.58	32.73	45.82
Total	34.18	85.71	7.76	97.48	143.07

(c) The Commission had considered the capital cost as on COD for the assets for determination of tariff in order dated 7.12.2015 in Petition No. 44/TT/2013 as given below:-



(₹ in lakh)

Particulars	Capital cost considered before adjustment of IDC/IEDC & initial spares as on COD	Disallowed			Capital cost as on COD allowed for tariff calculation
		IDC	IEDC	Excess initial spares as on COD	
	(A)	(B)	(C)	(D)	(E)= (A)-(B+C+D)
Asset-1	1393.31	46.42	43.08	-	1303.81
Asset-2	377.01	17.33	22.81	-	336.87
Asset-3.1	233.67	10.91	-	-	222.76
Asset-3.2	275.83	5.05	3.67	-	267.11
Asset-3.3	127.62	8.40	1.00	-	118.22
Asset-3.4	297.51	14.52	14.89	-	268.10
Asset-3.5	387.23	28.04	18.60	-	340.59
Asset-4	587.48	40.95	26.68	-	519.85

(d) 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.

TRUING UP OF ANNUAL FIXED CHARGES FOR TARIFF PERIOD 2009-14

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

Capital Cost

6. The petitioner has claimed the capital cost as on COD for the assets for the purpose of tariff as given below:-

(₹ in lakh)

Particulars	Capital cost as on COD as claimed by the petitioner
Asset-1	1393.31
Asset-2	377.01
Asset-3.1	233.67



Particulars	Capital cost as on COD as claimed by the petitioner
Asset-3.2	275.83
Asset-3.3	127.62
Asset-3.4	297.51
Asset-3.5	387.23
Asset-4	587.48

7. The above capital cost as on COD is same as the capital cost (before adjustment of IDC/IEDC & initial spares as on COD) approved by the Commission vide order dated 7.12.2015.

8. Clause (1) of Regulation 7 of the 2009 Tariff Regulations provides that:-

“(1) Capital cost for a project shall include:

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

(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and

(c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.”

9. The petitioner has submitted the actual capital expenditure incurred upto COD and submitted Auditor's Certificate in support of claim of the capital cost as on COD and additional capitalization claimed from COD to 31.3.2014. In accordance with Regulation 7(1) read with Regulation 6 of the 2009 Tariff Regulations, the actual capital cost incurred for the subject assets has been considered as below:-



(₹ in lakh)

Particulars	Capital cost considered before adjustment of IDC/IEDC & initial spares as on COD
Asset-1	1393.31
Asset-2	377.01
Asset-3.1	233.67
Asset-3.2	275.83
Asset-3.3	127.62
Asset-3.4	297.51
Asset-3.5	387.23
Asset-4	587.48

Cost Over-run

10. The petitioner in instant petition has submitted the RCE for the project.

The details are as given below:-

(₹ in lakh)

Asset	COD	Apportioned cost as per FR as submitted in original petition	Revised apportioned cost as per RCE	Estimated completion cost an on 31.3.2019
Asset-1	1.4.2013	3095.64	2366.28	1766.99
Asset-2	1.2.2013	772.89	603.05	542.02
Asset-3.1	1.5.2013	555.23	605.70	342.26
Asset-3.2	1.4.2013	2089.80	547.11	434.19
Asset-3.3	1.9.2013	388.76	395.62	205.90
Asset-3.4	1.4.2013	569.16	635.18	374.07
Asset-3.5	1.3.2013	466.15	667.15	463.43
Asset-4	1.4.2013	545.56	1218.46	693.37
Total		8483.19	7038.55	4822.23



The completion cost of the instant assets is within the apportioned costs as per revised RCE and hence there is no cost over-run with respect to revised apportioned approved cost.

Time over-run

12. As per the investment approval dated 26.2.2010, the instant assets were scheduled to be commissioned within 34 months from the date of investment approval. Accordingly, the schedule completion date works out to 1.1.2013. However, the actual commissioning of assets with delay are as given below:-

Assets name	SCOD as per IA dated 26.2.2010	Date of commercial operation	Delay in months
Asset-1	1.1.2013	1.4.2013	3 months
Asset-2		1.2.2013	1 months
Asset-3.1		1.5.2013	4 months
Asset-3.2		1.4.2013	3 months
Asset-3.3		1.9.2013	8 months
Asset-3.4		1.4.2013	3 months
Asset-3.5		1.3.2013	2 months
Asset-4		1.4.2013	3 months

13. As regards time over-run in commissioning of the assets, the Commission vide its order dated 7.12.2015 in Petition No. 44/TT/2013 has observed as under:-

“Time over-run

...

18. The Commission directed the petitioner to submit detailed reasons for time over-run in the case of each asset. The petitioner vide affidavits dated 11.4.2014 and 29.6.2015 has submitted detailed reasons and these are tabulated as follows:-



Asset	Scheduled COD	Actual COD	Planned activity		Achieved		Main reason for delay
			From	To	From	To	
Asset-1: LILO of 220 kV Misa-Kathalguri T/L	1.1.2013	1 .4.2013	Aug. 2011	Dec. 2012	Aug. 2012	Apr. 2013	Interruption in supplies of S/S equipment due to riots in Assam.
Asset-2: 4x6.67 MVAR, 132 kV, 1-Ph Bus Reactor at 132 kV Ziro Sub-station	1.1.2013	1.2.2013	-	-	-	-	Interruption in supplies of S/S equipment due to riots in Assam. Minor delay of 1 month.
Asset-3.1: No.50 MVA, 132/33 kV ICT-I(2nd Transformer) alongwith associated Bays at 132 kV Imphal S/S	1.1.2013	1.5.2013	Aug. 2011	Dec. 2012	Sep. 2011	May. 2013	Delay in land acquisition and Economic blockade of Manipur State
Asset-3.2: Loop-in line 132 kV Imphal Ningthoukhong T/L alongwith associated bay at Imphal	1.1.2013	1.4.2013	Mar. 2012	Dec. 2012	Dec. 2012	Mar. 2013	
Asset-3.3: Loop-out line of 132 kV Imphal Ningthoukhong T/L alongwith associated bay at Imphal	1.1.2013	1.9.2013	Feb. 2012	Dec. 2012	Sep. 2012	Sep. 2013	
Asset-3.4: 1 No. 50 MVA, 132/33 kV ICT along with associated Bays at 132/33 KV Imphal(new) S/S	1.1.2013	1.4.2013	Aug. 2011	Nov. 2011	Sep. 2011	Apr. 2013	
Asset-3.5: 1X20 MVAR Bus Reactor along with associated Bays at 132/33 KV Imphal (new) S/S	1.1.2013	1.3.2013	Aug. 2011	Dec. 2012	Sep. 2011	Mar. 2013	
Asset-4: 20MVAR Bus Reactor at 220kV Mariani Switching Station	1.1.2013	1.4.2013	Feb. 2011	Dec. 2012	Apr. 2011	Mar. 2013	Interruption in supplies of S/S equipment due to riots in Assam

19. We have considered the submissions made by the petitioner. The time over-run in case of Asset-1, Asset-2 and Asset-4 was due to delays caused by blockage of roads due to which limited time was available for supply of material and equipment. The time over-run in case of Asset-3.1, 3.2, 3.3, 3.4 and 3.5 was due to delay in land acquisition on account of stiff protests of villagers during August, 2009 and March, 2010, as well as delay in construction of LILO due to 100 days economic blockade of Manipur State and consequential crisis of diesel/petrol prices in the State. The reasons for time over-run are beyond the control of the petitioner and as such the time over-run in respect of the instant assets is condoned. Accordingly, the IDC and IEDC for this period are allowed to be capitalized.”



14. Accordingly, we have condoned the entire time over-run of the instant assets and IDC and IEDC for this period are allowed to be capitalized.

IDC and IEDC

15. The petitioner in its auditor's certificates for the assets has submitted the breakup of IDC and IEDC as follows:-

(₹ in lakh)

Statement showing IDC and IEDC	Asset-1		Asset-2	
	IDC	IEDC	IDC	IEDC
Total IDC/IEDC as per certificate	99.49	102.64	32.12	38.15
IDC/IEDC discharged upto COD	99.49	102.64	32.12	38.15

(₹ in lakh)

Statement showing IDC and IEDC	Asset-3.1	
	IDC	IEDC
Total IDC/IEDC as per certificate	12.62	9.03
Total IDC/IEDC from date of infusion of debt fund to 31.3.2013	11.23	9.03
Total IDC/IEDC from 1.4.2013 to 30.4.2013 (COD)	1.39	0.00

(₹ in lakh)

Statement showing IDC and IEDC	Asset-3.2		Asset-3.3		Asset-3.4		Asset-3.5		Asset-4	
	IDC	IEDC	IDC	IEDC	IDC	IEDC	IDC	IEDC	IDC	IEDC
Total IDC/IEDC as per certificate	15.41	15.90	10.36	6.54	26.26	27.10	29.26	34.76	49.47	51.03
IDC/IEDC discharged upto COD	15.41	15.90	10.36	6.54	26.26	27.10	29.26	34.76	49.47	51.03

16. The Commission, vide its order dated 7.12.2015 in Petition No. 44/TT/2013 had directed the petitioner to submit the amount of IDC/IEDC pertaining to the transmission assets considered in this petition upto date of commercial operation and balance IDC discharged after the date of commercial operation as extracted below:-



“22. Regulation 9 of the 2009 Tariff Regulations provides for the treatment of undischarged liabilities after the same are discharged. However, as the petitioner has not submitted the required information with regard to the IDC/IEDC actually discharged, we are not inclined to allow the amount of IDC/IEDC as claimed by the petitioner. The petitioner is directed to submit the amount of IDC/IEDC pertaining to the transmission assets considered in this petition upto date of commercial operation and balance IDC discharged after the date of commercial operation. IDC/IEDC allowed shall be reviewed at the time of truing up on submission of adequate information by the petitioner as directed at paras 20 and 21.”

17. The petitioner in instant petition submitted the details of IDC claimed on cash basis is as given below:-

(₹ in lakh)				
Particulars	Asset-1	Asset-2	Asset-3.1	Asset-3.2
IDC as per Certificate	99.49	32.12	12.62	15.41
IDC discharged upto COD	72.88	24.79	4.43	10.43
IDC discharged in 2012-13	0.00	1.83	0.00	0.00
IDC discharged in 2013-14	26.61	5.50	8.19	4.98

(₹ in lakh)				
Particulars	Asset-3.3	Asset-3.4	Asset-3.5	Asset-3.6
IDC as per Certificate	10.36	26.26	29.26	49.47
IDC discharged upto COD	6.61	21.16	3.30	35.32
IDC discharged in 2012-13	0.00	0.00	0.63	0.00
IDC discharged in 2013-14	3.75	5.10	25.33	14.15

18. Further, the petitioner has submitted that IEDC for all the assets are discharged upto COD of the respective assets. As discussed above, we have condoned the entire time over-run in case of all the assets.

Initial Spares

19. The petitioner has claimed initial spares for the assets as given below:-

(₹ in lakh)		
Assets name	Initial Spares	
	Sub-station	Transmission line
Asset-1	85.18	0.37
Asset-2	20.46	0.00
Asset-3.1	8.56	0.00



Assets name	Initial Spares	
	Sub-station	Transmission line
Asset-3.2	13.55	0.42
Asset-3.3	26.86	0.27
Asset-3.4	9.35	0.00
Asset-3.5	11.59	0.00
Asset-4	17.33	0.00
Total	192.88	1.06

20. In this regard, the petitioner has submitted that the initial spares of ₹192.88 lakh pertaining to sub-station and ₹1.06 lakh pertaining to transmission line has been claimed as 5.01% for sub-station and 0.431% for transmission line for the instant project and is marginally higher for sub-station in accordance with Regulation 8 of the 2009 Tariff Regulations. Accordingly, the petitioner has prayed to allow such initial spare for determination of tariff, as number of elements of the project are yet to be commissioned.

21. The petitioner has submitted actual capital expenditure for true up of tariff during 2009-14 tariff period as per the 2009 Tariff Regulations and also submitted the estimated capital expenditure for determination of tariff during 2014-19 tariff period in accordance with the 2014 Tariff Regulations. The initial spares have been worked out by considering the additional capital expenditure upto cut-off date by considering the additional capitalization beyond 31.3.2014. The petitioner has claimed the additional capitalization for 2014-19 tariff period in the instant petition and as the cut-off date falls beyond the 31.3.2014, we have considered the additional capitalization as considered in subsequent Paragraph to work out the capital cost up to cut-off date.



22. Regulation 8 of the 2009 tariff Regulations provides that:-

“Initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:

- (iv) Transmission system
 - (a) Transmission line - 0.75%
 - (b) Transmission Sub-station - 2.5%
 - (c) Series Compensation devices and HVDC Station - 3.5%.....”

23. The details of the initial spares claimed and allowed for the assets covered in the instant petition are in the table given below:-

(₹ in lakh)

Description	Cut-off date	Project cost pertaining to transmission line/Sub-station as on cut-off date	Initial spares claimed	Ceiling limits as per Regulation 8 of the 2009 Tariff Regulation	Initial spares worked out and allowed	Excess initial spares claimed
		(a)	(b)	(c)	(d)=*((a-b)*c)/(100-c)%	(e)=(d)-(b)
Sub-station (including PLCC)						
Asset-1	31.3.2016	1748.84	85.18	2.50%	42.66	42.52
Asset-2	31.3.2016	542.02	20.46	2.50%	13.37	7.09
Asset-3.1	31.3.2016	342.26	8.56	2.50%	8.56	0.00
Asset-3.2	31.3.2016	241.81	13.55	2.50%	5.85	7.70
Asset-3.3	31.3.2016	169.55	26.86	2.50%	3.66	23.20
Asset-3.4	31.3.2016	374.07	9.35	2.50%	9.35	0.00
Asset-3.5	31.3.2016	463.43	11.59	2.50%	11.59	0.00
Asset-4	31.3.2016	693.37	17.33	2.50%	17.33	0.00
Transmission Line						
Asset-1	31.3.2016	18.15	0.37	0.75%	0.13	0.24
Asset-3.2	31.3.2016	192.38	0.42	0.75%	1.45	0.00
Asset-3.3	31.3.2016	36.35	0.27	0.75%	0.27	0.00



The capital cost upto cut off date has been worked out by considering the additional capital expenditure for 2014-16 beyond the 31.3.2014 as the same has been admitted by the Commission in this order as set forth in subsequent paragraph.

24. The capital cost as on COD has been worked out after adjusting disallowed IDC, IEDC and excess initial spares as under:-

(₹ in lakh)

Assets	Capital cost claimed as on COD	IDC & IEDC discharged in 2012-13 and 2013-14	Capital cost after adjusting IDC and IDC discharged during 2012-14	Excess initial spares	Capital cost of individual assets considered as on COD
	(a)	(b)	(c)=(a)-(b)	(d)	(e)=(c)-(d)
Asset-1	1393.31	26.61	1366.70	42.76	1323.94
Asset-2	377.01	7.33	369.68	7.09	362.59
Asset-3.1	233.67	8.19	225.48	0.00	225.48
Asset-3.2	275.83	4.98	270.85	7.70	263.15
Asset-3.3	127.62	3.75	123.87	23.20	100.67
Asset-3.4	297.51	5.1	292.41	0.00	292.41
Asset-3.5	387.23	25.96	361.27	0.00	361.27
Asset-4	587.48	14.15	573.33	0.00	573.33

Additional Capital Expenditure

25. The petitioner has claimed additional capitalization for tariff period from COD to 31.3.2014 for all the assets on account of balance and retention payment towards building and civil works, sub-station, transmission line and PLCC within cut-off date under Regulation 9(1)(i) of the 2009 Tariff Regulations.

26. Clause (1), sub-clause(i) of Regulation 9 of the 2009 Tariff Regulations provides that:-



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

(i) Undischarged liabilities....”

27. The total capital cost (including actual additional capitalization) is within the overall approved cost of the assets. The claim of additional capitalization falls within the meaning of Regulation 9(1) of the 2009 Tariff Regulations and hence, we have allowed additional capitalization as claimed by the petitioner under Regulation 9(1)(i) of the 2009 Tariff Regulations as shown in the table below:-

(₹ in lakh)							
Name of the asset	Particulars	Appor- tioned approved cost	Capital cost as on COD [#]	Additional Capital Expenditure (2009-14)			Capital cost as on 31.3.2014
				2012-13 ^{##}	2013-14 ^{###}	Total	
Asset-1	Approved in order dated 7.12.2015 in Petition No. 44/TT/2013	3095.64	1303.81	0.00	99.71*	99.71	1403.53
	Allowed in this order	2366.28	1323.94	0.00	140.61	140.61	1464.55
Asset-2	Approved in order dated 7.12.2015 in Petition No. 44/TT/2013	772.89	336.87	0.00	115.98*	115.98	452.84
	Allowed in this order	603.05	362.59	1.83	125.10	126.93	489.52
Asset-3.1	Approved in order dated 7.12.2015 in Petition No. 44/TT/2013	555.23	222.76	0.00	11.57	11.57	234.33



Name of the asset	Particulars	Appor-tioned approved cost	Capital cost as on COD [#]	Additional Capital Expenditure (2009-14)			Capital cost as on 31.3.2014
				2012-13 ^{##}	2013-14 ^{###}	Total	
	Allowed in this order	605.70	225.48	0.00	19.76	19.76	245.24
Asset-3.2	Approved in order dated 7.12.2015 in Petition No. 44/TT/2013	2089.80	267.11	0.00	69.50	69.50	336.60
	Allowed in this order	547.11	263.15	0.00	74.48	74.48	337.63
Asset-3.3	Approved in order dated 7.12.2015 in Petition No. 44/TT/2013	388.76	118.22	0.00	33.00	33.00	151.21
	Allowed in this order	395.62	100.67	0.00	36.75	36.75	137.42
Asset-3.4	Approved in order dated 7.12.2015 in Petition No. 44/TT/2013	569.16	268.10	0.00	41.00	41.00	309.10
	Allowed in this order	635.18	292.41	0.00	46.10	46.10	338.51
Asset-3.5	Approved in order dated 7.12.2015 in Petition No. 44/TT/2013	466.15	340.59	0.00	35.40	35.40	375.99
	Allowed in this order	667.15	361.27	0.63	60.73	61.36	422.63
Asset-4	Approved in order dated 7.12.2015 in Petition No. 44/TT/2013	545.56	519.85	0.00	25.71 ^{**}	25.71	545.56



Name of the asset	Particulars	Appor-tioned approved cost	Capital cost as on COD [#]	Additional Capital Expenditure (2009-14)			Capital cost as on 31.3.2014
				2012-13 ^{##}	2013-14 ^{###}	Total	
	Allowed in this order	1218.46	573.33	0.00	83.05	83.05	656.38

*approved after restricting excess initial spares of ₹14.29 lakh and ₹3.62 lakh for Asset-1 and Asset-2 respectively.

**approved after restricting the completion cost to apportioned approved cost in the absence of RCE.

#deducted IDC discharged during 2012-14 and excess initial spares

added IDC discharged during 2012-13

added IDC discharged during 2013-14

Debt: Equity

28. Clause 1 & 3 of Regulation 12 of the 2009 Tariff Regulations provide as follows:-

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

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

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

.....

(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.”

29. The petitioner has claimed trued up Annual Fixed Charge based on debt-equity ratio of 70:30 for the assets. The debt:equity ratio of 70:30 as on COD for the instant assets is in accordance with the 2009 Tariff Regulations and is considered for the purpose of truing up of the approved tariff of tariff period 2009-14, as given under:-



(₹ in lakh)

Particulars	Asset-1		Asset-2		Asset-3.1		Asset-3.2	
	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)
Debt	926.76	70.00	253.82	70.00	157.84	70.00	184.21	70.00
Equity	397.18	30.00	108.78	30.00	67.64	30.00	78.95	30.00
Total	1323.94	100.00	362.59	100.00	225.48	100.00	263.15	100.00

(₹ in lakh)

Particulars	Asset-3.3		Asset-3.4		Asset-3.5		Asset-4	
	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)
Debt	70.47	70.00	204.69	70.00	252.89	70.00	401.33	70.00
Equity	30.20	30.00	87.72	30.00	108.38	30.00	172.00	30.00
Total	100.67	100.00	292.41	100.00	361.27	100.00	573.33	100.00

30. With respect to additional capitalization during 2009-14 tariff period, the petitioner has claimed the debt:equity ratio of 70:30 as on COD for the instant assets. The petitioner was directed to submit an undertaking that the actual equity infused for additional capitalization during the 2009-14 tariff period is not less than 30%. In response, the petitioner vide affidavit dated 14.6.2016, has submitted that debt to equity ratio for the assets for the tariff period 2009-14 is 70:30.

31. The overall debt equity ratio as on 31.3.2014 for the Asset including additional capitalization is as under:-



(₹ in lakh)

Particulars	Asset-1		Asset-2		Asset-3.1		Asset-3.2	
	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)
Debt	1025.19	70.00	342.67	70.00	171.67	70.00	236.34	70.00
Equity	439.37	30.00	146.86	30.00	73.57	30.00	101.29	30.00
Total	1464.55	100.00	489.52	100.00	245.24	100.00	337.63	100.00

(₹ in lakh)

Particulars	Asset-3.3		Asset-3.4		Asset-3.5		Asset-4	
	Amount	(%)	Amount	(%)	Amount	(%)	Amount	(%)
Debt	96.19	70.00	236.96	70.00	295.84	70.00	459.47	70.00
Equity	41.23	30.00	101.55	30.00	126.79	30.00	196.91	30.00
Total	137.42	100.00	338.51	100.00	422.63	100.00	656.38	100.00

Interest on Loan ("IOL")

32. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest. We have considered the submissions of the petitioner. IOL is worked out on the basis of the 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 placed at **Annexure-I** and the IOL has been worked out and allowed as follows:-

(₹ in lakh)

Particulars	Asset-1	Asset-2		Asset-3.1	Asset-3.2
	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)	2013-14
Approved vide order dated 7.12.2015 in Petition No.	83.23	3.56	23.84	12.73	19.14



Particulars	Asset-1	Asset-2		Asset-3.1	Asset-3.2
	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)	2013-14
44/TT/2013					
As claimed by the petitioner	88.86	3.83	26.06	13.22	19.78
Allowed after trued up	86.24	3.76	25.64	13.22	19.29

(₹ in lakh)

Particulars	Asset-3.3	Asset-3.4	Asset-3.5		Asset-4
	2013-14 (Pro-rata)	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)
Approved vide order dated 7.12.2015 in Petition No. 44/TT/2013	4.84	17.87	1.78	21.52	33.22
As claimed by the petitioner	5.33	19.70	1.89	23.68	38.22
Allowed after trued up	4.46	19.70	1.89	23.68	38.22

The variation in interest on loan is due to variation in capital cost as on COD and variation in actual additional capitalization during 2012-14 tariff period.

Return on Equity ("ROE")

33. Clause (3), (4) and (5) of Regulation 15 of the 2009 Tariff Regulations provides 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:

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

Where “t” is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee, as the case maybe, 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.”

34. The petitioner has submitted that MAT rate of 20.008% applicable for 2012-13 and 20.961% applicable for 2013-14 was considered in the order dated 7.12.2015 in Petition No. 44/TT/2013 for the assets. As the Commission in its order dated 7.12.2015 in Petition No. 44/TT/2013 had computed RoE for the tariff period 2009-14 on the basis of actual MAT rate applicable during 2009-14, we have considered the same MAT rate for truing up purpose. The petitioner has submitted 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 (t) %	Grossed up ROE (Base rate/(1-t)) %
2012-13	20.008	19.377
2013-14	20.961	19.610

35. We have considered the submissions of the petitioner and have approved ROE in accordance with the provisions of the 2009-14 Tariff Regulations. Accordingly, the ROE as trued up in accordance with the 2009 Tariff Regulations is shown in the table below:-



(₹ in lakh)

Particulars	Asset-1	Asset-2		Asset-3.1	Asset-3.2
	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)	2013-14
Approved vide order dated 7.12.2015 in Petition No. 44/TT/2013	79.64	3.26	23.23	12.33	17.76
As claimed by the petitioner	84.54	3.59	25.54	12.69	18.12
Allowed after trued up	82.02	3.52	25.12	12.69	17.67

(₹ in lakh)

Particulars	Asset-3.3	Asset-3.4	Asset-3.5		Asset-4
	2013-14 (Pro-rata)	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)
Approved vide order dated 7.12.2015 in Petition No. 44/TT/2013	4.62	16.98	1.65	21.08	31.34
As claimed by the petitioner	4.88	18.56	1.75	23.08	36.17
Allowed after trued up	4.09	18.56	1.75	23.08	36.17

The variation in return on equity is on account of variation in capital cost and actual additional capitalization.

Depreciation

36. 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” |

37. Clause (4) of Regulation 17 of the 2009 Tariff Regulations provides as follows:-



"17. Depreciation:

...

(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."

38. Depreciation was worked out in order dated 7.12.2015 in Petition No. 44/TT/2013 for the assets in accordance with Regulation 17 of the 2009 Tariff Regulations.

39. The weighted average useful life of the transmission asset has been considered as per Regulations 3(42) and 17(4) of the 2009 Tariff Regulations. For the purpose of calculation, the weighted average useful life of the asset as on COD has been considered as 25 years for Assets-1, 2, 3.1, 3.4, 3.5 and 4, 33 years for Asset-3.2 and 27 years for Asset-3.3. 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 as under.

(₹ in lakh)					
Particulars	Asset-1	Asset-2		Asset-3.1	Asset-3.2
	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)	2013-14
Approved vide order dated 7.12.2015 in Petition No. 44/TT/2013	56.69	2.96	20.85	11.06	4.69
As claimed by the petitioner	60.06	3.26	22.92	11.39	4.65
Allowed after trued up	57.80	3.20	22.54	11.39	4.24



(₹ in lakh)

Particulars	Asset-3.3	Asset-3.4	Asset-3.5		Asset-4
	2013-14 (Pro-rata)	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)
Approved vide order dated 7.12.2015 in Petition No. 44/TT/2013	4.24	15.24	1.50	18.92	28.13
As claimed by the petitioner	4.48	16.66	1.59	20.71	32.46
Allowed after trued up	3.77	16.66	1.59	20.71	32.46

The variation in depreciation is on account of variation in capital cost as on COD and variation in additional capitalization vis-à-vis that approved in the Order.

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

40. The petitioner has computed O&M Expenses for the assets mentioned in the petition and in accordance with the O&M norms for lines and bays specified in Regulation 19(g) of the 2009 Tariff Regulations. The O&M Expenses claimed by the petitioner for tariff period 2009-14 are same as that approved in the order dated 7.12.2015 in Petition No. 44/TT/2013 for the assets.

41. The O&M Expenses claimed by the petitioner, allowed and trued up are the same, and are as follows:-

(₹ in lakh)

Particulars	Asset-1	Asset-2		Asset-3.1	Asset-3.2
	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)	2013-14
Approved vide order dated 7.12.2015 in Petition No. 44/TT/2013	91.77	5.16	32.73	30.00	32.84
As claimed by the petitioner	91.77	5.16	32.73	30.00	32.84
Allowed after trued up	91.77	5.16	32.73	30.00	32.84



(₹ in lakh)

Particulars	Asset-3.3	Asset-3.4	Asset-3.5		Asset-4
	2013-14 (Pro-rata)	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)
Approved vide order dated 7.12.2015 in Petition No. 44/TT/2013	19.13	32.73	2.58	32.73	45.82
As claimed by the petitioner	19.14	32.73	2.58	32.73	45.82
Allowed after trued up	19.14	32.73	2.58	32.73	45.82

Interest on working capital("IWC")

42. 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.

43. The petitioner submitted the rate of interest on working capital as 13.20% for Assets-1, 3.1, 3.2, 3.3, 3.4 and 13.50 for Assets-2 and 3.5 for the period from COD to 31.3.2014 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 Tariff Regulations.

44. Rate of interest in working capital is considered on normative basis in accordance with Clause (3) of Regulation 18 of the 2009 Tariff Regulations. It is calculated equal to State Bank of India Base Rate as applicable as on 1.4.2012 and 1.4.2013 plus 350 basis points. State Bank of India Base Rate on 1.4.2012 was 10.00% and as on 1.4.2013 was 9.70%. Therefore, interest rate of 13.50%



(10.00% plus 350 basis points) for Assets-2 and 3.5 and 13.20% (9.70% plus 350 basis points) for Assets-1, 3.1, 3.2, 3.3, 3.4 has been considered to work out the interest on working capital in the instant case.

45. The IWC trued up is as under:-

(₹ in lakh)

Particulars	Asset-1	Asset-2		Asset-3.1	Asset-3.2
	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)	2013-14
Maintenance Spares	13.77	0.77	4.91	4.50	4.93
O & M expenses	7.65	0.43	2.73	2.50	2.74
Receivables	54.65	2.69	18.25	11.63	12.79
Total	76.06	3.90	25.89	18.63	20.45
Rate of Interest (%)	13.20	13.50	13.50	13.20	13.20
Interest	10.04	0.53	3.50	2.46	2.70

(₹ in lakh)

Particulars	Asset-3.3	Asset-3.4	Asset-3.5		Asset-4
	2013-14 (Pro-rata)	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)
Maintenance Spares	2.87	4.91	0.39	4.91	6.87
O & M expenses	1.59	2.73	0.22	2.73	3.82
Receivables	5.46	15.11	1.35	17.26	26.26
Total	9.92	22.75	1.95	24.90	36.95
Rate of Interest (%)	13.20	13.20	13.50	13.50	13.20
Interest	1.31	3.00	0.26	3.36	4.88

46. The IWC claimed by the petitioner, allowed and trued up are the same, and are as follows:-

(₹ in lakh)

Particulars	Asset-1	Asset-2		Asset-3.1	Asset-3.2
	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)	2013-14
Approved vide order dated 7.12.2015 in	9.89	0.51	3.37	2.43	2.71



Petition No. 44/TT/2013					
As claimed by the petitioner	10.21	0.53	3.52	2.46	2.73
Allowed after trued up	10.04	0.53	3.50	2.46	2.70

(₹ in lakh)

Particulars	Asset-3.3	Asset-3.4	Asset-3.5		Asset-4
	2013-14 (Pro-rata)	2013-14	2012-13 (Pro-rata)	2013-14	2013-14 (Pro-rata)
Approved vide order dated 7.12.2015 in Petition No. 44/TT/2013	1.34	2.89	0.26	3.22	4.56
As claimed by the petitioner	1.37	3.00	0.26	3.36	4.88
Allowed after trued up	1.31	3.00	0.26	3.36	4.88

47. The variation in IWC is on account of variation in IOL, depreciation and ROE due to variation in capital cost, actual additional capitalization and further increase in ROE on account of applicable MAT rate during 2009-14 tariff period.

ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

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

(₹ in lakh)

Particulars	Asset-1	Asset-2		Asset-3.1	Asset-3.2
	2013-14	2012-13 (Pro-rata)	2013-14	2013-14	2013-14
Gross Block					
Opening Gross Block	1323.94	362.59	364.42	225.48	263.15
Additional Capitalization	140.61	1.83	125.10	19.76	74.48
Closing Gross block	1464.55	364.42	489.52	245.24	337.63
Average Gross block	1394.25	363.51	426.97	235.36	300.39
Rate of Depreciation (%)	4.146	5.280	5.280	5.280	1.413



Particulars	Asset-1	Asset-2		Asset-3.1	Asset-3.2
	2013-14	2012-13 (Pro-rata)	2013-14	2013-14	2013-14
Depreciable Value	972.46	327.16	384.28	211.82	72.85
Elapsed Life of the assets at beginning of the year	0	0	1	1	1
Weighted Balance Useful life of the assets	25	25	24	24	32
Remaining Depreciable Value	972.46	327.16	381.08	211.82	72.85
Depreciation	57.80	3.20	22.54	11.39	4.24
Interest on Loan					
Gross Normative Loan	926.76	253.82	255.10	157.84	184.21
Cumulative Repayment upto Previous Year	0.00	0.00	3.20	0.00	0.00
Net Loan-Opening	926.76	253.82	251.90	157.84	184.21
Additions	98.43	1.28	87.57	13.83	52.14
Repayment during the year	57.80	3.20	22.54	11.39	4.24
Net Loan-Closing	967.38	251.90	316.92	160.28	232.10
Average Loan	947.07	252.86	284.41	159.06	208.15
Weighted Average Rate of Interest on Loan (%)	9.1065	8.9125	9.0148	9.0680	9.2688
Interest	86.24	3.76	25.64	13.22	19.29
Return on Equity					
Opening Equity	397.18	108.78	109.33	67.64	78.95
Additions	42.18	0.55	37.53	5.93	22.34
Closing Equity	439.37	109.33	146.86	73.57	101.29
Average Equity	418.27	109.05	128.09	70.61	90.12
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT rate for the respective year (%)	20.961	20.008	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.377	19.610	19.610	19.610
Return on Equity (Pre Tax)	82.02	3.52	25.12	12.69	17.67
Interest on Working Capital					



Particulars	Asset-1	Asset-2		Asset-3.1	Asset-3.2
	2013-14	2012-13 (Pro-rata)	2013-14	2013-14	2013-14
Maintenance Spares	13.77	0.77	4.91	4.50	4.93
O & M Expenses	7.65	0.43	2.73	2.50	2.74
Receivables	54.65	2.69	18.25	11.63	12.79
Total	76.06	3.90	25.89	18.63	20.45
Interest	10.04	0.53	3.50	2.46	2.70
Annual Transmission Charges					
Depreciation	57.80	3.20	22.54	11.39	4.24
Interest on Loan	86.24	3.76	25.64	13.22	19.29
Return on Equity	82.02	3.52	25.12	12.69	17.67
Interest on Working Capital	10.04	0.53	3.50	2.46	2.70
O & M Expenses	91.77	5.16	32.73	30.00	32.84
Total	327.89	16.16	109.53	69.77	76.75

(₹ in lakh)

Particulars	Asset-3.3	Asset-3.4	Asset-3.5		Asset-4
	2013-14	2013-14	2012-13 (Pro-rata)	2013-14	2013-14
Gross Block					
Opening Gross Block	100.67	292.41	361.27	361.90	573.33
Additional Capitalization	36.75	46.10	0.63	60.73	83.05
Closing Gross block	137.42	338.51	361.90	422.63	656.38
Average Gross block	119.04	315.46	361.58	392.26	614.86
Rate of Depreciation (%)	5.423	5.280	5.280	5.280	5.280
Depreciable Value	107.14	283.91	325.42	353.03	553.37
Elapsed Life of the assets at beginning of the year	1	0	0	1	0
Weighted Balance Useful life of the assets	26	25	25	24	25
Remaining Depreciable Value	107.14	283.91	325.42	351.44	553.37
Depreciation	3.77	16.66	1.59	20.71	32.46



Particulars	Asset-3.3	Asset-3.4	Asset-3.5		Asset-4
	2013-14	2013-14	2012-13 (Pro-rata)	2013-14	2013-14
Interest on Loan					
Gross Normative Loan	70.47	204.69	252.89	253.33	401.33
Cumulative Repayment upto Previous Year	0.00	0.00	0.00	1.59	0.00
Net Loan-Opening	70.47	204.69	252.89	251.74	401.33
Additions	25.73	32.27	0.44	42.51	58.14
Repayment during the year	3.77	16.66	1.59	20.71	32.46
Net Loan-Closing	92.43	220.30	251.74	273.54	427.00
Average Loan	81.45	212.49	252.31	262.64	414.17
Weighted Average Rate of Interest on Loan (%)	9.3803	9.2718	8.9921	9.0172	9.2272
Interest	4.46	19.70	1.89	23.68	38.22
Return on Equity					
Opening Equity	30.20	87.72	108.38	108.57	172.00
Additions	11.03	13.83	0.19	18.22	24.92
Closing Equity	41.23	101.55	108.57	126.79	196.91
Average Equity	35.71	94.64	108.47	117.68	184.46
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year (%)	20.961	20.961	20.008	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.377	19.610	19.610
Return on Equity (Pre Tax)	4.09	18.56	1.75	23.08	36.17
Interest on Working Capital					
Maintenance Spares	2.87	4.91	0.39	4.91	6.87
O & M Expenses	1.59	2.73	0.22	2.73	3.82
Receivables	5.46	15.11	1.35	17.26	26.26
Total	9.92	22.75	1.95	24.90	36.95
Interest	1.31	3.00	0.26	3.36	4.88
Annual Transmission Charges					



Particulars	Asset-3.3	Asset-3.4	Asset-3.5		Asset-4
	2013-14	2013-14	2012-13 (Pro-rata)	2013-14	2013-14
Depreciation	3.77	16.66	1.59	20.71	32.46
Interest on Loan	4.46	19.70	1.89	23.68	38.22
Return on Equity	4.09	18.56	1.75	23.08	36.17
Interest on Working Capital	1.31	3.00	0.26	3.36	4.88
O & M Expenses	19.14	32.73	2.58	32.73	45.82
Total	32.75	90.65	8.08	103.56	157.55

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

49. The petitioner has claimed the transmission charges for Combined Asset for the 2014-19 tariff period as under:-

	(₹ in lakh)				
Combined Assets	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	196.68	205.54	217.86	224.99	224.99
Interest on Loan	246.48	239.00	236.11	225.48	204.88
Return on equity	249.55	261.10	276.21	285.06	285.06
Interest on Working Capital	32.95	33.81	34.96	35.68	35.83
O & M Expenses	307.82	318.03	328.57	339.47	350.79
Total	1033.48	1057.48	1093.71	1110.68	1101.55

50. 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	46.17	47.70	49.29	50.92	52.62
O & M expenses	25.65	26.50	27.38	28.29	29.23
Receivables	172.25	176.25	182.29	185.11	183.59
Total	244.07	250.45	258.96	264.32	265.44
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	32.95	33.81	34.96	35.68	35.83



Capital Cost

51. Clause (1) & (3) of Regulation 9 of the 2014 Tariff Regulations specify 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.”

“(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 trued 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.”

52. The petitioner has claimed capital cost as on 1.4.2014 of ₹4172.63 lakh for Combined Asset for the 2014-19 tariff period.

53. The following trued up capital cost for the assets, totalling to ₹4091.88 lakh for combined assets, as on 31.3.2014 is considered to work out tariff for 2014-19 tariff period.

(₹ in lakh)	
Assets name	Trued up capital cost as on 31.3.2014
Asset-1	1464.55
Asset-2	489.52
Asset-3.1	245.24
Asset-3.2	337.63
Asset-3.3	137.42
Asset-3.4	338.51
Asset-3.5	422.63
Asset-4	656.38
Total	4091.88



Additional Capital Expenditure

54. The petitioner has proposed additional capital expenditure of ₹138.33 lakh and ₹211.87 lakh in 2014-15 and 2015-16, respectively, for Combined Asset, towards balance and retention payments under Clause 1(i) of Regulation 14 of the 2014 Tariff Regulations. Further the petitioner has proposed additional capital expenditure of ₹299.40 lakh in 2016-17 for Combined Asset, towards balance and retention payments under Clause 3(v) of Regulation 14 of the 2014 Tariff Regulations.

55. Clause 1(i) and 3(v) of Regulation 14 of the 2014 Tariff Regulations provides as follows:

“(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 recognized to be payable at a future date;

...

...

(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:

...

(v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.”

56. The petitioner was directed, vide letter dated 10.6.2016, to confirm whether all the balance/retention payments for assets under this Petition have been claimed or some payments are still to be claimed. In response, the petitioner, vide affidavit dated 14.6.2016, has submitted the contractor wise



details of balance and retention payments claimed under additional capital expenditure.

57. The total capital cost of the transmission asset including additional capitalization incurred during the 2014-19 tariff period is within the approved apportioned cost of the asset. It is observed that the additional capitalization proposed is mainly towards balance and retention payments due to undischarged liabilities for works executed within cut-off date. Accordingly, the capital cost claimed by the petitioner is allowed in accordance with Clause 1(i) of Regulation 14 of the 2014 Tariff Regulations for period 2014-16 and Clause 3(v) of Regulation 14 of the 2014 Tariff Regulations for period 2016-17. The additional capitalisation for tariff period 2014-19 shall be finally approved after the detailed scrutiny of additional capitalisation while carrying out the true up for 2014-19 tariff period.

58. The total capital cost of the transmission asset including additional capitalization projected to be incurred during 2014-19 is shown below:-

Particulars	Approved Apportioned Cost	Admitted capital cost as on 31.3.2014	Additional capital Expenditure				Total capital cost including additional capitalization
			2014-15	2015-16	2016-17	Total	
Asset-1	2366.28	1464.55	33.60	94.00	132.08	259.68	1724.23
Asset-2	603.05	489.52	45.41	0.00	0.00	45.41	534.93
Asset-3.1	605.70	245.24	20.67	1.22	75.13	97.02	342.26
Asset-3.2	547.11	337.63	0.00	52.28	36.58	88.86	426.49
Asset-3.3	395.62	137.42	9.56	35.72	0.00	45.28	182.70
Asset-3.4	635.18	338.51	16.27	0.00	19.29	35.56	374.07
Asset-3.5	667.15	422.63	4.48	0.00	36.32	40.80	463.43
Asset-4	1218.46	656.38	8.34	28.65	0.00	36.99	693.37



Particulars	Approved Apporportioned Cost	Admitted capital cost as on 31.3.2014	Additional capital Expenditure				Total capital cost including additional capitalization
			2014-15	2015-16	2016-17	Total	
Combined Asset	7038.55	4091.88	138.33	211.87	299.40	649.60	4741.48

Debt:Equity Ratio

59. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as under:-

“(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.”

60. The petitioner has considered debt:equity ratio as 70:30 as on 31.3.2014. The admitted debt:equity ratio of 70:30 after true-up for the tariff period ending 31.3.2014 has been considered as opening debt:equity ratio 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 is as follows:-

Particulars	Amount	(₹ in lakh)
		(%)
Debt	2864.32	70.00
Equity	1227.56	30.00
Total	4091.88	100.00

61. For additional capitalization, the petitioner has proposed debt:equity ratio of 70.01:29.99 for 2014-15 and normative debt:equity ratio of 70:30 for period 2015-17 and the same has been considered. The details of the debt:equity including additional capitalization as on 31.3.2019 is as follows:-



(₹ in lakh)		
Funding	Amount	(%)
Debt	3319.05	70.00
Equity	1422.44	30.00
Total	4741.48	100.00

Interest on Loan (“IOL”)

62. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations are reproduced as under:-

“(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.”

63. We have considered the weighted average rate of IOL on the basis of rate prevailing as on 1.4.2014. 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-II** 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	2864.32	2961.16	3109.47	3319.05	3319.05
Cumulative Repayment up to previous year	174.37	366.80	568.08	781.67	1002.39



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Net Loan-Opening	2689.94	2594.36	2541.39	2537.38	2316.65
Additions during the year	96.84	148.31	209.58	0.00	0.00
Repayment during the year	192.43	201.27	213.59	220.72	220.72
Net Loan-Closing	2594.36	2541.39	2537.38	2316.65	2095.93
Average Loan	2642.15	2567.87	2539.38	2427.02	2206.29
Rate of Interest (%)	9.1535	9.1421	9.1467	9.1481	9.1470
Interest	241.85	234.76	232.27	222.03	201.81

Return on Equity("ROE")

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

"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"

"25. Tax on Return on Equity:

(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."

65. The petitioner has submitted ROE at the rate of 19.610% for 2014-15 and 19.705% for period 2015-19 after grossing up the ROE of 15.50% with MAT rate as per the above regulation. The petitioner has further 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.

66. 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.

67. 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 allowed is given below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	1227.56	1269.05	1332.62	1422.44	1422.44



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Additional Capitalization	41.49	63.56	89.82	0.00	0.00
Closing Equity	1269.05	1332.62	1422.44	1422.44	1422.44
Average Equity	1248.31	1300.84	1377.53	1422.44	1422.44
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)	244.79	255.09	270.13	278.94	278.94

Depreciation

68. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide as follows:-

"27. Depreciation:

(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"

"(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."

69. The petitioner has computed depreciation considering capital expenditure of ₹4172.63 lakh as on 31.3.2014 with additional capital expenditure of ₹138.33 lakh, ₹211.87 lakh and ₹299.40 lakh in 2014-15, 2015-16 and 2016-17 during the



tariff period 2014-19. The effective date of commercial operation (April, 2013) and weighted average useful life of 26 years has been considered in accordance to Regulation 26 of the 2014 Tariff Regulations considering actual COD and capital cost of all the elements of the transmission system for working out the depreciation for Combined Asset.

70. We have considered the submissions of the petitioner. The depreciation is allowed considering capital expenditure of ₹4091.88 lakh as on 31.3.2014 and additional capital expenditure of ₹649.60 lakh in tariff period 2014-19 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	4091.88	4230.22	4442.09	4741.49	4741.49
Additional Capitalization	138.33	211.87	299.40	0.00	0.00
Gross block at the end of the year	4230.22	4442.09	4741.49	4741.49	4741.49
Average gross block	4161.05	4336.16	4591.79	4741.49	4741.49
Rate of Depreciation (%)	4.625	4.642	4.652	4.655	4.655
Depreciable Value	3265.07	3422.66	3652.73	3787.46	3787.46
Elapsed Life of the assets at beginning of the year	3	4	5	6	7
Weighted Balance Useful life of the assets	23	22	21	20	19
Remaining Depreciable Value	3090.70	3055.86	3084.66	3005.79	2785.07
Depreciation	192.43	201.27	213.59	220.72	220.72



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

71. 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 as given hereunder:-

		(₹ in lakh)				
Particulars		2014-15	2015-16	2016-17	2017-18	2018-19
Actual	Double circuit (Twin conductor) (in km)	0.17	0.17	0.17	0.17	0.17
	Double circuit (Single conductor) (in km)	0.09	0.09	0.09	0.09	0.09
	Single Circuit (Single conductor) (in km)	0.691	0.691	0.691	0.691	0.691
	220 kV Bays (no.)	3	3	3	3	3
	132 kV Bays (no.)	6	6	6	6	6
Norms as per Regulation	Double circuit (Twin conductor) (in lakh/km)	0.707	0.731	0.755	0.78	0.806
	Double circuit (Single conductor)(in lakh/km)	0.303	0.313	0.324	0.334	0.346
	Single Circuit (Single conductor) (in lakh/km)	0.202	0.209	0.216	0.223	0.23
	220 kV Bays (in lakh/bay)	42.21	43.61	45.06	46.55	48.1
	132 kV Bays (in lakh/bay)	30.15	31.15	32.18	33.25	34.36
Total		307.82	318.03	328.57	339.47	350.79

72. The petitioner has submitted that norms for 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 is due during the 2014-19 tariff period 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.

73. We have considered the submissions made by the petitioner. 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.

74. The details of O&M Expenses allowed for the instant assets are given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses Allowed	307.82	318.03	328.57	339.47	350.79

Interest on Working Capital ("IWC")

75. As per 2014 Tariff Regulations the components of the working capital and the interest thereon are discussed hereinafter:-

(i) Receivables

As per Regulation 28(1) (c) (i) of the 2014 Tariff Regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of 2 months transmission charges claimed in the petition. In the tariff being



allowed, receivables have been worked out on the basis of 2 months transmission charges.

(ii) Maintenance Spares

Regulation 28 (1) (c) (ii) of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses from 1.4.2014. The petitioner has claimed maintenance spares for the instant asset and value of maintenance spares has accordingly been worked out as 15% of O&M Expenses.

(iii) O & M Expenses

Regulation 28 (1) (c) (iii) of the 2014 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O & M expenses for the instant asset and value of O & M expenses has accordingly been worked out by considering 1 month O&M Expenses.

(iv) Rate of interest on working capital

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 transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later. Further, the 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. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points).

76. The interest on working capital allowed is shown in the table below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	46.17	47.70	49.29	50.92	52.62
O & M Expenses	25.65	26.50	27.38	28.29	29.23
Receivables	169.92	173.77	179.87	182.75	181.30
Total	241.74	247.98	256.53	261.96	263.15
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	32.64	33.48	34.63	35.36	35.52

Annual Transmission Charges

77. The detailed computation of the various components of the annual fixed charges for the transmission asset for the tariff period 2014-19 is summarised below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block					
Opening Gross Block	4091.88	4230.22	4442.09	4741.49	4741.49
Additional Capitalization	138.33	211.87	299.40	0.00	0.00
Closing Gross Block	4230.22	4442.09	4741.49	4741.49	4741.49
Average Gross Block	4161.05	4336.16	4591.79	4741.49	4741.49
Depreciation					
Rate of Depreciation	4.625	4.642	4.652	4.655	4.655
Depreciable Value	3265.07	3422.66	3652.73	3787.46	3787.46
Elapsed Life of the assets at beginning of the year	3	4	5	6	7
Weighted Balance Useful life of the assets	23	22	21	20	19
Remaining Depreciable Value	3090.70	3055.86	3084.66	3005.79	2785.07



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	192.43	201.27	213.59	220.72	220.72
Interest on Loan					
Gross Normative Loan	2864.32	2961.16	3109.47	3319.05	3319.05
Cumulative Repayment upto Previous Year	174.37	366.80	568.08	781.67	1002.39
Net Loan-Opening	2689.94	2594.36	2541.39	2537.38	2316.65
Additions	96.84	148.31	209.58	0.00	0.00
Repayment during the year	192.43	201.27	213.59	220.72	220.72
Net Loan-Closing	2594.36	2541.39	2537.38	2316.65	2095.93
Average Loan	2642.15	2567.87	2539.38	2427.02	2206.29
Weighted Average Rate of Interest on Loan (%)	9.1535	9.1421	9.1467	9.1481	9.1470
Interest	241.85	234.76	232.27	222.03	201.81
Return on Equity					
Opening Equity	1227.56	1269.05	1332.62	1422.44	1422.44
Additions	41.49	63.56	89.82	0.00	0.00
Closing Equity	1269.05	1332.62	1422.44	1422.44	1422.44
Average Equity	1248.31	1300.84	1377.53	1422.44	1422.44
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for the year 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)	244.79	255.09	270.13	278.94	278.94
Interest on Working Capital					
Maintenance Spares	46.17	47.70	49.29	50.92	52.62
O & M expenses	25.65	26.50	27.38	28.29	29.23
Receivables	169.92	173.77	179.87	182.75	181.30
Total	241.74	247.98	256.53	261.96	263.15
Interest	32.64	33.48	34.63	35.36	35.52
Annual Transmission Charges					
Depreciation	192.43	201.27	213.59	220.72	220.72
Interest on Loan	241.85	234.76	232.27	222.03	201.81



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	244.79	255.09	270.13	278.94	278.94
Interest on Working Capital	32.64	33.48	34.63	35.36	35.52
O & M Expenses	307.82	318.03	328.57	339.47	350.79
Total	1019.52	1042.63	1079.20	1096.52	1087.78

Filing Fee and Publication Expenses

78. 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 is 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

79. 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

80. The petitioner has sought to recover Service Tax on transmission charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list in future. We are of the view that the petitioner's prayer is premature.



Sharing of Transmission Charges

81. 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.

82. This order disposes of Petition No. 78/TT/2016.

Sd/-
(Dr. M. K. Iyer)
Member

Sd/-
(A.S. Bakshi)
Member



ANNEXURE-I**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2009-14****(₹ in lakh)**

Asset-1	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXI-DOCO Funding	8.90%	135.00	0.00	135.00
BOND XXXIII-DOCO Funding	8.64%	8.00	0.00	8.00
BOND XXXIV-DOCO funding	8.84%	50.00	0.00	50.00
BOND XXXVIII-DOCO Funding-	9.25%	150.00	0.00	150.00
BOND XXXIX-DOCO Funding-	9.40%	135.00	0.00	135.00
BOND XL-DOCO Funding-	9.30%	200.00	0.00	200.00
BOND- XLI-DOCO Funding-	8.85%	200.00	0.00	200.00
BOND-XLII-ADD CAP FOR 2013-14	9.32%	0.00	18.63	18.63
BOND-XLII-DOCO LOAN	8.80%	78.69	0.00	78.69
BOND-XLV-ADD CAP FOR 2013-14 Add cap funding-	9.65%	0.00	79.80	79.80
Total		956.69	98.43	1055.12

(₹ in lakh)

Asset-2	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND-XXXIV-DOCO Funding-	8.84	140.00	0.00	140.00
BOND XXXVIII-DOCO Funding-	9.25	22.00	0.00	22.00
BOND XL-DOCO Funding-	9.30	20.00	0.00	20.00
BOND-XLI- ADD CAP FOR 2012-13 Add cap 2012-13	8.85	0.00	1.28	1.28
BOND-XLI-ADD CAP FOR 2012-13 Add cap for 2013-14	8.85	0.00	3.85	3.85
BOND-XLI- DOCO Loan-	8.85	76.77	0.00	76.77
BOND-XLV- ADDCAP FOR 2013-14 Add cap Funding-	9.65	0.00	83.72	83.72
Total		258.77	88.85	347.62

(₹ in lakh)

Asset-3.1	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXIII-DOCO Funding-	8.64	9.00	0.00	9.00
BOND XXXVII-DOCO Funding-	9.25	23.00	0.00	23.00
BOND XXXVIII- DOCO Funding-	9.25	8.00	0.00	8.00
BOND XL- DOCO Funding-	9.30	50.00	0.00	50.00
BOND-XLI-DOCO Funding-	8.85	60.00	0.00	60.00
BOND-XLII-Add cap for 2013-14-	8.80	0.00	5.73	5.73
BOND-XLV- ADD CAP FOR 2013-14 add cap Funding-	9.65	0.00	8.10	8.10
BOND-XLII-DOCO LOAN-	8.80	7.84	0.00	7.84
Total		157.84	13.83	171.67

(₹ in lakh)

Asset-3.2	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXI-DOCO Funding-	8.90	5.00	0.00	5.00
BOND XXXIII-DOCO Funding-	8.64	5.00	0.00	5.00
BOND XXXIV-DOCO Funding-	8.84	11.00	0.00	11.00
BOND XXXVIII- DOCO Funding	9.25	20.00	0.00	20.00
BOND XXXIX-DOCO Funding-	9.40	30.00	0.00	30.00
SBI (21.03.2012)- DOCO FUNDING-	10.29	15.00	0.00	15.00
BOND XL- DOCO FUNDING-	9.30	60.00	0.00	60.00
BOND-XLI- DOCO Funding-	8.85	20.00	0.00	20.00
BOND-XLII-ADD CAP FOR 2013-14 ADD CAP Accrual IDC-	8.80	0.00	3.48	3.48
BOND- XLII- DOCO LOAN-	8.80	23.60	0.00	23.60
BOND-XLV-ADD CAP FOR 2013-14 Add cap Funding-	9.65	0.00	48.65	48.65
Total		189.60	52.13	241.73

(₹ in lakh)

Asset-3.3	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXIX-DOCO Funding-	9.40	55.00	0.00	55.00



Asset-3.3	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
SBI (21.03.2012)- DOCO Funding-	10.18	10.00	0.00	10.00
BOND-XLI-DOCO Funding-	8.85	20.00	0.00	20.00
BOND-XLII- ADDCAP FOR 2013-14 ADD CAP Accrual IDC-	8.80	0.00	2.62	2.62
BOND- XLII-DOCO LOAN	8.80	1.71	0.00	1.71
BOND-XLV- ADD CAP FOR 2013-14 Add cap Funding-	9.65	0.00	23.10	23.10
Total		86.71	25.72	112.43

(₹ in lakh)

Asset-3.4	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXI-DOCO Funding-	8.90	40.00	0.00	40.00
BOND XXXIII-DOCO FUNDING-	8.64	5.00	0.00	5.00
BOND-XXXIV-DOCO FUNDING-	8.84	11.00	0.00	11.00
BOND XXXIX- DOCO FUNDING-	9.40	40.00	0.00	40.00
SBI (21.03.2012)- DOCO FUNDING-	10.29	15.00	0.00	15.00
BOND XL- DOCO FUNDING-	9.30	60.00	0.00	60.00
BOND-XLI-DOCO FUNDING-	8.85	5.00	0.00	5.00
BOND- XLII- ADD CAP FOR 2013-2014 ADD CAP Accrual IDC-	8.80	0.00	3.57	3.57
BOND-XLII- DOCO LOAN	8.80	3.69	0.00	3.69
BOND- XLV- ADD CAP FOR 2013-14 Add cap Funding-	9.65	0.00	28.70	28.70
BOND XXXVIII- DOCO FUNDING-	9.25	25.00	0.00	25.00
Total		204.69	32.27	236.96

(₹ in lakh)

Asset-3.5	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXIII-DOCO Funding-	8.64	18.00	0.00	18.00
BOND XXXVII- DOCO Funding-	9.25	2.00	0.00	2.00
BOND XXXVIII- DOCO Funding-	9.25	7.00	0.00	7.00
BOND XL- DOCO Funding-	9.30	86.00	0.00	86.00



Asset-3.5	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XLI- DOCO Funding-	8.85	90.00	0.00	90.00
BOND-XLII-ADD CAP FOR 2012-13 ADD CAP accrual IDC-	8.80	0.00	0.44	0.44
BOND- XLII ADDCAP FOR 2013-14 ADD CAP Accrual IDC-	8.80	0.00	17.73	17.73
BOND-XLII-DOCO LOAN-	8.80	49.89	0.00	49.89
BOND- XLV- ADD CAP FOR 2013-14 Add Cap Funding-	9.65	0.00	24.78	24.78
Total		252.89	42.95	295.84

(₹ in lakh)				
Asset-4	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXI-DOCO Funding-	8.90	105.00	0.00	105.00
BOND XXXIII-DOCO Funding-	8.64	3.00	0.00	3.00
BOND-XXXIV-DOCO Funding-	8.84	2.00	0.00	2.00
BOND-XXXV-DOCO Funding-	9.64	1.00	0.00	1.00
BOND XXXVIII-DOCO Funding-	9.25	20.00	0.00	20.00
BOND XXXIX-DOCO Funding-	9.40	30.00	0.00	30.00
SBI (21.3.2012)- DOCO Funding-	10.29	15.00	0.00	15.00
BOND XL-DOCO Funding-	9.30	200.00	0.00	200.00
BOND-XLI-ADD CAP FOR 2013-14 Add Cap Accrual IDC-	8.85	0.00	9.91	9.91
BOND-XLI-DOCO LOAN-	8.85	25.33	0.00	25.33
BOND- XLV- ADD CAP FOR 2013-14 Add Cap Funding-	9.65	0.00	48.23	48.23
Total		401.33	58.14	459.47

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2009-14

(₹ in lakh)	
Asset-1	2013-14
Gross Opening Loan	956.69



Asset-1	2013-14
Cumulative Repayments of Loans upto Previous Year	0.00
Net Loans Opening	956.69
ADD: Drawl(s) During the year	98.43
Less: Repayment(s) of Loan During the year	11.25
Net Closing Loan	1043.87
Average Net Loan	1000.28
Rate of Interest on Loan (%)	9.1065%
Interest on Loan	91.09

(₹ in lakh)

Asset-2	2012-13	2013-14
Gross Opening Loan	258.77	260.05
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
Net Loans Opening	258.77	260.05
ADD: Drawl(s) During the year	1.28	87.57
Less: Repayment(s) of Loan During the year	0.00	0.00
Net Closing Loan	260.05	347.62
Average Net Loan	259.41	303.84
Rate of Interest on Loan (%)	8.9125%	9.0148%
Interest on Loan	23.12	27.39

(₹ in lakh)

Asset-3.1	2013-14
Gross Opening Loan	157.84
Cumulative Repayments of Loans upto Previous Year	0.00
Net Loans Opening	157.84
ADD: Drawl(s) During the year	13.83
Less: Repayment(s) of Loan During the year	0.00
Net Closing Loan	171.67
Average Net Loan	164.76
Rate of Interest on Loan (%)	9.0680%
Interest on Loan	14.94



(₹ in lakh)

Asset-3.2	2013-14
Gross Opening Loan	189.60
Cumulative Repayments of Loans upto Previous Year	0.00
Net Loans Opening	189.60
ADD: Drawl(s) During the year	52.13
Less: Repayment(s) of Loan During the year	0.42
Net Closing Loan	241.31
Average Net Loan	215.46
Rate of Interest on Loan (%)	9.2688%
Interest on Loan	19.97

(₹ in lakh)

Asset-3.3	2013-14
Gross Opening Loan	86.71
Cumulative Repayments of Loans upto Previous Year	0.00
Net Loans Opening	86.71
ADD: Drawl(s) During the year	25.72
Less: Repayment(s) of Loan During the year	0.00
Net Closing Loan	112.43
Average Net Loan	99.57
Rate of Interest on Loan (%)	9.3803%
Interest on Loan	9.34

(₹ in lakh)

Asset-3.4	2013-14
Gross Opening Loan	204.69
Cumulative Repayments of Loans upto Previous Year	0.00
Net Loans Opening	204.69
ADD: Drawl(s) During the year	32.27
Less: Repayment(s) of Loan During the year	3.33
Net Closing Loan	233.63



Average Net Loan	219.16
Rate of Interest on Loan (%)	9.2718%
Interest on Loan	20.32

(₹ in lakh)

Asset-3.5	2012-13	2013-14
Gross Opening Loan	252.89	253.33
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
Net Loans Opening	252.89	253.33
ADD: Drawl(s) During the year	0.44	42.51
Less: Repayment(s) of Loan During the year	0.00	0.00
Net Closing Loan	253.33	295.84
Average Net Loan	253.11	274.59
Rate of Interest on Loan (%)	8.9921%	9.0172%
Interest on Loan	22.76	24.76

(₹ in lakh)

Asset-4	2013-14
Gross Opening Loan	401.33
Cumulative Repayments of Loans upto Previous Year	0.00
Net Loans Opening	401.33
ADD: Drawl(s) During the year	58.14
Less: Repayment(s) of Loan During the year	8.75
Net Closing Loan	450.72
Average Net Loan	426.03
Rate of Interest on Loan (%)	9.2272%
Interest on Loan	39.31



ANNEXURE-II**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2014-19)****(₹ in lakh)**

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXI-DOCO Funding	8.90%	285.00	0.00	285.00
BOND XXXIII-DOCO Funding	8.64%	48.00	0.00	48.00
BOND XXXIV-DOCO funding	8.84%	214.00	0.00	214.00
BOND-XXXV-DOCO Funding-	9.64%	1.00	0.00	1.00
BOND XXXVII-DOCO Funding-	9.25%	25.00	0.00	25.00
BOND XXXVIII-DOCO Funding-	9.25%	252.00	0.00	252.00
BOND XXXIX-DOCO Funding-	9.40%	290.00	0.00	290.00
SBI (21.03.2012)- DOCO FUNDING-	10.25%	55.00	0.00	55.00
BOND XL-DOCO Funding-	9.30%	676.00	0.00	676.00
BOND-XLI- ADD CAP FOR 2012-13 Add cap 2012-13	8.85%	1.28	0.00	1.28
BOND-XLI-ADD CAP FOR 2012-13 Add cap for 2013-14	8.85%	13.76	0.00	13.76
BOND- XLI-DOCO Funding-	8.85%	497.10	0.00	497.10
BOND-XLII-ADD CAP FOR 2012-13 ADD CAP accrual IDC-	8.80%	0.44	0.00	0.44
BOND-XLII-ADD CAP FOR 2013-14	8.80%	51.76	0.00	51.76
BOND-XLII-DOCO LOAN	8.80%	165.42	0.00	165.42
BOND-XLV-ADD CAP FOR 2013-14 Add cap funding-	9.65%	345.08	0.00	345.08
BOND XLVIII- ADD CAP FOR 2014-15 Add cap 2014-15	8.20%	0.00	96.84	96.84
Total		2920.84	96.84	3017.68

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2014-19**(₹ in lakh)**

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	2920.84	3017.68	3017.68	3017.68	3017.68
Cumulative Repayments of Loans upto Previous Year	23.75	69.33	117.07	268.83	449.35
Net Loans Opening	2897.09	2948.35	2900.61	2748.85	2568.33
Add: Drawl(s) during the year	96.84	0.00	0.00	0.00	0.00



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Less: Repayment(s) of Loan during the year	45.58	47.74	151.76	180.52	180.52
Net Closing Loan	2948.35	2900.61	2748.85	2568.33	2387.81
Average Net Loan	2922.72	2924.48	2824.73	2658.59	2478.07
Rate of Interest on Loan (%)	9.1535%	9.1421%	9.1467%	9.1481%	9.1470%
Interest on Loan	267.53	267.36	258.37	243.21	226.67

