

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 82/TT/2015

Coram:

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

**Date of Hearing : 08.02.2016
Date of Order : 19.04.2016**

In the matter of:

Truing up of transmission tariff of 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 Combined Assets, viz., **Asset-I:** 125 MVAR, 400 kV Bus Reactor at new Purnea S/S along with associated bays, **Asset-II:** Shifting of 1 no 63 MVAR Bus Reactor installed at new Purnea bus for installation as a fixed line reactor at new Purnea end of one ckt new Siliguri-new Purnea 400 kV D/C (quad) line, **Asset-III:** Installation of 1 no new 125 MVAR bus reactor at new Purnea 400 kV bus, **Asset-IV:** Durgapur-Maithon 400 kV D/C line with associated bays at Durgapur and Maithon Sub-station, **Asset-V:** Installation of 1 no new 125 MVAR bus reactor at Siliguri 400 kV bus, shifting of 3 no. 63 MVAR reactors at 400 kV Siliguri SS, **Asset-VI:** Installation of new 125 MVAR bus reactor at new Siliguri Sub-station **and Asset-VII:** 220/132 kV, 160 MVA ICT at Baripada under ERSS-II in 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. North Bihar Power Distribution Company Ltd.,
Vidyut Bhawan,
Bailey Road, Patna-800001



2. South Bihar Power Distribution Company Ltd.,
(Vidyut Bhawan,
Bailey Road, Patna-800001
3. West Bengal State Electricity Distribution Company
Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II,
Salt Lake City, Calcutta-700091
4. Grid Corporation of Orissa Ltd., Shahid Nagar,
Bhubaneswar-751007
5. Damodar Valley Corporation, DVC Tower, Maniktala
Civic Centre, VIPO Road, Calcutta-700054
6. Power Department, Govt. of Sikkim,
Gangtok-737101
7. Jharkhand State Electricity Board,
In front of Main Secretariat,
Doranda, Ranchi-834002

.....**Respondents**

The following were present:-

For Petitioner: Shri S. K. Venkatesan, PGCIL
 Shri M. M. Mondal, PGCIL
 Shri Jasbir Singh, PGCIL
 Shri S.S. Raju, PGCIL
 Shri Rakesh Prasad, PGCIL
 Shri Subhash C. Taneja, PGCIL

For Respondent: None

ORDER

The present petition has been preferred by Power Grid Corporation of India Ltd. ("the petitioner"), for truing up of capital expenditure and tariff for 125 MVAR, 400 kV Bus Reactor at new Purnea Sub-station along with associated bays (short as "**Asset-I**"), Shifting of 1 no 63 MVAR Bus Reactor installed at new



Purnea bus for installation as a fixed line reactor at new Purnea end of one ckt new Siliguri-new Purnea 400 kV D/C (quad) line(short as “**Asset-II**”), Installation of 1 no new 125 MVAR bus reactor at new Purnea 400 kV bus (short as “**Asset-III**”), Durgapur-Maithon 400 kV D/C line with associated bays at Durgapur and Maithon Sub-station (short as “**Asset-IV**”), Installation of 1 no new 125 MVAR bus reactor at Siliguri 400 kV bus, shifting of 3 no. 63 MVAR reactors at 400 kV Siliguri Sub-station (short as “**Asset-V**”), Installation of new 125 MVAR bus reactor at new Siliguri Sub-station (short as “**Asset-VI**”) and 220/132 kV, 160 MVA ICT at Baripada (short as “**Asset-VII**”) under ERSS-II in Eastern Region (hereinafter referred as “transmission asset”) 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 to 31.3.2014, and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019.

2. The respondents are distribution licensees or centralised power companies of the State, who are procuring transmission service from the petitioner, mainly beneficiaries of Eastern Region.

3. The petitioner has served the petition on 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 8.2.2016. None of the respondents have filed their reply. The petitioner has submitted the information sought in the ROP dated 8.2.2016 vide affidavit dated 23.2.2016. 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) Investment approval for the transmission project was accorded by Board of Directors of the petitioner vide letter dated 24.12.2007 at an estimated cost of ₹22752 lakh, including IDC of ₹1466 lakh (based on 3rd quarter, 2007 level). The details of the assets along with COD and approved apportioned cost are as under:-

Assets name	Date of commercial operation	Approved apportioned cost (₹ in lakh)
125 MVAR, 400 kV Bus Reactor at new Purnea Sub-station along with associated bays (referred as " Asset-I ")	1.4.2011	1969.91
Shifting of 1 no 63 MVAR Bus Reactor installed at new Purnea bus for installation as a fixed line reactor at new Purnea end of one ckt new Siliguri-new Purnea 400 kV D/C (quad) line (referred as " Asset-II ")	1.7.2011	266.52
Installation of 1 no new 125 MVAR bus reactor at new Purnea 400 kV bus (referred as " Asset-III ")	1.10.2011	1615.42
Installation of 1 no new 125 MVAR bus reactor at Siliguri 400 kV bus, shifting of 3 no. 63 MVAR reactors at 400 kV Siliguri SS (referred as " Asset-V ")	1.11.2011	1789.80
Durgapur-Maithon 400 kV D/C line with associated bays at Durgapur and Maithon	1.3.2012	14264.34



Assets name	Date of commercial operation	Approved apportioned cost (₹ in lakh)
Sub-station (referred as "Asset-IV")		
Installation of new 125 MVAR bus reactor at new Siliguri Sub-station ("Asset-VI")	1.4.2012	1600.77
220/132 kV, 160 MVA ICT at Baripada ("Asset-VII")	1.4.2011	1224.26
Total		22731.02

(b) The tariff from respective COD to 31.3.2014 was determined vide order dated 26.12.2011 in Petition No. 47/2011 for Asset-I, order dated 30.4.2013 in Petition No. 160/TT/2011 for Combined Assets-I to VI and order dated 5.9.2011 in Petition No. 68/2011 for Asset-VII in accordance with the 2009 Tariff Regulations.

(c) The tariff allowed for the instant assets for the tariff period 2009-14 is as under:-

Particulars	(₹ in lakh)					
	Combined Asset-I&II	Combined Asset-I, II & III	Combined Asset-I, II, III & V	Combined Asset-I, II, III, V & IV	Combined Asset-I, II, III, V, IV & VI	Combined Asset-I, II, III, V, IV & VI
	2011-12 (Pro-rata) 1.7.2011 to 30.9.2011	2011-12 (Pro-rata) 1.10.2011 to 31.10.2011	2011-12 (Pro-rata) 1.11.2011 to 29.2.2012	2011-12 (Pro-rata) 1.3.2012 to 31.3.2012	2012-13	2013-14
Depreciation	11.61	5.97	36.44	62.91	801.50	821.36
Interest on Loan	13.13	6.85	42.26	75.38	922.84	872.43
Return on equity	11.53	5.93	36.19	62.48	796.06	815.79
Interest on Working Capital	1.43	0.61	3.23	5.38	78.00	78.90
O & M Expenses	14.64	4.88	19.52	28.52	361.83	382.49
Total	52.34	24.24	137.65	234.66	2960.24	2970.96



(₹ in lakh)

Particulars	Asset-VII		
	2011-12	2012-13	2013-14
Depreciation	52.42	59.44	59.44
Interest on Loan	60.43	63.76	58.34
Return on Equity	52.06	59.04	59.04
Interest on WC	6.66	7.20	7.30
O&M Expenses	70.28	74.30	78.55
Total	241.86	263.73	262.66

(d) The Commission, vide order dated 26.12.2011 in Petition No. 47/2011, had determined tariff from COD to 31.3.2014 considering the capital cost of ₹574.12 lakh for **Asset-I** as on COD of 1.2.2011. In order dated 30.4.2013 in Petition No. 160/TT/2011, the Commission had determined the tariff from COD to 31.3.2014 considering the capital cost of ₹807.26 lakh for **Combined Asset-I&II** as on COD of 1.7.2011, ₹1275.77 lakh for **Combined Asset-I, II & III** as on COD of 1.10.2011, ₹1964.52 lakh for **Combined Asset-I, II, III & V** as on COD of 1.11.2011, ₹14182.16 lakh for **Combined Asset-I, II, III, V & IV** as on COD of 1.3.2012 and ₹14875.09 lakh for **Combined Asset-I, II, III, V, IV & VI** as on COD of 1.4.2012. Further, in order dated 10.8.2011 in Petition No. 325/2010, the tariff was determined from 1.7.2010 to 31.3.2014 considering the capital cost of ₹5843.68 lakh for **Combined Asset-I & II** as on 1.7.2010 (COD of Asset-II). Further, in order dated 5.9.2011 in Petition No. 68/2011, the tariff was determined from COD to 31.3.2014 considering the capital cost of ₹859.80 lakh for **Combined Asset-I, II & III** as on 1.3.2011 (COD of Asset-VII).



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

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

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

Capital Cost

6. The petitioner has claimed capital cost (including IDC and IEDC) of ₹586.67 lakh for Asset-I, ₹60.03 lakh for Asset-II, ₹487.49 lakh for Asset-III, ₹727.07 lakh for Asset-V, ₹12217.64 lakh for Asset-IV, ₹568.70 lakh for Asset-VI and ₹902.27 lakh for Asset-VII, as on COD (as per Auditor's Certificate) for the purpose of tariff.

7. 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.”



8. As the actual completion cost is substantially lower than the approved apportioned capital cost for most of the assets and, therefore, directed the petitioner to submit justification for such variation. In response, the petitioner vide its affidavit dated 23.2.2016 has submitted that the actual completion cost is lower than the corresponding approved cost for the subject assets primarily due to reduction in awarded cost (obtained via competitive bidding under price discovery mechanism) vis-a-vis estimates. Further, the decrease in actual cost w.r.t. approved cost for subject Assets I, III, V & VI are for 125 MVAR bus reactors. This was the first instance where the 125 MVAR bus reactor was procured by the petitioner. Various budgetary quotations were invited for the same and the estimate was prepared based on the basis of lowest budgetary quotation received from one of the suppliers (M/s CGL). In absence of the previous actual quotes, there is variation in the actual price received in competitive bids and the estimate.

9. We have considered the submissions of the petitioner. It is observed that the completion cost is lower than the estimated cost inspite of time over-run in some of the assets. We are of the view that the cost estimates prepared by the petitioner are not realistic. The petitioner is directed to adopt a prudent procedure to make the cost estimates of different elements of the transmission projects more realistic.



10. The petitioner has submitted the Auditor's Certificate certifying the capital cost as on COD and additional capitalization claimed thereafter. Accordingly, the capital cost as on COD including IDC and IEDC has been considered as ₹586.67 lakh for Asset-I, ₹60.03 lakh for Asset-II, ₹487.49 lakh for Asset-III, ₹727.07 lakh for Asset-V, ₹12217.64 lakh for Asset-IV, ₹568.70 lakh for Asset-VI and ₹902.27 lakh for Asset-VII to work out the trued up tariff for the tariff period 2009-14.

Time over-run

11. As per the investment approval dated 24.12.2007, the instant assets were scheduled to be commissioned within 30 months from the date of investment approval. Accordingly, the scheduled date of completion works out to 1.7.2010. The Commission, in its previous orders mentioned above has dealt with the time over-run. After examination of the reasons for time over-run, the Commission has condoned the delay as given below:-

Asset	SCOD as per IA dtd 29.8.2008	Date of commercial operation	Delay in months	Delay condoned	Delay not condoned
Asset-I	1.7.2010	1.4.2011	7	0	7
Asset-II		1.7.2011	12	0	12
Asset-III		1.10.2011	15	0	15
Asset-V		1.11.2011	16	0	16
Asset-IV		1.3.2012	20	20	0
Asset-VI		1.4.2012	21	0	21
Asset-VII		1.4.2011	9	0	9

12. As regards Asset-I, the Commission vide its order dated 26.12.2011 in Petition No. 47 of 2011 had observed as under:-



“17... ..we are of the view that the IDC and IEDC for seven months on account of the delay in commissioning of the asset shall not be capitalized for the purpose of tariff.

18. The details of the IDC disallowed are as follows:-

(₹ in lakh)

Asset-I			
Details of IEDC and IDC as per CA certificate dated 26.2.2011			
Particulars	IEDC	IDC	Total
From date of investment approval to 31.3.2010	2.08	2.44	4.52
From 1.4.2010 to 31.1.2011	7.06	10.87	17.93
Total IDC and IEDC claimed (total 37 months)	9.14	13.31	22.45
Details of IEDC and IDC disallowed for 7 months			
From July 2010 to January 2011 (7 months)	4.94	7.61	12.55
Total disallowed IEDC and IDC (7 months)	4.94	7.61	12.55

13. Further, as regards Asset-III, the Commission vide its order dated 30.4.2013 in Petition No. 160/TT/2011 had observed as under:-

“33(b). Similarly, IDC and IEDC for 15 months have been proportionally deducted from the cost of elements of Asset-III as on date of commercial operation. Details are given hereunder:-

(₹ in lakh)

Asset-III			
Details of IEDC and IDC as per CA certificate dated 25.6.2012			
Particulars	IEDC	IDC	Total
Up to 31.3.2011 (30+15-6=39 Months)	2.68	12.07	14.75
From 01.4.2011 to 30.9.2011 (6 Months)	5.13	10.45	15.58
Total IDC and IEDC claimed (total 37 months)	7.81	22.52	30.33
Details of IEDC and IDC disallowed for 15 months			
From 01.4.2011 to 30.9.2011 (6 Months)	5.13	10.45	15.58
Remaining on pro rata basis from the expenditure up to 31.3.2011 (9 Months)	0.62	2.79	3.40
Total disallowed IEDC and IDC (15 months)	5.75	13.24	18.98

”

14. The Commission vide its order dated 30.4.2013 in Petition No. 160/TT/2011 and order dated 5.9.2011 in Petition No. 68/2011, had disallowed the IDC and IEDC of ₹1.45 lakh and ₹0.09 lakh for Asset-II, ₹26.84 lakh and



₹5.12 lakh for Asset-V, ₹65.60 lakh and ₹34.27 lakh for Asset-V and ₹19.80 lakh and ₹10.58 lakh for Asset-VII, however, the same was on the basis of estimated capital cost. The petitioner has submitted the actual capital expenditure incurred including IDC and IEDC. Accordingly, the IDC and IEDC corresponding to disallowed period has been worked out based on the capital expenditure incurred as per the Auditor Certificates given below:-

(₹ in lakh)

Asset-II			
Details of IDC and IEDC as per CA Certificate dated 9.8.2014			
Particulars	IEDC	IDC	Total
From IA 24.12.2007 upto 31.3.2011 (30+12-3=39 months)	0.38	1.72	2.1
From 1.4.2011 to 30.6.2011 (3 Months)	0.00	1.05	1.05
Total IDC and IEDC claimed (30+12=42 Months)	0.38	2.77	3.15
Detail of IDC and IEDC disallowed for 12 months			
From 1.4.2011 to 30.6.2011 (3 months)	0.00	1.05	1.05
Remaining on pro rata basis from the expenditure up to 31.3.2011 (9 Months)	0.09	0.40	0.48
Total disallowed IDC and IEDC (12 months)	0.09	1.45	1.53

(₹ in lakh)

Asset-V			
Details of IDC and IEDC as per CA Certificate dated 9.12.2014			
Particulars	IEDC	IDC	Total
From IA 24.12.2007 upto 31.3.2011 (30+16-7=39 Months)	20.11	70.81	90.92
From 1.4.2011 to 31.10.2011 (7 Months)	0.48	10.50	10.98
Total IDC and IEDC claimed (30+16=46 Months)	20.59	81.31	101.9
Detail of IDC and IEDC disallowed for 16 months			
From 1.4.2011 to 31.10.2011 (7 Months)	0.48	10.50	10.98
Remaining on pro rata basis from the expenditure up to 31.3.2011 (9 Months)	4.64	16.34	20.98
Total disallowed IDC and IEDC (16 months)	5.12	26.84	31.96

(₹ in lakh)

Asset-VI			
Details of IDC and IEDC as per CA Certificate dated 9.12.2014			
Particulars	IEDC	IDC	Total
From IA 24.12.2007 upto Up to 31.3.2011 (30+21-12=39 Months)	1.77	6.23	8.00



Asset-VI			
Details of IDC and IEDC as per CA Certificate dated 9.12.2014			
Particulars	IEDC	IDC	Total
From 1.4.2011 to 31.3.2012 (12 Months)	33.86	64.16	98.02
Total IDC and IEDC claimed (30+21=51 Months)	35.63	70.39	106.02
Detail of IDC and IEDC disallowed for 21 months			
From 1.4.2011 to 31.3.2012 (12 Months)	33.86	64.16	98.02
Remaining on pro rata basis from the expenditure up to 31.3.2011 (9 Months)	0.41	1.44	1.85
Total disallowed IDC and IEDC (21 months)	34.27	65.60	99.87

(₹ in lakh)

Details of IEDC and IDC as per CA certificate dated 30.12.2014			
Particulars	IEDC	IDC	Total
From IA 24.12.2007 upto 31.3.2010 (27 months)	24.40	20.65	45.05
From 1.4.2010 to 31.1.2011 (10 months)	11.82	22.87	34.69
From 1.2.2011 to 31.3.2011 (2 months)	2.55	4.19	6.74
Total IDC and IEDC claimed (41 months)	38.77	47.71	86.48
Details of IEDC and IDC disallowed for 9 months			
From February 2011 to March 2011 (2 months)	2.55	3.79	6.34
From July 2010 to January 2011 (7 months)	8.27	16.01	24.28
Total disallowed IEDC and IDC (9 months)	10.82	19.80	30.62

Liquidated Damages

15. In accordance with Auditor Certificate, the petitioner has recovered the liquidated damages of ₹6.36 lakh and ₹21.43 lakh for Asset-V, ₹4.71 lakh and ₹15.86 lakh for Asset-VI, and ₹8.31 lakh and ₹27.96 lakh for Asset-VII during 2010-11 and 2013-14, respectively, from beneficiaries. In case of Asset-V and Asset-VI, as the IDC and IEDC disallowed due to time over-run is higher than the liquidated damages recovered from the beneficiaries. Thus, liquidated damages recovered by the petitioner on account of delay by contractor is adjusted to the capital cost as on COD to the extent of IDC and IEDC.



Initial Spares

16. The petitioner has claimed initial spares of ₹22.00 lakh and ₹15.74 lakh for Asset-I and III, respectively, pertaining to sub-station. In this regard, the petitioner has submitted that the initial spares is within the ceiling limit specified in the 2009 Tariff Regulations as the same is claimed for combined asset-I to VII.

17. 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 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 upto cut-off date.

18. 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%.....”



19. 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	Capital cost 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-I	31.3.2013	586.67	22.00	2.50%	14.48	7.52
Asset-III	31.3.2014	586.87	15.74	2.50%	14.64	1.10

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

(₹ in lakh)

Assets	Capital cost claimed as on COD	IDC & IEDC disallowed	Capital cost after adjusting disallowed IDC and IEDC (adjusting LD)	Excess initial spares	Capital cost of individual assets considered as on COD
	(a)	(b)	(c)	(d)	$(e)=(c)-(d)$
Asset-I	586.67	12.55	574.12	7.52	566.60
Asset-II	60.03	1.53	58.50	0.00	58.50
Asset-III	487.49	18.98	468.51	1.10	467.41
Asset-V	727.07	31.96	695.11	0.00	695.11
Asset-IV	12217.64	0.00	12217.64	0.00	12217.64
Asset-VI	568.70	99.87	468.83	0.00	468.83
Asset-VII	902.27	30.62	866.00*	0.00	866.00

* Excess LD of ₹5.65 lakh is adjusted

Additional Capital Expenditure

21. The petitioner has claimed additional capitalization under Regulation 9(1)(i) of the 2009 Tariff Regulations. Clause (1), sub-clause (i) of Regulation 9 of the 2009 Tariff Regulations provides as follows:-



“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...;”

22. The petitioner has submitted the Auditor’s Certificate to justify its additional capitalization incurred during 2009-14 for Asset-I, II, III, V, IV, VI and VII. Further, the petitioner vide its affidavit dated 8.4.2016 has submitted details of additional capitalization for 2011-12 for Assets-III and V as follows:-

(₹ in lakh)

Asset	Add-cap from 1.10.2011 to 31.10.2011	from to 1.11.2011 to 29.2.2012	Add-cap from 1.3.2012 to 31.3.2012
Asset-III	0.68	17.19	0.15
Asset-V	0.00	0.00	49.62

23. As the total capital cost including additional capital expenditure during 2009-14 period is within the approved apportioned cost, we have considered the petitioner’s submission and allowed additional capitalization under Regulation 9(1)(i) of the 2009 Tariff Regulations as shown in the table below:-



(₹ in lakh)

articulars	Capital cost as on COD	Additional Capital Expenditure (2011-14)								Total Add Cap	Capital Cost as on 31.3.2014
		2010-11 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2012-13	2013-14		
		1.2.2011 to 31.3.2011	1.4.2011 to 30.6.2011	1.7.2011 to 30.9.2011	1.10.2011 to 31.10.2011	1.11.2011 to 29.2.2012	1.3.2012 to 31.3.2012				
Asset-I (COD- 1.2.2011): Approved apportioned cost: ₹2236.43 lakh											
Approved in order dtd 26.12.2011 in Petition No.47/2011	574.12	174.65						144.25			
Approved in this order	566.60	0.00	0.00								
Combined Asset-I&II (COD- 1.7.2011): Approved apportioned cost: ₹2236.43 lakh											
Approved in order dtd 30.4.2013 in Petition No.160/TT/2011			807.26					144.25			
Approved in this order			625.09 (=566.60+58.50)	0.00				0.00			
Combined Asset-I, II & III (COD- 1.10.2011): Approved apportioned cost: ₹3851.85 lakh											
Approved in order dtd 30.4.2013 in Petition No.160/TT/2011				1275.77				162.27			
Approved in this order				1092.50 (=625.09+467.41)	0.68		17.19	0.15			
Combined Asset-I, II, III & V (COD- 1.11.2011): Approved apportioned cost: ₹5641.65 lakh											
Approved in order dtd 30.4.2013 in Petition No.160/TT/2011					1964.52			211.89			
Approved in this order					1788.29 (=1092.50+0.68+695.11)		17.19	49.77 (=0.15+49.62)			



articulans	Capital cost as on COD	Additional Capital Expenditure (2011-14)								Total Add Cap	Capital Cost as on 31.3.2014
		2010-11 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2012-13	2013-14		
		1.2.2011 to 31.3.2011	1.4.2011 to 30.6.2011	1.7.2011 to 30.9.2011	1.10.2011 to 31.10.2011	1.11.2011 to 29.2.2012	1.3.2012 to 31.3.2012				
Combined Asset-I, II, III, V & IV (COD- 1.3.2012): Approved apportioned cost: ₹19905.99 lakh											
Approved in order dtd 30.4.2013 in Petition No.160/TT/2011						14182.16	228.81				
Approved in this order					14023.12 (=1788.29+17.19+12217.64)	66.69 (=49.77+16.92)					
Combined Asset-I, II, III, V, IV & VI (COD- 1.4.2012): Approved apportioned cost: ₹21506.76 lakh											
Approved in order dtd 30.4.2013 in Petition No.160/TT/2011						14875.09	609.08	143.00	752.08	15627.17	
Approved in this order						14558.65 (14023.12+66.69+468.83)	400.21	474.97	875.18	15433.83	

(₹ in lakh)

Particulars	Capital cost as on COD	Additional Capital Expenditure (2011-14)				Capital cost as on 31.3.2014
		2011-12	2012-13	2013-14	Total	
Asset-VII (COD- 1.4.2011): Approved apportioned cost: ₹1225.26 lakh						
Approved in order dtd 5.9.2011 in Petition No. 68/2011	859.80	265.93	0.00	0.00	265.93	1125.73
Approved in this order	866.00	1.85	68.46	114.28	184.59	1050.59



Debt: Equity

24. Clause 1 & 3 of Regulation 12 of the 2009 Tariff Regulations provide that:-

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

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

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

.....

(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.”

25. The petitioner has claimed true up Annual Fixed Charge based on debt-equity ratio of 70:30 admitted as on as on COD by the Commission in its order dated 30.4.2013 in Petition No. 160/TT/2011 for Assets-I to VI and order dated 5.9.2011 in Petition No. 68/2011 for Asset-VII. The admitted debt:equity ratio of 70:30 as on COD for the assets has been considered for the purpose of truing up of the approved tariff of tariff period 2009-14, as given under:-

(₹ in lakh)		
Funding	Amount	(%)
Combined Assets-I & II (as on COD 1.7.2011)		
Debt	437.57	70.00
Equity	187.53	30.00
Total	625.09	100.00
Combined Asset-I, II & III (as on COD 1.10.2011)		
Debt	764.75	70.00
Equity	327.75	30.00
Total	1092.50	100.00
Combined Asset-I, II, III & V (as on COD 1.11.2011)		
Debt	1251.80	70.00



Funding	Amount	(%)
Equity	536.49	30.00
Total	1788.29	100.00
Combined Asset-I, II, III, V & IV (as on COD 1.3.2011)		
Debt	9816.19	70.00
Equity	4206.94	30.00
Total	14023.12	100.00
Combined Asset-I, II, III, V, IV & VI (as on COD 1.4.2012)		
Debt	10191.05	70.00
Equity	4367.59	30.00
Total	14558.65	100.00
Asset- VII (as on COD 1.4.2011)		
Debt	606.20	70.00
Equity	259.80	30.00
Total	866.00	100.00

26. With respect to additional capitalization, the petitioner has submitted the debt:equity ratio of 70:30 for all the assets. In this regard, the petitioner was directed to provide an undertaking on affidavit that actual equity infused for the additional capitalisation in 2011-12 is not less than 30%. In response, the petitioner vide affidavit dated 23.2.2016 has submitted that for additional capitalization of combined assets in tariff period 2009-14, the actual debt equity ratio is 70:30 in accordance with Regulation 12(1) of the 2009 Tariff Regulations.

27. The overall debt equity ratio as on 31.3.2014 for Combined Asset-I, II & III including additional capitalization is as under:-

Funding	Amount	(%)
(₹ in lakh)		
Combined Asset-I, II, III, V, IV & VI (as on COD 1.4.2012)		
Debt	10803.68	70.00
Equity	4630.15	30.00
Total	15433.83	100.00
Asset- VII (as on COD 1.4.2011)		



Funding	Amount	(%)
Debt	735.41	70.00
Equity	315.18	30.00
Total	1050.59	100.00

Interest on Loan (“IOL”)

28. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has held that:-

“...in case of floating rate of interest, any change in the rates of interest during the tariff period will be considered at the time of true up”.

29. 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 and accordingly calculated the IOL based on actual interest rate submitted by the petitioner, in accordance with Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest are placed at **Annexure-I** and the IOL allowed is as follows:-

(₹ in lakh)

Particulars	Combined Asset-I&II	Combined Asset-I, II & III	Combined Asset-I, II, III & V	Combined Asset-I, II, III, V & IV	Combined Asset-I, II, III, V, IV & VI	Combined Asset-I, II, III, V, IV & VI
	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2012-13	2013-14
	1.7.2011 to 30.9.2011	1.10.2011 to 31.10.2011	1.11.2011 to 29.2.2012	1.3.2012 to 31.3.2012		
Approved vide order dated 30.4.2013	13.13	6.85	42.26	75.38	922.84	872.43
As claimed by petitioner	9.56	5.93	39.58	74.93	912.65	868.51
Allowed after true up	9.32	5.58	37.33	74.17	896.98	853.67

(₹ in lakh)



Particulars	2011-12	2012-13	2013-14
Approved vide order dated 5.9.2011	60.43	63.76	58.34
As claimed by the petitioner	55.03	52.79	53.92
Allowed after trued up	52.82	50.75	52.06

30. There is variation in interest on loan due to variation in capital cost as on COD and variation in actual additional capitalization during 2009-14 tariff period.

Return on Equity (“ROE”)

31. 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.”

32. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 30.4.2013 in Petition No. 160/TT/2011 and 5.9.2011 in Petition No. 68/2011. However, for truing up purpose, the computation of RoE for the tariff period 2009-14 has been done on the basis of actual MAT rate applicable during 2009-14. The petitioner has



submitted the variation in the MAT rate during 2009-14 as per the Finance Act of the relevant year for the purpose of grossing up of ROE, as below:-

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

33. Accordingly, the ROE as trued up is as shown in the table below:-

(₹ in lakh)

Particulars	Combined Asset-I&II	Combined Asset-I, II & III	Combined Asset-I, II, III & V	Combined Asset-I, II, III, V & IV	Combined Asset-I, II, III, V, IV & VI	Combined Asset-I, II, III, V, IV & VI
	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2012-13	2013-14
	1.7.2011 to 30.9.2011	1.10.2011 to 31.10.2011	1.11.2011 to 29.2.2012	1.3.2012 to 31.3.2012		
Approved vide order dated 30.4.2013	11.53	5.93	36.19	62.48	796.06	815.79
As claimed by petitioner	9.40	5.54	36.73	68.45	868.03	904.21
Allowed after true up	9.08	5.34	35.31	68.14	857.94	894.00

(₹ in lakh)

Particulars	2011-12	2012-13	2013-14
Approved vide order dated 5.9.2011	52.06	59.04	59.04
As claimed by the petitioner	52.50	54.55	60.58
Allowed after trued up	50.40	52.44	58.44

34. There is variation in return on equity due to variation in equity on account of additional capitalisation and increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.



Depreciation

35. 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”

36. 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.”

37. The Commission in its orders dated 30.4.2013 in Petition No. 160/TT/2011 and 5.9.2011 in Petition No. 68/2011 worked out the depreciation for Combined Assets-I to VI and Asset VII respectively in accordance with Regulation 17 of the 2009 Tariff Regulations.

38. 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 the Asset-I, Combined Asset-I & II, Combined Asset- I, III & III and Combined Asset-I, II, III & V, 33 years for the



Combined Asset-I, II, III, V & IV and Combined Asset-I, II, III, V, IV and VI and 25 years for the Asset-VII. 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-I	Asset-I	Combine d Asset- I&II	Combined Asset-I, II & III	Combined Asset-I, II, III & V	Combin ed Asset-I, II, III, V & IV	Combin ed Asset-I, II, III, V, IV & VI	Combine d Asset-I, II, III, V, IV & VI
	2010-11 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro- rata)		
	1.2.2011 to 31.3.201 1	1.4.2011 to 30.6.201 1	1.7.2011 to 30.9.201 1	1.10.2011 to 31.10.201 1	1.11.2011 to 29.2.2012	1.3.2012 to 31.3.201 2	2012-13	2013-14
Approved vide order dated 26.12.2011 and 30.4.2013	5.82	10.84	11.61	5.97	36.44	62.91	801.50	821.36
As claimed by petitioner	5.82	10.84	8.54	5.03	33.37	62.17	788.43	811.53
Allowed after true up	5.10	7.64	8.25	4.85	32.07	61.89	779.26	802.37

* Depreciation for 2011-12 is approved for entire year 2011-12

(₹ in lakh)

Particulars	2011-12	2012-13	2013-14
Approved vide order dated 5.9.2011	52.42	59.44	59.44
As claimed by the petitioner	47.69	49.54	54.37
Allowed after trued up	45.77	47.63	52.45

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



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 was approved in the earlier orders. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are the same, and they are as follows:-

Particulars	(₹ in lakh)					
	Combined Asset-I&II	Combined Asset-I, II & III	Combined Asset-I, II, III & V	Combined Asset-I, II, III, V & IV	Combined Asset-I, II, III, V, IV & VI	Combined Asset-I, II, III, V, IV & VI
	2011-12 (Pro-rata) 1.7.2011 to 30.9.2011	2011-12 (Pro-rata) 1.10.2011 to 31.10.2011	2011-12 (Pro-rata) 1.11.2011 to 29.2.2012	2011-12 (Pro-rata) 1.3.2012 to 31.3.2012	2012-13	2013-14
Approved vide order dated 30.4.2013	14.64	4.88	19.52	28.52	361.83	382.49
As claimed by petitioner	14.64	4.88	19.52	28.52	361.83	382.49
Allowed after true up	14.64	4.88	19.52	28.52	361.83	382.49

Particulars	(₹ in lakh)		
	2011-12	2012-13	2013-14
Approved vide order dated 5.9.2011	70.28	74.30	78.55
As claimed by the petitioner	70.28	74.30	78.55
Allowed after trued up	70.28	74.30	78.55

Interest on working capital (“IWC”)

41. 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.



42. The petitioner has submitted the rate of interest on working capital as 11.75% for the period 1.7.2011 to 31.3.2012 and 13.50% for the period 1.4.2012 to 31.3.2014 for Combined Assets-I to VI and 11.75% for the period 1.4.2011 to 31.3.2014 for Asset-VII 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.

43. The Commission in accordance with Clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, has considered the rate of interest on working capital on normative basis, as follows:-

- a. equal to State Bank of India Base Rate as applicable as on 1.4.2011 plus 350 basis points (=8.25% plus 350 basis points = 11.75%) for the period 1.9.2011 to 31.3.2012 for Combined Assets-I to VI.
- b. equal to State Bank of India Base Rate as applicable as on 1.4.2012 plus 350 basis points (=10.00% plus 350 basis points = 13.50%) for the period 1.4.2012 to 31.3.2014 for Combined Assets-I to VI..
- c. equal to State Bank of India Base Rate as applicable as on 1.4.2011 plus 350 basis points (=8.25% plus 350 basis points = 11.75%) for the period 1.4.2011 to 31.3.2014 for Asset-VII.

44. Therefore, interest rate has been considered as 11.75% for the period 1.7.2011 to 31.3.2012 and 13.50% for the period 1.4.2012 to 31.3.2014 for



Combined Assets-I to VI and 11.75% for the period 1.4.2011 to 31.3.2014 for Asset-VII to work out the interest on working capital in the instant case.

45. The IWC trued up is as under:-

Particulars	(₹ in lakh)					
	Combined Asset-I&II	Combined Asset-I, II & III	Combined Asset-I, II, III & V	Combined Asset-I, II, III, V & IV	Combined Asset-I, II, III, V, IV & VI	Combined Asset-I, II, III, V, IV & VI
	2011-12 (Pro-rata) 1.7.2011 to 30.9.2011	2011-12 (Pro-rata) 1.10.2011 to 31.10.2011	2011-12 (Pro-rata) 1.11.2011 to 29.2.2012	2011-12 (Pro-rata) 1.3.2012 to 31.3.2012	2012-13	2013-14
Maintenance Spares	2.20	0.73	2.93	4.28	54.28	57.37
O & M expenses	1.22	0.41	1.63	2.38	30.15	31.87
Receivables	7.09	3.53	21.21	39.69	495.72	502.06
Total	10.50	4.67	25.77	46.35	580.15	591.31
Rate of Interest (%)	11.75	11.75	11.75	11.75	13.50	13.50
Interest	1.23	0.55	3.03	5.45	78.32	79.83

Particulars	(₹ in lakh)		
	2011-12	2012-13	2013-14
Maintenance Spares	10.54	11.15	11.78
O & M expenses	5.86	6.19	6.55
Receivables	37.60	38.62	41.42
Total	54.00	55.95	59.75
Rate of Interest (%)	11.75	11.75	11.75
Interest	6.35	6.57	7.02

Particulars	(₹ in lakh)					
	Combined Asset-I&II	Combined Asset-I, II & III	Combined Asset-I, II, III & V	Combined Asset-I, II, III, V & IV	Combined Asset-I, II, III, V, IV & VI	Combined Asset-I, II, III, V, IV & VI
	2011-12 (Pro-rata) 1.7.2011 to 30.9.2011	2011-12 (Pro-rata) 1.10.2011 to 31.10.2011	2011-12 (Pro-rata) 1.11.2011 to 29.2.2012	2011-12 (Pro-rata) 1.3.2012 to 31.3.2012	2012-13	2013-14
Approved vide order dated	1.43	0.61	3.23	5.38	78.00	78.90



Particulars	Combined Asset-I&II	Combined Asset-I, II & III	Combined Asset-I, II, III & V	Combined Asset-I, II, III, V & IV	Combined Asset-I, II, III, V, IV & VI	Combined Asset-I, II, III, V, IV & VI
	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2011-12 (Pro-rata)	2012-13	2013-14
	1.7.2011 to 30.9.2011	1.10.2011 to 31.10.2011	1.11.2011 to 29.2.2012	1.3.2012 to 31.3.2012		
30.4.2013						
As claimed by petitioner	1.25	0.56	3.13	5.47	79.12	80.61
Allowed after true up	1.23	0.55	3.03	5.45	78.32	79.83

(₹ in lakh)

Particulars	2011-12	2012-13	2013-14
Approved vide order dated 5.9.2011	6.66	7.20	7.30
As claimed by the petitioner	6.47	6.70	7.14
Allowed after trued up	6.35	6.57	7.02

46. The variation in IWC is on account of variation in IOL, depreciation and ROE due to variation in capital cost, 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

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

(₹ in lakh)

	Combined Asset-I&II 2011-12 1.7.2011 to 30.9.2011	Combined Asset-I, II & III 2011-12 1.10.2011 to 31.10.2011	Combined Asset-I, II, III & V 2011-12 1.11.2011 to 29.2.2012	Combined Asset-I, II, III, V & IV 2011-12 1.3.2012 to 31.3.2012	Combined Asset-I, II, III, V, IV & VI 2012-13	Combined Asset-I, II, III, V, IV & VI 2013-14
Gross Block						
Opening Gross Block	625.09	1092.50	1788.29	14023.12	14558.65	14958.86
Additional Capitalization	0.00	18.02	67.64	84.56	400.21	474.97
Closing Gross block	625.09	1110.52	1855.93	14107.68	14958.86	15433.83



	Combined Asset-I&II 2011-12 1.7.2011 to 30.9.2011	Combined Asset-I, II & III 2011-12 1.10.2011 to 31.10.2011	Combined Asset-I, II, III & V 2011-12 1.11.2011 to 29.2.2012	Combined Asset-I, II, III, V & IV 2011-12 1.3.2012 to 31.3.2012	Combined Asset-I, II, III, V, IV & VI 2012-13	Combined Asset-I, II, III, V, IV & VI 2013-14
Average Gross block	625.09	1101.51	1822.11	14065.40	14758.75	15196.34
Depreciation						
Rate of Depreciation (%)	5.280	5.280	5.280	5.280	5.280	5.280
Depreciable Value	562.58	991.36	1639.90	12658.86	13282.88	13676.71
Elapsed Life of the assets at beginning of the year	0	0	0	0	0	1
Weighted Balance Useful life of the assets	25	25	25	33	33	32
Remaining Depreciable Value	549.84	970.37	1618.91	12600.95	13257.04	12777.65
Depreciation	8.25	4.85	32.07	61.89	779.26	802.37
Interest on Loan						
Gross Normative Loan	437.57	764.75	1251.80	9816.19	10191.05	10471.20
Cumulative Repayment upto Previous Year	12.74	20.99	25.84	57.91	119.80	899.06
Net Loan-Opening	424.82	743.76	1225.97	9758.28	10071.26	9572.14
Additions	0.00	12.61	47.35	59.19	280.15	332.48
Repayment during the year	8.25	4.85	32.07	61.89	779.26	802.37
Net Loan-Closing	416.57	751.53	1241.24	9755.58	9572.14	9102.25
Average Loan	420.70	747.64	1233.60	9756.93	9821.70	9337.20
Weighted Average Rate of Interest on Loan (%)	8.8579	8.9507	9.0784	9.1223	9.1327	9.1427
Interest	9.32	5.58	37.33	74.17	896.98	853.67
Return on Equity						
Opening Equity	187.53	327.75	536.49	4206.94	4367.59	4487.66
Additions	0.00	5.41	20.29	25.37	120.06	142.49
Closing Equity	187.53	333.16	556.78	4232.30	4487.66	4630.15
Average Equity	187.53	330.45	546.63	4219.62	4427.63	4558.90
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50	15.50
MAT rate for the respective year (%)	20.008	20.008	20.008	20.008	20.008	20.961



	Combined Asset-I&II 2011-12 1.7.2011 to 30.9.2011	Combined Asset-I, II & III 2011-12 1.10.2011 to 31.10.2011	Combined Asset-I, II, III & V 2011-12 1.11.2011 to 29.2.2012	Combined Asset-I, II, III, V & IV 2011-12 1.3.2012 to 31.3.2012	Combined Asset-I, II, III, V, IV & VI 2012-13	Combined Asset-I, II, III, V, IV & VI 2013-14
Rate of Return on Equity (Pre Tax) (%)	19.377	19.377	19.377	19.377	19.377	19.610
Return on Equity (Pre Tax)	9.08	5.34	35.31	68.14	857.94	894.00
Interest on Working Capital						
Maintenance Spares	2.20	0.73	2.93	4.28	54.28	57.37
O & M Expenses	1.22	0.41	1.63	2.38	30.15	31.87
Receivables	7.09	3.53	21.21	39.69	495.72	502.06
Total	10.50	4.67	25.77	46.35	580.15	591.31
Interest	1.23	0.55	3.03	5.45	78.32	79.83
Annual Transmission Charges						
Depreciation	8.25	4.85	32.07	61.89	779.26	802.37
Interest on Loan	9.32	5.58	37.33	74.17	896.98	853.67
Return on Equity	9.08	5.34	35.31	68.14	857.94	894.00
Interest on Working Capital	1.23	0.55	3.03	5.45	78.32	79.83
O & M Expenses	14.64	4.88	19.52	28.52	361.83	382.49
Total	42.53	21.19	127.26	238.16	2974.34	3012.36

(₹ in lakh)

Asset-VII			
Particulars	2011-12	2012-13	2013-14
Gross Block			
Opening Gross Block	866.00	867.85	936.31
Additional Capitalization	1.85	68.46	114.28
Closing Gross block	867.85	936.31	1050.59
Average Gross block	866.93	902.08	993.45
Depreciation			
Rate of Depreciation (%)	5.280	5.280	5.280
Depreciable Value	780.23	811.87	894.11
Elapsed Life of the assets at beginning of the year	0	1	2
Weighted Balance Useful life of the assets	25	24	23
Remaining Depreciable Value	780.23	766.10	800.70
Depreciation	45.77	47.63	52.45
Interest on Loan			



Asset-VII			
Particulars	2011-12	2012-13	2013-14
Gross Normative Loan	606.20	607.50	655.42
Cumulative Repayment upto Previous Year	0.00	45.77	93.40
Net Loan-Opening	606.20	561.72	562.01
Additions	1.30	47.92	80.00
Repayment during the year	45.77	47.63	52.45
Net Loan-Closing	561.72	562.01	589.56
Average Loan	583.96	561.87	575.78
Weighted Average Rate of Interest on Loan (%)	9.0453	9.0326	9.0411
Interest	52.82	50.75	52.06
Return on Equity			
Opening Equity	259.80	260.36	280.89
Additions	0.56	20.54	34.28
Closing Equity	260.36	280.89	315.18
Average Equity	260.08	270.62	298.04
Return on Equity (Base Rate) (%)	15.50	15.50	15.50
MAT rate for the respective year (%)	20.008	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	19.377	19.377	19.610
Return on Equity (Pre Tax)	50.40	52.44	58.44
Interest on Working Capital			
Maintenance Spares	10.54	11.15	11.78
O & M Expenses	5.86	6.19	6.55
Receivables	37.60	38.62	41.42
Total	54.00	55.95	59.75
Interest	6.35	6.57	7.02
Annual Transmission Charges			
Depreciation	45.77	47.63	52.45
Interest on Loan	52.82	50.75	52.06
Return on Equity	50.40	52.44	58.44
Interest on Working Capital	6.35	6.57	7.02
O & M Expenses	70.28	74.30	78.55
Total	225.62	231.69	248.53

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

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

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	886.61	891.76	891.76	891.76	891.76
Interest on Loan	868.61	793.89	712.49	631.00	549.43
Return on equity	987.86	993.60	993.60	993.60	993.60
Interest on Working Capital	86.55	85.86	84.78	83.74	82.72
O & M Expenses	423.70	437.79	452.31	467.33	482.83



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Total	3253.33	3202.90	3134.94	3067.43	3000.34

49. 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	63.56	65.67	67.85	70.10	72.42
O & M expenses	35.31	36.48	37.69	38.94	40.24
Receivables	542.22	533.82	522.49	511.24	500.06
Total	641.09	635.97	628.03	620.28	612.72
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	86.55	85.86	84.78	83.74	82.72

Capital Cost

50. 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.”

51. The petitioner has claimed capital cost of ₹16694.20 lakh as on 31.3.2014 and has projected additional capital expenditure of ₹195.17 lakh during 2014-15 for Combined Asset-I to VII. The trued up capital cost of ₹15433.83 lakh as on 31.3.2014 for Combined Asset-I to VI and ₹1050.59 lakh as on 31.3.2014 for



Asset- VII, totalling to ₹16484.42 lakh for Combined Asset-I to VII, is considered to work out tariff for tariff period 2014-19.

Additional Capital Expenditure

52. The petitioner has claimed additional expenditure of ₹195.17 lakh during 2014-15 for Combined Asset- I to VII during 2014-15 for the tariff period 2014-19 towards balance and retention payments under Clause 1 of Regulation 14 of the 2014 Tariff Regulations.

53. The petitioner was directed to confirm the amount of balance and retention payment yet to be made along with the details of contract for which the payment has been retained. In response, the petitioner vide its affidavit dated 23.2.2016 has submitted that contractor wise details of projected expenditure of ₹195.17 lakh during 2014-15.

54. Clause 1 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;
- (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 of law; 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.



55. The total capital cost of the transmission asset for the asset including additional capitalisation of ₹195.17 lakh works out to ₹16679.59 lakh, which is less than the approved apportioned cost of ₹22731.02 lakh for Combined Asset-I to VII given in the investment approval dated 24.12.2007. Accordingly, additional capitalisation of ₹195.17 lakh in 2014-15 towards balance and retention payment claimed by the petitioner is allowed in accordance with Clause 1(i) of Regulation 14 of the 2014 Tariff Regulations. 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 of 2014-19 period.

(₹ in lakh)

Combined Asset-I to VII: Apportioned approved cost: ₹22731.02 lakh							
Capital cost as on 31.3.2014	Additional capitalisation					Total additional capitalisation	Total capital cost including additional capitalisation
	2014-15	2015-16	2016-17	2017-18	2018-19		
16484.42	195.17	0.00	0.00	0.00	0.00	195.17	16679.59

Debt:Equity Ratio

56. 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.”

57. The petitioner has considered debt: equity ratio as 70:30 as on 31.3.2014. The admitted debt:equity ratio of 70:30 has been considered as opening debt:equity ratio as on 1.4.2014. Further, for additional capital expenditure during 2014-19 period, the normative debt:equity ratio of 70:30 as proposed by the



petitioner has been considered. The details of the debt:equity including additional capitalisation during 2014-19 period for Combined Asset-I, II & III considered for the purpose of tariff for the 2014-19 tariff period is as follows:-

(₹ in lakh)		
Funding	Amount	(%)
Combined Asset-I to VII		
Debt	11539.09	70.00
Equity	4945.32	30.00
Total	16484.42	100.00

58. For additional capital expenditure, the petitioner has proposed normative debt:equity ratio of 70:30 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)		
Particulars	Amount	(%)
Combined Asset-I to VII		
Debt	11675.71	70.00
Equity	5003.88	30.00
Total	16679.59	100.00

Interest on Loan (“IOL”)

59. 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.”

60. The weighted average rate of IOL has been considered on the basis of rate prevailing as on 1.4.2014.

61. 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	11539.09	11675.71	11675.71	11675.71	11675.71
Cumulative Repayment upto previous year	1847.28	2722.81	3603.49	4484.18	5364.86
Net Loan-Opening	9691.81	8952.90	8072.22	7191.53	6310.85
Additions during the year	136.62	0.00	0.00	0.00	0.00
Repayment during the year	875.53	880.68	880.68	880.68	880.68
Net Loan-Closing	8952.90	8072.22	7191.53	6310.85	5430.17
Average Loan	9322.35	8512.56	7631.87	6751.19	5870.51
Rate of Interest (%)	9.1469	9.1488	9.1509	9.1534	9.1564
Interest	852.71	778.80	698.39	617.97	537.53

Return on Equity (“ROE”)

62. Clause (1) & (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.”

63. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE 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.

64. 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.

65. 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 for Combined Asset-I, II & III is given below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	4945.32	5003.88	5003.88	5003.88	5003.88
Additional Capitalization	58.55	0.00	0.00	0.00	0.00
Closing Equity	5003.88	5003.88	5003.88	5003.88	5003.88
Average Equity	4974.60	5003.88	5003.88	5003.88	5003.88
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)	975.52	981.26	981.26	981.26	981.26

Depreciation

66. 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.”

67. The petitioner has computed depreciation considering capital expenditure of ₹16694.20 lakh as on 31.3.2014.

68. We have considered the submissions of the petitioner. Depreciation is allowed considering capital expenditure of ₹16484.42 lakh as on 31.3.2014 under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	16484.42	16679.59	16679.59	16679.59	16679.59
Additional Capitalisation	195.17	0.00	0.00	0.00	0.00
Gross block at the end of the year	16679.59	16679.59	16679.59	16679.59	16679.59
Average gross block	16582.00	16679.59	16679.59	16679.59	16679.59
Rate of Depreciation (%)	5.280	5.280	5.280	5.280	5.280
Depreciable Value	14923.80	15011.63	15011.63	15011.63	15011.63
Elapsed Life of the assets at beginning of the year	2	3	4	5	6
Weighted Balance Useful life of the assets	30	29	28	27	26
Remaining Depreciable Value	13222.38	12434.67	11553.99	10673.31	9792.63
Depreciation	875.53	880.68	880.68	880.68	880.68

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

69. 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 have been worked out as given hereunder:-

Particulars		(₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19
Actual line length (km)	Single Circuit (Twin & Triple Conductor)	0.65	0.65	0.65	0.65	0.65
	Double Circuit (Twin & Triple Conductor)	70.12	70.12	70.12	70.12	70.12
Actual (No. of bays)	220 kV bay	1	1	1	1	1
	400 kV bay	5	5	5	5	5
	132 kV & below Bays	1	1	1	1	1
Norms as per Regulation	Single Circuit (Twin & Triple Conductor) (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
	Double Circuit (Twin & Triple Conductor) (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
	220 kV (Rs lakh/bay) (₹ lakh/km)	42.21	43.61	45.06	46.55	48.10
	400 kV (Rs lakh/bay)	60.30	62.30	64.37	66.51	68.71
	132 kV & below (Rs lakh/bay)	30.15	31.15	32.18	33.25	34.36
Total		423.70	437.79	452.31	467.33	482.83

70. 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 2014-19 and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for



suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

71. 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, any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

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

Particulars	Year				
	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed	423.70	437.79	452.31	467.33	482.83

(₹ in lakh)

Interest on Working Capital (“IWC”)

73. 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).

74. 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	63.55	65.67	67.85	70.10	72.42
O & M Expenses	35.31	36.48	37.69	38.94	40.24
Receivables	535.52	527.25	516.09	505.02	494.03
Total	634.38	629.40	621.63	614.07	606.69
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	85.64	84.97	83.92	82.90	81.90

Annual Transmission Charges

75. The detailed computation of the various components of the annual fixed charges for the Combined Asset I to VII for the tariff period 2014-19 is summarised below:-

(₹ in lakh)					
Particulars	Combined Asset- I to VII				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block					
Opening Gross Block	16484.42	16679.59	16679.59	16679.59	16679.59
Additional Capitalisation	195.17	0.00	0.00	0.00	0.00
Closing Gross Block	16679.59	16679.59	16679.59	16679.59	16679.59
Average Gross Block	16582.00	16679.59	16679.59	16679.59	16679.59
Depreciation					
Rate of Depreciation	5.280	5.280	5.280	5.280	5.280
Depreciable Value	14923.80	15011.63	15011.63	15011.63	15011.63



Particulars	Combined Asset- I to VII				
	2014-15	2015-16	2016-17	2017-18	2018-19
Elapsed Life of the assets at beginning of the year	2	3	4	5	6
Weighted Balance Useful life of the assets	30	29	28	27	26
Remaining Depreciable Value	13222.38	12434.67	11553.99	10673.31	9792.63
Depreciation	875.53	880.68	880.68	880.68	880.68
Interest on Loan					
Gross Normative Loan	11539.09	11675.71	11675.71	11675.71	11675.71
Cumulative Repayment upto Previous Year	1847.28	2722.81	3603.49	4484.18	5364.86
Net Loan-Opening	9691.81	8952.90	8072.22	7191.53	6310.85
Additions	136.62	0.00	0.00	0.00	0.00
Repayment during the year	875.53	880.68	880.68	880.68	880.68
Net Loan-Closing	8952.90	8072.22	7191.53	6310.85	5430.17
Average Loan	9322.35	8512.56	7631.87	6751.19	5870.51
Weighted Average Rate of Interest on Loan (%)	9.1469	9.1488	9.1509	9.1534	9.1564
Interest	852.71	778.80	698.39	617.97	537.53
Return on Equity					
Opening Equity	4945.32	5003.88	5003.88	5003.88	5003.88
Additions	58.55	0.00	0.00	0.00	0.00
Closing Equity	5003.88	5003.88	5003.88	5003.88	5003.88
Average Equity	4974.60	5003.88	5003.88	5003.88	5003.88
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
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)	975.52	981.26	981.26	981.26	981.26
Interest on Working Capital					
Maintenance Spares	63.55	65.67	67.85	70.10	72.42
O & M expenses	35.31	36.48	37.69	38.94	40.24
Receivables	535.52	527.25	516.09	505.02	494.03



Particulars	Combined Asset- I to VII				
	2014-15	2015-16	2016-17	2017-18	2018-19
Total	634.38	629.40	621.63	614.07	606.69
Interest	85.64	84.97	83.92	82.90	81.90
Annual Transmission Charges					
Depreciation	875.53	880.68	880.68	880.68	880.68
Interest on Loan	852.71	778.80	698.39	617.97	537.53
Return on Equity	975.52	981.26	981.26	981.26	981.26
Interest on Working Capital	85.64	84.97	83.92	82.90	81.90
O & M Expenses	423.70	437.79	452.31	467.33	482.83
Total	3213.10	3163.50	3096.56	3030.14	2964.20

Filing Fee and Publication Expenses

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

77. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when materialized. However, the COD of the asset is after 2009, hence the claim of the petitioner is infructuous.



Foreign Exchange Rate Variation

78. The petitioner has sought recovery of FERV on foreign loans deployed as provided in Clause 50 of the 2014 Tariff Regulations. The petitioner is entitled to recover the FERV directly from the beneficiaries or the long term transmission customers/DICs as the case may be, in accordance with Regulation 51(1) 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 of service tax 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. 82/TT/2015.

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)**

Particulars	Combined Asset-I&II 2011-12 1.7.2011 to 30.9.2011				Combined Asset-I, II & III 2011-12 1.10.2011 to 31.10.2011				Combined Asset-I, II, III & V 2011-12 1.11.2011 to 29.2.2012			
	Interest Rate (%)	Loan deployed as on 1.9.2009	Addition from 1.9.2009 to 30.6.2010	Total	Interest Rate (%)	Loan deployed as on 1.7.2010	Addition from 1.7.2010 to 31.8.2011	Total	Interest Rate (%)	Loan deployed as on 1.9.2011	Addition from 1.9.2011 to 31.3.2014	Total
BOND XXVIII-DOC0 XXVIII	9.33	50.00	0.00	50.00	9.33	100.00	0.00	100.00	9.33	450.00	0.00	450.00
BOND XXIX-DOC0 XXIX	9.20	0.00	0.00	0.00	9.20	0.00	0.00	0.00	9.20	100.00	0.00	100.00
BOND XXXI-DOC0 XXXI	8.90	50.00	0.00	50.00	8.90	50.00	0.00	50.00	8.90	50.00	0.00	50.00
BOND XXXIII-ADDCAP FOR ADD CAP 11-12 XXXIII	8.64	0.00	0.00	0.00	8.64	0.00	0.48	0.48	8.64	0.00	6.87	6.87
BOND XXXIII-DOC0 XXXIII	8.64	100.00	0.00	100.00	8.64	100.00	0.00	100.00	8.64	104.93	0.00	104.93
BOND-XXXIV-ADDCAP FOR ADDCAP 11-12 XXXIV	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00	8.84	0.00	5.16	5.16
BOND-XXXIV-DOC0 XXXIV	8.84	251.94	0.00	251.94	8.84	473.94	0.00	473.94	8.84	505.44	0.00	505.44
BOND-XXXV-DOC0 XXXV	9.64	0.73	0.00	0.73	9.64	69.97	0.00	69.97	9.64	92.97	0.00	92.97
Total		452.67	0.00	452.67		793.91	0.48	794.39		1303.34	12.03	1315.37



(₹ in lakh)

Particulars	Combined Asset-I, II, III, V & IV 2011-12 1.3.2012 to 31.3.2012				Combined Asset-I, II, III, V, IV & VI				Asset-VII			
	Interest Rate (%)	Loan deployed as on 1.9.2011	Addition from 1.9.2011 to 31.3.2014	Total	Interest Rate (%)	Loan deployed as on 1.9.2011	Addition from 1.9.2011 to 31.3.2014	Total	Interest Rate (%)	Loan deployed as on 1.9.2011	Addition from 1.9.2011 to 31.3.2014	Total
BOND XXVIII-DOCOC XXVIII	9.33	2600.00	0.00	2600.00	9.33	2600.00	0.00	2600.00	9.33	150.00	0.00	150.00
BOND XXIX-DOCOC XXIX	9.20	2358.00	0.00	2358.00	9.20	2358.00	0.00	2358.00	9.20	150.00	0.00	150.00
BOND XXX-DOCOC XXX	8.80	1070.00	0.00	1070.00	8.80	1070.00	0.00	1070.00	8.80	50.00	0.00	50.00
BOND XXXI-DOCOC XXXI	8.90	1603.76	0.00	1603.76	8.90	1648.76	0.00	1648.76	8.90	200.00	0.00	200.00
BOND XXXIII-ADDCAP FOR ADD CAP 11-12 XXXIII	8.64	0.00	0.00	0.00	8.64	0.00	0.00	0.00	8.64	0.00	1.30	1.30
BOND XXXIII-DOCOC XXXIII	8.64	188.70	0.00	188.70	8.64	188.70	0.00	188.70	8.64	60.00	0.00	60.00
BOND-XXXIV-ADDCAP FOR ADDCAP 11-12 XXXIV	8.84	0.00	46.68	46.68	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00
BOND-XXXIV-ADDCAP FOR 2012-13 ADDCAP 12-XXXIV	8.84	0.00	0.00	0.00	8.84	0.00	0.00	0.00	8.84	0.00	47.84	47.84
BOND-XXXIV-DOCOC XXXIV	8.84	1029.66	0.00	1029.66	8.84	1092.16	0.00	1092.16	8.84	0.00	0.00	0.00
BOND-XXXV-ADDCAP FOR 2012-13 ADD CAP 12-13 XXXV	9.64	0.00	0.00	0.00	9.64	0.00	86.67	86.67	9.64	0.00	0.00	0.00
BOND-XXXV-DOCOC XXXV	9.64	597.04	0.00	597.04	9.64	821.25	0.00	821.25	9.64	0.00	0.00	0.00
BOND XXXVI-ADDCAP FOR 2012-2013 ADD CAP 12-13 XXXVI	9.35	0.00	0.00	0.00	9.35	0.00	23.00	23.00	9.35	0.00	0.00	0.00
BOND XXXVIII-DOCOC XXXVIII	9.25	350.00	0.00	350.00	9.25	350.00	0.00	350.00	9.25	0.00	0.00	0.00
BOND XL-ADDCAP FOR 2012-2013 ADD CAP 12-13 XL	9.30	0.00	0.00	0.00	9.30	0.00	170.48	170.48	9.30	0.00	0.00	0.00



Particulars	Combined Asset-I, II, III, V & IV 2011-12 1.3.2012 to 31.3.2012				Combined Asset-I, II, III, V, IV & VI				Asset-VII			
	Interest Rate (%)	Loan deployed as on 1.9.2011	Addition from 1.9.2011 to 31.3.2014	Total	Interest Rate (%)	Loan deployed as on 1.9.2011	Addition from 1.9.2011 to 31.3.2014	Total	Interest Rate (%)	Loan deployed as on 1.9.2011	Addition from 1.9.2011 to 31.3.2014	Total
BOND XL-ADDCAP FOR 2013-2014 ADD CAP 13-14 XL	9.30	0.00	0.00	0.00	9.30	0.00	0.00	0.00	9.30	0.00	58.96	58.96
BOND XL-DOCO XL	9.30	70.56	0.00	70.56	9.30	70.56	0.00	70.56	9.30	0.00	0.00	0.00
BOND-XLV-ADDCAP FOR 2013-2014 ADD CAP 13-14 XLV	9.65	0.00	0.00	0.00	9.65	0.00	332.48	332.48	9.65	0.00	21.04	21.04
Total		9867.72	46.68	9914.40		10199.43	612.63	10812.06		610.00	129.14	739.14

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

(₹ in lakh)

Particulars	Combined Asset-I&II	Combined Asset-I, II & III	Combined Asset-I, II, III & V	Combined Asset-I, II, III, V & IV	Combined Asset-I, II, III, V, IV & VI	Combined Asset-I, II, III, V, IV & VI	Asset-VII		
	2011-12 1.7.2011 to 30.9.2011	2011-12 1.10.2011 to 31.10.2011	2011-12 1.11.2011 to 29.2.2012	2011-12 1.3.2012 to 31.3.2012	2012-13	2013-14	2011-12	2012-13	2013-14
Gross Opening Loan	452.67	793.91	1303.34	9867.72	10199.43	10479.58	610.00	611.30	659.14
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	0.00	413.17	0.00	0.00	25.00
Net Loans Opening	452.67	793.91	1303.34	9867.72	10199.43	10066.41	610.00	611.30	634.14



Particulars	Combined Asset-I&II	Combined Asset-I, II & III	Combined Asset-I, II, III & V	Combined Asset-I, II, III, V & IV	Combined Asset-I, II, III, V, IV & VI	Combined Asset-I, II, III, V, IV & VI	Asset-VII		
	2011-12 1.7.2011 to 30.9.2011	2011-12 1.10.2011 to 31.10.2011	2011-12 1.11.2011 to 29.2.2012	2011-12 1.3.2012 to 31.3.2012	2012-13	2013-14	2011-12	2012-13	2013-14
Add: Drawl(s) during the year	0.00	0.48	12.03	46.68	280.15	332.48	1.30	47.84	80.00
Less: Repayment(s) of Loan during the year	0.00	0.00	0.00	0.00	413.17	639.74	0.00	25.00	45.84
Net Closing Loan	452.67	794.39	1315.37	9914.40	10066.41	9759.15	611.30	634.14	668.30
Average Net Loan	452.67	794.15	1309.36	9891.06	10132.92	9912.78	610.65	622.72	651.22
Interest on Loan	40.10	71.08	118.87	902.29	925.41	906.30	55.24	56.25	58.88
Rate of Interest on Loan (%)	8.8579	8.9507	9.0784	9.1223	9.1327	9.1427	9.05	9.03	9.04



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

(₹ in lakh)

Particulars	Combined Asset-I, II, III, V, IV, VI & VII 2014-19			
	Interest Rate (%)	Loan deployed as on 1.4.2014	Addition from 1.4.2014 to 31.3.2019	Total
BOND XXVIII-DOCO XXVIII	9.33	2750.00	0.00	2750.00
BOND XXIX-DOCO XXIX	9.20	2508.00	0.00	2508.00
BOND XXX-DOCO XXX	8.80	1120.00	0.00	1120.00
BOND XXXI-DOCO XXXI	8.90	1848.76	0.00	1848.76
BOND XXXIII-ADDCAP FOR ADD CAP 11-12 XXXIII	8.64	1.30	0.00	1.30
BOND XXXIII-DOCO XXXIII	8.64	248.70	0.00	248.70
BOND-XXXIV-ADDCAP FOR 2012-13 ADDCAP 12-XXXIV	8.84	47.84	0.00	47.84
BOND-XXXIV-DOCO XXXIV	8.84	1092.16	0.00	1092.16
BOND-XXXV-ADDCAP FOR 2012-13 ADD CAP 12-13 XXXV	9.64	86.67	0.00	86.67
BOND-XXXV-DOCO XXXV	9.64	821.25	0.00	821.25
BOND XXXVI-ADDCAP FOR 2012-2013 ADD CAP 12-13 XXXVI	9.35	23.00	0.00	23.00
BOND XXXVIII-DOCO XXXVIII	9.25	350.00	0.00	350.00
BOND XL-ADDCAP FOR 2012-2013 ADD CAP 12-13 XL	9.30	170.48	0.00	170.48
BOND XL-ADDCAP FOR 2013-2014 ADD CAP 13-14 XL	9.30	58.96	0.00	58.96
BOND XL-DOCO XL	9.30	70.56	0.00	70.56
BOND-XLV-ADDCAP FOR 2013-2014 ADD CAP 13-14 XLV	9.65	353.52	0.00	353.52
Total		11551.20	0.00	11551.20



CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2014-19

(₹ in lakh)

Particulars	Combined Asset-I, II, III, V, IV, VI & VII				
	2014-15	2014-15	2014-15	2014-15	2014-15
Gross Opening Loan	11551.20	11551.20	11551.20	11551.20	11551.20
Cumulative Repayments of Loans upto Previous Year	1123.75	1809.33	2494.91	3180.49	3866.07
Net Loans Opening	10427.45	9741.87	9056.29	8370.71	7685.13
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	685.58	685.58	685.58	685.58	685.58
Net Closing Loan	9741.87	9056.29	8370.71	7685.13	6999.55
Average Net Loan	10084.66	9399.08	8713.50	8027.92	7342.34
Interest on Loan	922.44	859.90	797.37	734.83	672.29
Rate of Interest on Loan (%)	914.69	914.88	915.09	915.34	915.64

