

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO. 53/TT/2015

Coram:
Shri A.S. Bakshi, Member
Dr. M. K. Iyer, Member

Date of Hearing : 21.12.2015
Date of Order : 21.04.2016

In the Matter of:

Truing up of transmission tariff for 2009-14 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 and determination of transmission tariff for 2014-19 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014 for Transmission System associated with Kudankulam Atomic Power Project in Southern Region and 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-122001 (Haryana)

.....Petitioner

Versus

1. Karnataka Power Transmission Corporation Limited, (KPTCL),
Kaveri Bhawan,
Bangalore – 560009
2. Transmission Corporation of Andhra Pradesh Limited, (APTRANSCO),
Vidyut Soudha, Hyderabad- 500082
3. Kerala State Electricity Board (KSEB),
Vaidyuthi Bhavanam, Pattom,
Thiruvananthapuram - 695 004
4. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO),
NPKRR Maaligai, 800, Anna Salai,
Chennai - 600 002



5. Electricity Department, Govt. of Pondicherry,
Pondicherry - 605001
6. Eastern Power Distribution Company of Andhra Pradesh Limited, (APEPDCL)
P&T Colony, Seethmmadhara,
Vishakhapatnam, Andhra Pradesh
7. Southern Power Distribution Company of Andhra Pradesh Limited, (APSPDCL),
Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta,
Tirupati-517 501, Chittoor District, Andhra Pradesh
8. Central Power Distribution Company of Andhra Pradesh Limited, (APCPDCL),
Corporate Office, Mint Compound,
Hyderabad - 500 063, Andhra Pradesh
9. Northern Power Distribution Company of Andhra Pradesh Limited, (APNPDCL),
Opp. NIT Petrol Pump, Chaitanyapuri,
Kazipet, Warangal - 506 004, Andhra Pradesh
10. Bangalore Electricity Supply Company Ltd. (BESCOM),
Corporate Office, KR.Circle
Bangalore - 560001, Karnataka
11. Gulbarga Electricity Supply Company Ltd (GESCOM)
Station Main Road, Gulbarga, Karnataka
12. Hubli Electricity Supply Company Ltd, (HESCOM)
Navanagar, PB Road,
Hubli, Karnataka
13. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle,
Mangalore – 575001, Karnataka
14. Chamundeswari Electricity Supply Corporation Ltd., (CESC),
927, L J Avenue, Ground Floor,
New Kantharaj Urs Road, Saraswatipuram,
MYSORE - 570 009, Karnataka
15. Electricity Department Govt. Of Goa
Vidyut Bhawan, Panaji,
Ner Mandvi Hotel, Goa - 403 001

....Respondent(s)

The following were present:



For Petitioner: Shri S.K. Niranjana, PGCIL
Shri S.S. Raju, PGCIL
Shri Jasbir Singh, PGCIL
Shri Rakesh Prasad, PGCIL
Shri Anshul Garg, PGCIL
Shri M.M. Mondal, PGCIL
Shri S.K Venkatesan, PGCIL
Shri Piyush Awasthi, PGCIL
Smt. Sangeeta Edwards, PGCIL

For Respondents: Shri S. Vallinayagam, Advocate, TANGEDCO

ORDER

The petition has been preferred by Power Grid Corporation of India Limited (hereinafter referred to as "the petitioner"), a transmission licensee, for revision of tariff under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations") based on truing up of 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 in respect of Transmission System associated with Kudankulam Atomic Power Project in Southern Region (referred to as "the transmission asset").

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

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

a) The investment approval of the project was accorded by Government of India vide the Memorandum No. 12/18/2003-PG dated 25.5.2005 of Ministry of Power at an estimated cost of ₹177929 lakh including Interest During Construction of ₹7141 lakh at 4th Quarter 2004 price level. Revised cost estimates of project have been approved by Board of Directors of the petitioner vide Memorandum C/CP/Kudankulam dated 3.9.2010 at an estimated cost of ₹215907 lakh including Interest During Construction of ₹22342 lakh at 1st Quarter of 2010 price level. The cost estimates have been revised by the Board of Directors of the petitioner on 12.1.2016 with an estimated cost of ₹218732 lakh including IDC of ₹29487 lakh. The project was scheduled to be commissioned within 42 months from the date of investment approval i.e. 1.12.2008. The scope of works covered broadly includes:-

A. Transmission Lines:

- (i) Kudankulam (NPC) - Tirunelveli (Powergrid) 400 kV (QUAD) D/C Line -1
- (ii) Kudankulam (NPC) - Tirunelveli (Powergrid) 400 kV (QUAD) D/C Line - II
- (iii) Tirunelveli (Powergrid) - Udumalpet (Powergrid) 400 kV D/C Line
- (iv) Tirunelveli (Powergrid) - Edamon (Kerala State Electricity Board) 400 kV Multi Circuit Line
- (v) Edamon (Kerala State Electricity Board) - Muvattupuzha (Powergrid) 400 kV (Quad) D/C Line
- (vi) Muvattupuzha (Powergrid) - North Trichur (Powergrid) 400 kV (Quad) D/C Line
- (vii) LILO of both Circuits of Madurai (Powergrid) - Trivandrum (Powergrid) 400 kV D/C Line at Tirunelveli

B. Sub-stations:

- (i) 400/220 kV Tirunelveli (Powergrid) Sub-Station (New)
- (ii) 400/220 kV Muvattupuzha (Powergrid) Sub-Station (New)
- (iii) 400/220 kV North Trichur (Powergrid) Sub-Station (Extension)
- (iv) 400/220 kV Udumalpet (Powergrid) Sub-Station (Extension)
- (v) 400/220 kV Trivandrum (Powergrid) Sub-Station (Extension)

b) Most of the assets of the project have been commissioned, as per the following details:



Sr. No.	Element	COD	Referred to As	Apportioned approved cost
1	LILO of both circuits of Madurai-Trivandrum 400kV D/C line at Tirunelveli	1.5.2008	"Asset-1"	15236.00
2	ICT-II and downstream system at Tirunelveli Sub-Station	1.5.2008	"Asset-2"	2159.00
3	400kV, 63MVAR bus reactor-II at Tirunelveli Sub-Station	1.11.2008	"Asset-3"	1021.00
4	ICT-I and downstream system at Tirunelveli Sub-Station	1.11.2008	"Asset-4"	2856.00
5	3 Nos. Of 400kV line reactors at Tirunelveli Sub-Station	1.2.2009	"Asset-5"	3213.00
6	Kudamkulam-Tirunelveli 400kV D/C lines	1.4.2009	"Asset-6"	30655.00
7	3 rd 315MVA ICT at Udumalpet Sub-Station	1.4.2009	"Asset-7"	1627.00
8	3 rd 315MVA ICT at Trivandrum Sub-Station	1.7.2009	"Asset-8"	2048.00
9	Tirunelveli-Udumalpet D/C line along with bay extension at Tirunelveli and Udumalpet Sub-Station	1.11.2009	"Asset-9"	26562.00
10	1x63 MVAR Reactor at Tirunelveli Sub-Station	1.2.2010	"Asset-10"	731.00
11	Tirunelveli-Edamon 400kV D/C line (initially to be operated at 220 kV) with associated bays and equipment at Tirunelveli and Edamon (KSEB)	1.7.2010	"Asset-11"	28641.00
12	1 st Switchable Line reactor at Udumalpet Sub-Station	1.12.2010	"Asset-12"	1376.00
13	2 nd Switchable Line reactor at Udumalpet Sub-Station	1.3.2011	"Asset-13"	
14	2 Nos. Of 220kV Bays at Trivandrum Sub-Station	1.9.2011	"Asset-14"	559.00
15	Cochin (Muvattapuzha)-Trichur 400kV D/C quad line	1.12.2011	"Asset-15"	34633.00 (as per 2 nd RCE dated 19.1.2016)
16	2x315 MVAR Transformers at Cochin	1.12.2011	"Asset-16"	6466.00
17	01 No. 400 kV 63 MVAR line reactor at Cochin	1.1.2012	"Asset-17"	751.00
18	01 Nos. 400 kV 63 MVAR line reactor at Cochin	1.6.2012	"Asset-18"	698.00

c) The Commission vide its previous orders admitted the following capital cost as on COD, for the transmission assets:-

(₹ in lakh)

Assets	Notional COD	Tariff period	Capital cost as on COD/ 1.4.2009	Order date
Combined Asset 1,3,5,6	1.4.2009	1.4.2009 to 31.10.2009	48977.46	Order dated 25.4.2012, revised vide order dated 28.5.2012 in Petition No. 22/TT/2012
Combined Asset 1,3,5,6,9	1.11.2009	1.11.2009 to 31.1.2010	74636.86	
Combined Asset 1, 3, 5, 6, 9 & 10	1.2.2010	1.2.2010 to 31.3.2014	75335.46	
Combined Asset 2, 4 & 7	1.4.2009	1.4.2009 to 31.3.2014	6264.16	
Asset-8	1.7.2009	1.7.2009 to 31.3.2014	1836.16	Order dated 20.7.2011 in Petition No. 258/2010
Asset-11	1.7.2010	1.7.2010 to 30.11.2010	26805.95	Order dated 19.8.2011 in Petition No. 306/2010
Combined Asset 11, 12	1.12.2010	1.12.2010 to 28.2.2011	26117.02	Order dated 29.11.2011 in Petition No.346/2010
Combined Asset 11, 12 & 13	1.3.2011	1.3.2011 to 31.3.2014	26732.06	
Asset-14	1.9.2011	1.9.2011 to 31.3.2014	313.62	Order dated 27.1.2014 in Petition No.108/2012
Asset-15	1.12.1011	1.12.2011 to 31.3.2014	28930.83	Order dated 13.2.2014 in Petition No.183/2012
Asset-16	1.12.2011	1.12.2011 to 31.3.2014	6113.76	
Asset-17	1.1.2012	1.1.2012 to 31.3.2014	689.65	Order dated 30.10.2014 in Petition No.81/2012
Asset-18	1.6.12	1.6.2012 to 31.3.2014	552.14	Order dated 21.2.2014 in Petition No.195/2012

d) The Commission in the earlier orders as stated in para 3(c) had disallowed time over-run and the corresponding IDC and IEDC in case of Assets-12, 13, 14 and 18. The details of time over-run and IDC and IEDC disallowed is as below:-

(₹ in lakh)

Asset	Total time over-run (months)	Time over-run disallowed (months)	IDC	IEDC
Asset-12	20	20	16.71	9.62
Asset-13	23	23	21.08	11.29
Asset-14	33	26	17.14	11.57
Asset-18	42	29	58.71	15.13

e) The transmission tariff allowed for the instant assets by the Commission for the 2009-14 tariff period is depicted below:-

(₹ in lakh)

Particulars	Combined Asset-1, 3, 5 and 6	Combined Asset-1, 3, 5, 6 and 9	Combined Asset-1, 3, 5, 6, 9 and 10				
	2009-10 (pro-rata)	2009-10 (pro-rata)	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Depreciation	1508.66	987.89	664.79	4026.30	4044.54	4049.12	4049.12
Interest on Loan	1610.81	888.27	597.10	3461.41	3182.72	2871.41	2555.76
Return on Equity	1505.22	984.32	662.37	4011.59	4029.89	4034.40	4034.40
Interest on Working Capital	123.91	75.46	51.10	309.43	308.37	306.29	304.16
O & M Expenses	550.20	316.64	219.82	1394.52	1474.36	1558.63	1647.53
Total	5298.81	3252.57	2195.19	13203.25	13039.89	12819.84	12590.97

(₹ in lakh)

Particulars	Combined Asset-2, 4 and 7				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Depreciation	334.75	342.73	346.90	346.90	346.90
Interest on Loan	257.25	242.73	223.16	199.35	175.56
Return on Equity	332.23	340.15	344.30	344.30	344.30
Interest on Working Capital	38.14	39.24	40.15	40.86	41.64
O & M Expenses	377.28	398.88	421.71	445.80	471.30
Total	1339.65	1363.73	1376.22	1377.21	1379.70

(₹ in lakh)

Particulars	Asset-8				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Depreciation	75.10	105.30	107.28	107.28	107.28
Interest on Loan	26.27	34.43	32.26	29.35	26.44
Return on Equity	74.59	104.58	106.55	106.55	106.55
Interest on Working Capital	7.01	9.80	10.11	10.33	10.57
O & M Expenses	66.81	94.18	99.57	105.26	111.28
Total	249.78	348.30	355.77	358.77	362.12

(₹ in lakh)

Particulars	Asset-11	Combined Asset-11 &12	Combined Asset-11, 12 and 13			
	2010-11 (pro-rata)	2010-11 (pro-rata)	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Depreciation	457.43	343.07	116.96	1431.44	1462.61	1466.96
Interest on Loan	196.94	147.71	49.88	578.88	533.30	476.87
Return on Equity	457.08	342.81	116.93	1431.96	1464.13	1468.65
Interest on Working Capital	24.71	18.54	6.50	79.45	80.66	80.69
O & M Expenses	88.27	66.20	26.68	338.55	357.89	378.33
Total	1224.44	918.33	316.94	3859.77	3898.59	3871.50

(₹ in lakh)

Particulars	Asset-14		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	10.65	20.16	20.42
Interest on Loan	4.71	8.42	7.79
Return on Equity	10.54	19.96	20.22
Interest on Working Capital	2.81	5.12	5.36
O & M Expenses	47.83	86.68	91.64
Total	76.55	140.34	145.44

(₹ in lakh)

Particulars	Asset-15		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	471.32	1461.96	1461.96
Interest on Loan	274.17	819.60	773.70
Return on Equity	522.12	1615.54	1615.54
Interest on Working Capital	31.31	96.85	97.02
O & M Expenses	125.01	396.48	419.10
Total	1423.94	4390.43	4367.32



(₹ in lakh)

Particulars	Asset-16		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	108.40	334.50	341.59
Interest on Loan	44.86	132.19	125.59
Return on Equity	107.61	332.06	339.10
Interest on Working Capital	11.01	34.36	35.56
O & M Expenses	121.05	383.88	405.84
Total	392.94	1216.98	1247.67

(₹ in lakh)

Particulars	Asset-17		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	9.28	38.54	39.25
Interest on Loan	3.22	12.69	11.77
Return on Equity	9.22	38.28	38.98
Interest on Working Capital	1.14	4.76	4.94
O & M Expenses	14.64	61.92	65.46
Total	37.49	156.18	160.40

(₹ in lakh)

Particulars	Asset-18	
	2012-13 (pro-rata)	2013-14
Depreciation	25.64	32.37
Interest on Loan	22.33	26.53
Return on Equity	25.46	32.15
Interest on Working Capital	4.54	5.71
O & M Expenses	51.60	65.46
Total	129.56	162.23

4. As per Regulation 6 of the 2009 Tariff Regulations, the Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up. Further, as per Regulation 15 of the 2009 Tariff Regulations, the petitioner is

required to adjust the yearly impact of MAT rate in the truing up petition for 2009-14 tariff period.

5. In this context, the petitioner has filed the instant petition for revision of tariff for the tariff period 2009-14 in accordance with Regulation 6 of the 2009 Tariff Regulations.

6. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act 2003. No comments/objections have been received from the public in response to the notice in newspaper. Kerala State Electricity Board (KSEB), Respondent No.3 and TANGEDCO, Respondent No.4 filed reply to the petition, vide affidavit dated 22.5.2015 and 21.1.2016 respectively. The submissions of the respondent are addressed in the respective paragraphs hereunder. The hearing in this matter was held on 21.12.2015.

7. The Commission had directed the petitioner, vide its letter dated 18.12.2015, to submit additional information in respect of additional capital expenditure and rejoinder to the reply filed by KSEB. The petitioner has filed rejoinder to the reply of KSEB. However, no rejoinder has been filed to the reply of TANGEDCO. Further, the Commission directed the petitioner, vide Record of Proceedings dated 21.12.2015, to submit the relevant copy of the order issued by the Government of Kerala for payment of additional crop compensation paid to the affected farmers. The petitioner has submitted the required information vide affidavit dated 11.1.2016 and affidavit dated 22.1.2016.

8. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

9. Clause (3) of the Regulation 6 of the 2009 Tariff Regulations provides as under:-

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

10. The petitioner has submitted the information as required under the 2009 Tariff Regulations for truing up of annual fixed charges for 2009-14 tariff period. The tariff for 2009-14 tariff period has been trued up in the subsequent paragraphs.

Capital Cost

11. The capital cost as on COD claimed by the petitioner for the purpose of tariff determination is as follows:-

(₹ in lakh)

Assets	Notional COD	Apportioned approved cost	Capital Cost on COD/1.4.2009
Combined Asset 1,3,5,6	1.4.2009	50125.00	49083.39
Combined Asset 1,3,5,6,9	1.11.2009	76687.00	75011.49
Combined Asset 1,3,5,6,9 & 10	1.2.2010	77418.00	76174.49
Combined Asset 2,4 & 7	1.4.2009	6642.00	6264.16
Asset-8	1.7.2009	2048.00	1836.15
Asset-11	1.7.2010	28641.00	25426.12
Combined Asset 11, 12	1.12.2010	29329.00	26180.26
Combined Asset 11, 12 & 13	1.3.2011	30017.00	26793.55
Asset-14	1.9.2011	559.00	313.63

Asset-15	1.12.1011	34633.00 (as per 2nd RCE dated 19.1.2016)	28930.83
Asset-16	1.12.2011	6466.00	6113.76
Asset-17	1.1.2012	751.00	689.65
Asset-18	1.6.12	698.00	552.14

12. The last proviso to Regulation 7(2) of the 2009 Tariff Regulations provides that:-

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

13. TANGEDCO has submitted vide affidavit dated 21.1.2016, that the Commission had approved the COD of Asset-6 vide order dated 24.9.2010 in Petition No. 81/2010 citing the proviso to Regulation 3(12)(c) of the Tariff Regulations 2009. The order was later upheld by the Hon’ble Appellate Tribunal in its judgement dated 3.10.2012 in Appeal No. 201 of 2011. TANGEDCO has submitted that they have filed a Civil Appeal No. 2647 of 2013 before the Hon’ble Supreme Court challenging the orders of the Commission as well as the Appellate Tribunal regarding the COD of Asset-6 approved by the Commission vide order dated 24.9.2010 in Petition No. 81/2010 and upheld by the Appellate Tribunal in its judgement dated 3.10.2012 in Appeal No. 201 of 2011. TANGEDCO has requested the Commission, to keep the truing up petition in abeyance till the final disposal of Civil Appeal 2647 of 2013.

14. We have considered the submissions of TANGEDCO. Transmission tariff of the instant assets is trued up, subject to the outcome of the Civil Appeal No. 2647 of 2013 pending before the Hon’ble Supreme Court. The capital cost for the transmission assets

admitted as on COD has been worked out in the subsequent paragraphs after the treatment of the IEDC and IDC and initial spares.

IDC and IEDC

15. There was a delay of 20, 23, 33 and 42 months in commissioning of Asset- 12, 13, 14 and 18 respectively. The IDC and IEDC corresponding to 20, 23, 26 and 29 months in case of Assets-12, 13, 14 and 18 respectively were disallowed.

16. TANGEDCO has submitted that the petitioner has claimed the IDC and IEDC disallowed as part of the capital cost and requested the Commission to limit the IDC and IEDC in respect of those assets.

17. It is observed that the total capital cost on COD claimed by the petitioner, as certified by the Auditor's Certificate dated 20.10.2014, does not include the IDC and IEDC disallowed by the Commission in its earlier orders. The capital cost allowed as on COD after disallowing the IDC and IEDC in respect of Assets 12, 13, 14 and 18 are as follows:-

(₹ in lakh)

Assets	Capital cost claimed	IDC/IEDC disallowed	Capital cost after disallowing IEDC/IDC
Asset-12	583.38	26.33	557.05
Asset-13	626.77	32.37	594.40
Asset-14	342.34	28.71	313.63
Asset-18	625.98	73.84	552.14

Treatment of Initial Spares

18. The initial spares claimed by the petitioner in respect of the transmission assets are as follows:-

(₹ in lakh)

Asset	TL	S/S
Asset-1	-	-
Asset-2	-	57.32
Asset-3	-	8.17
Asset-4	-	40.68
Asset-5	-	116.28
Asset-6	324.05	-
Asset-7	-	58.92
Asset-8	-	96.93
Asset-9	43.23	-
Asset-10	-	-
Asset-11	627.43	-
Asset-12	-	0.96
Asset-13	-	0.00
Asset-14	-	0.09
Asset-15	203.60	-
Asset-16	-	69.83
Asset-17	-	10.32
Asset-18	-	-

19. TANGEDCO has submitted that there is no provision in the 2009 Tariff Regulations for carrying over the unutilised shortfall amount of initial spares due to difference between the actual cost of spares and the ceiling limit for any particular asset and appending it to other assets. TANGEDCO has further submitted that just because there is an upper limit provided in the Regulation, the petitioner should not try to misuse it. The spares procured are not interchangeable to different assets like transmission line elements and sub-station elements and they are applicable only to the concerned element of the transmission asset. TANGEDCO has requested the Commission to limit the initial spares to the allowable norms as per 2009 Tariff Regulations. KSEB has raised issue against the capital cost on COD considered by the petitioner in respect of Asset-6. The Commission observed that the capital cost considered by the petitioner

includes the excess initial spares as well. The capital cost for Asset-6 has been worked out in subsequent paras.

20. We have considered the submission of TANGEDCO and KSEB. The petitioner has claimed the initial spares more than the norms specified in the 2009 Tariff Regulations in case of Assets 6 and 11. It is observed that the petitioner has computed the initial spares based on the overall cost of the assets. We have re-worked the initial spares based on the capital cost of individual asset and the same is depicted below:-

Particulars	Formula	(₹ in lakh)	
		Asset 6	Asset 11
Capital cost as on cut-off date	(a)	29252.87	25541.74
Capital cost for computing initial spares	(b)	29252.87	25541.74
Initial spares claimed	(c)	324.05	627.43
Ceiling limit as per Regulation 8 of 2009 Tariff Regulations	(d)	0.75%	0.75%
Initial spares worked out	(e)= ((b-c)*(1/(1-d)- 1)	218.61	188.27
Excess initial spares claimed	(f)=(c)-(e)	105.44	439.16

21. The initial spares claimed by the petitioner for all the transmission assets except Asset-6 and Asset-11 are within the normative limit. Accordingly, the capital cost as on COD allowed after deducting the excess initial spares and considered for computation of tariff are as follows:-

Assets	(₹ in lakh)		
	Capital cost on COD after disallowing IEDC/IDC	Excess initial spares disallowed	Capital cost allowed as on COD for tariff determination purpose
Combined Asset 1,3,5,6	49083.39	105.44	48977.95
Combined Asset 1,3,5,6,9	74906.05	-	74906.05

Assets	Capital cost on COD after disallowing IEDC/IDC	Excess initial spares disallowed	Capital cost allowed as on COD for tariff determination purpose
Combined Asset 1,3,5,6,9 & 10	76069.05	-	76069.05
Combined Asset 2,4 & 7	6264.16	-	6264.16
Asset-8	1836.16	-	1836.16
Asset-11	25550.05	439.16	25110.89
Combined Asset 11, 12	25865.03 (25891.36-26.33)	-	25865.03
Combined Asset 11, 12 & 13	26478.32 (26510.69-32.37)	-	26478.32
Asset-14	313.63 (342.34-28.71)	-	313.63
Asset-15	28930.83	-	28930.83
Asset-16	6113.76	-	6113.76
Asset-17	689.65	-	689.65
Asset-18	552.14 (625.98-73.84)	-	552.14

22. The petitioner has included the FERV gain and FERV loss in the capital cost up to COD as certified by the auditor.

Additional Capital Expenditure

23. Regulation 6(1) of the 2009 Regulations provides that:-

“The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014”

24. The additional capital expenditure approved by the Commission in the previous orders and that claimed by the petitioner based on actual expenditure are depicted below:-

(₹ in lakh)

Assets	Approved/claimed	Appor-tioned approved cost	Capital cost as on COD/ 1.4.2009	Additional capital expenditure allowed					Total estimated completion cost
				2009-10	2010-11	2011-12	2012-13	2013-14	
Combined Asset 1,3,5,6	Approved	50125.00	48977.46	457.06	-	-	-	-	49434.52
	Actual		49083.39	461.06	-	-	-	-	49544.45
Combined Asset 1,3,5,6,9	Approved	76687.00	74636.86	886.20	-	-	-	-	75523.06
	Actual		75011.49	773.61	-	-	-	-	75785.10
Combined Asset 1,3,5,6,9 &10	Approved	77418.00	75335.46	898.29	526.03	171.99	-	-	76931.77
	Actual		76174.49	321.53	8.30	478.44	11.92	36.64	77031.32
Combined Asset 2,4 & 7	Approved	6642.00	6264.16	143.92	158.08	-	-	-	6566.16
	Actual		6264.16	136.82	113.46	58.34	0.00	0.00	6572.78
Asset-8	Approved	2048.00	1836.16	120.61	75.00	-	-	-	2031.77
	Actual		1836.15	147.17	33.21	15.23	0.00	0.00	2031.76
Asset-11	Approved	28641.00	26805.95	-	1108.44	101.23	134.00	-	28149.62
	Actual		25426.12	-	251.15	1134.09	103.91	18.10	26933.37
Combined Asset 11, 12	Approved	29329.00	26117.02	-	61.06	-	-	-	26178.08
	Actual		26180.26	-	61.06	1134.09	155.02	18.10	27548.53
Combined Asset 11, 12 & 13	Approved	30017.00	26732.06	-	45.67	1054.67	172.46	-	28004.86
	Actual		26793.55	-	47.42	1154.01	212.17	18.10	28225.25
Asset-14	Approved	559.00	313.62	-	-	62.03	10.00	-	385.65
	Actual		313.63	-	-	31.15	70.49	-	415.27
Asset-15	Approved	34633.00*	28930.83	-	-	1875.17	-	-	30806.00
	Actual		28930.83	-	-	1946.68	1343.32	21.70	32242.53
Asset-16	Approved	6466.00	6113.76	-	-	83.78	268.46	-	6466.00
	Actual		6113.76	-	-	83.78	125.76	-	6323.30
Asset-17	Approved	751.00	689.65	-	-	26.85	26.85	-	743.35
	Actual		689.65	-	-	-	4.62	-	694.27
Asset-18	Approved	698.00	552.14	-	-	-	60.97	-	613.11
	Actual		552.14	-	-	-	84.32	-	636.46



25. The petitioner has submitted the Auditor's Certificates dated 20.12.2014 certifying the actual capital cost incurred towards additional capitalization for all the transmission assets. The capital cost of Asset-15 along with the additional capital expenditure has been certified vide Auditor's Certificate dated 22.12.2014. The petitioner has submitted the additional capital expenditure during 2009-14 tariff period is on account of balance and retention payments towards the transmission assets. The petitioner has claimed the actual additional capital expenditure during 2009-14 period under the provision of Regulation 9(1) and 9(2) of the 2009 Tariff Regulations.

26. TANGEDCO has requested that the petitioner may be asked to furnish the details of apportioned cost of the 18 elements covered in this petition. The petitioner has submitted vide affidavit dated 21.1.2016, the RCE for the project, vide Memorandum No. C/CP/RCE-II dated 19.1.2016. The petitioner has also submitted the revised cost estimate for Asset-15.

27. KSEB has submitted that additional capital expenditure upto cut-off date may only be allowed and additional capital expenditure beyond the cut-off date may be disallowed. KSEB has further submitted that the petitioner has claimed additional capital expenditure under the head "balance and retention payments" in case of all assets except Combined Asset 11 & 12, where no justification has been mentioned. In response, the petitioner has submitted revised form-9 in respect of all the assets, claiming the additional capital expenditure under Regulation 9(1) and 9(2) of the 2009 Tariff Regulations.

28. In response to query of the Commission, the petitioner has submitted, vide affidavit dated 21.1.2016, a copy of the Government of Kerala order dated 4.2.2010, to

justify the additional compensation to the farmers/land owners to the tune of ₹2200 lakh pertaining to the corridor of Kochi-Trissur 400 kV line.

29. We have considered the submissions of the petitioner with regard to the actual capital expenditure during 2009-14 tariff period. The capital addition claimed by the petitioner is based on actual capital expenditure incurred as per the Auditor Certificate dated 22.12.2014 in respect of Asset-15 and 20.12.2014 in all other assets and the same is within the original scope of work. The additional capital expenditure claimed by the petitioner towards balance and retention payments is allowed for truing up under Regulation 9(1) for Combined Asset-2, 4, 7, Asset-8, Combined Asset-11, 12, 13, Asset-14, Asset-15, Asset-16, Asset-17 and Asset-18 and under Regulation 9(1) and 9(2) for Combined Asset-1, 3, 5, 6, Combined Asset-1, 3, 5, 6, 9, Combined Asset-1, 3, 5, 6, 9, 10, Asset-11, and Combined Asset-11,12.

30. The additional capital expenditure allowed during 2009-14 tariff period for truing up is as follows:-

(₹ in lakh)

Assets	Capital Cost on COD	Additional capital expenditure								Capital cost as on 31.3.2014	
		2009-10			2010-11			2011-12	2012-13		2013-14
		1.4.2009 to 31.10.2009	1.11.2009 to 31.1.2010	1.2.2010 to 31.3.2010	1.7.2010 to 30.11.2010	1.12.2010 to 28.2.2011	1.3.2011 to 31.3.2011				
Combined Asset 1,3,5,6	48977.95	268.95								49246.90	
Combined Asset 1,3,5,6,9	74906.05		464.17							75370.22	
Combined Asset 1,3,5,6,9 & 10	76069.05			321.52		8.30		478.44	11.92	36.64	76925.87
Combined Asset 2,4 & 7	6264.16		136.82			113.46		58.34			6572.78
Asset-8	1836.16		147.17			33.21		15.23			2031.77
Asset-11	25110.89					197.09					25307.98
Combined Asset 11, 12			25865.03			18.89					25883.92
Combined Asset 11, 12 & 13			26478.32			47.42		1154.01	212.17	18.10	27910.02
Asset-14	313.63							31.15	70.49		415.27
Asset-15	28930.83							4146.68	1343.32	21.70	34442.53
Asset-16	6113.76							83.78	125.76		6323.30
Asset-17	689.65								4.62		694.27
Asset-18	552.14								84.32		636.46
Total Capital Cost of Combined Asset 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18										155952.27	



31. The debt:equity ratio of 70:30 for additional capital expenditure as claimed by the petitioner is in accordance with the Regulation 12 (3) of the 2009 Tariff Regulations and hence, same has been considered towards financing of the additional capital expenditure.

Debt: Equity

32. Regulation 12 of the 2009 Tariff Regulations provides as under:-

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

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

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

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

33. In respect of the additional capitalization, debt: equity ratio of 70:30 has been considered in line with Regulation 12 of the 2009 Tariff Regulations.

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

(₹ in lakh)

Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Combined Asset 1,3,5,6						
Debt	34284.57	70.00	188.27	70.00	34472.83	70.00
Equity	14693.39	30.00	80.69	30.00	14774.07	30.00
Total	48977.95	100.00	268.95	100.00	49246.90	100.00

Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Combined Asset 1,3,5,6,9						
Debt	52434.24	70.00	324.92	70.00	52759.15	70.00
Equity	22471.82	30.00	139.25	30.00	22611.07	30.00
Total	74906.05	100.00	464.17	100.00	75370.22	100.00
Combined Asset 1,3,5,6,9 & 10						
Debt	53248.34	70.00	599.77	70.00	53848.11	70.00
Equity	22820.72	30.00	257.05	30.00	23077.76	30.00
Total	76069.05	100.00	856.82	100.00	76925.87	100.00
Combined Asset 2,4 & 7						
Debt	4384.91	70.00	216.03	70.00	4600.95	70.00
Equity	1879.25	30.00	92.59	30.00	1971.83	30.00
Total	6264.16	100.00	308.62	100.00	6572.78	100.00
Asset-8						
Debt	1285.31	70.00	136.93	70.00	1422.24	70.00
Equity	550.85	30.00	58.68	30.00	609.53	30.00
Total	1836.16	100.00	195.61	100.00	2031.77	100.00
Asset-11						
Debt	17577.62	70.00	137.96	70.00	17715.59	70.00
Equity	7533.27	30.00	59.13	30.00	7592.39	30.00
Total	25110.89	100.00	197.09	100.00	25307.98	100.00
Combined Asset 11, 12						
Debt	18105.52	70.00	13.22	70.00	18118.74	70.00
Equity	7759.51	30.00	5.67	30.00	7765.18	30.00
Total	25865.03	100.00	18.89	100.00	25883.92	100.00
Combined Asset 11, 12 & 13						
Debt	18534.82	70.00	1002.19	70.00	19537.01	70.00
Equity	7943.50	30.00	429.51	30.00	8373.01	30.00
Total	26478.32	100.00	1431.70	100.00	27910.02	100.00
Asset-14						
Debt	219.54	70.00	71.15	70.00	290.69	70.00
Equity	94.09	30.00	30.49	30.00	124.58	30.00
Total	313.63	100.00	101.64	100.00	415.27	100.00
Asset-15						
Debt	20251.58	70.00	3858.19	70.00	24109.77	70.00
Equity	8679.25	30.00	1653.51	30.00	10332.76	30.00

Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Total	28930.83	100.00	5511.70	100.00	34442.53	100.00
Asset-16						
Debt	4280.01	70.01	146.68	70.00	4426.69	70.01
Equity	1833.75	29.99	62.86	30.00	1896.61	29.99
Total	6113.76	100.00	209.54	100.00	6323.30	100.00
Asset-17						
Debt	482.76	70.00	3.23	70.00	485.99	70.00
Equity	206.90	30.00	1.39	30.00	208.28	30.00
Total	689.65	100.00	4.62	100.00	694.27	100.00
Asset-18						
Debt	386.50	70.00	59.02	70.00	445.52	70.00
Equity	165.64	30.00	25.30	30.00	190.94	30.00
Total	552.14	100.00	84.32	100.00	636.46	100.00

Return on Equity (“ROE”)

35. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provides as follows:-

“(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

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

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

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

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

36. The variation in the tax rate during the 2009-14 tariff period applicable to the petitioner as per the Finance Act of the relevant year for the purpose of grossing up of return on equity (ROE) has been furnished as follows:-

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

37. The ROE as trued up and allowed is as follows:-

(₹ in lakh)

Particulars	Combined Asset-1,3,5,6	Combined Asset-1,3,5,6,9	Combined Asset-1,3,5,6,9,10				
	2009-10 (pro-rata)	2009-10 (pro-rata)	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide orders dated 25.4.2012 & 28.5.2012	1505.22	984.32	662.37	4011.59	4029.89	4034.40	4034.40
Claimed by the petitioner	1611.55	1055.99	712.74	4442.67	4461.18	4475.43	4530.67
Allowed after true up in this order	1604.93	1052.32	711.74	4436.62	4455.03	4469.29	4524.57

(₹ in lakh)

Particulars	Combined Asset-2,4,7				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide order dated 25.4.2012	332.23	340.15	344.30	344.30	344.30
Claimed by the petitioner	354.76	375.02	380.38	382.08	386.67
Allowed after true up in this order	354.75	375.03	380.38	382.08	386.68

(₹ in lakh)

Particulars	Asset-8				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide order dated 20.7.2011	74.59	104.58	106.55	106.55	106.55
Claimed by the petitioner	80.24	116.14	117.66	118.10	119.52
Allowed after true up in this order	80.24	116.14	117.66	118.10	119.53

(₹ in lakh)

Particulars	Asset-11	Combined Asset-11,12	Combined Asset-11,12,13			
	2010-11 (pro-rata)	2010-11 (pro-rata)	2010-11 (pro-rata)	2011-12	2012-13	2013-14
As approved vide order dated 29.11.2011	457.08	342.81	116.93	1431.96	1464.13	1468.65
Claimed by the petitioner	618.72	380.80	129.87	1594.87	1634.58	1661.01
Allowed after true up in this order	610.01	375.66	128.26	1575.50	1615.21	1641.45

(₹ in lakh)

Particulars	Asset-14		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 27.1.2014	10.54	19.96	20.22
Claimed by the petitioner	11.16	22.09	24.43
Allowed after true up in this order	11.16	22.09	24.43

(₹ in lakh)

Particulars	Asset-15		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 13.2.2014	522.12	1615.54	1615.54
Claimed by the petitioner	600.70	1961.66	2025.40
Allowed after true up in this order	600.70	1961.66	2025.45

(₹ in lakh)

Particulars	Asset-16		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 13.2.2014	107.61	332.06	339.10



Claimed by the petitioner	119.25	363.85	371.93
Allowed after true up in this order	119.25	363.85	371.93

(₹ in lakh)

Particulars	Asset-17		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 30.10.2014	9.22	38.28	38.98
Claimed by the petitioner	10.02	40.22	40.84
Allowed after true up in this order	10.02	40.22	40.84

(₹ in lakh)

Particulars	Asset-18	
	2012-13 (pro-rata)	2013-14
As approved vide order dated 21.2.2014	25.46	32.15
Claimed by the petitioner	28.79	37.44
Allowed after true up in this order	28.79	37.44

The difference in the approved ROE and that allowed after trueing up is on account of actual grossed up ROE based on actual MAT rate.

Interest on Loan (“IoL”)

38. Regulation 16 of the 2009 Tariff Regulations provide the methodology for working out weighted average rate of IoL. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has dealt with similar issue and 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”.

39. The petitioner has submitted the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, the IoL has been calculated based on actual interest rate submitted by the petitioner, in accordance with the Regulation 16 of

the 2009 Tariff Regulations. The details of weighted average rate of interest is placed in Annexure-1. The IoL worked out is as follows:-

(₹ in lakh)

Particulars	Combined Asset-1,3,5,6	Combined Asset-1,3,5,6,9	Combined Asset-1,3,5,6,9,10				
	2009-10 (pro-rata)	2009-10 (pro-rata)	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide orders dated 25.4.2012 & 28.5.2012	1610.81	888.27	597.10	3461.41	3182.72	2871.41	2555.76
Claimed by the petitioner	1625.88	856.48	565.06	3280.95	3003.81	2743.18	2402.55
Allowed after true up in this order	1619.18	853.54	564.35	3276.96	2997.68	2739.63	2399.40

(₹ in lakh)

Particulars	Combined Asset-2,4,7				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide order dated 25.4.2012	257.25	242.73	223.16	199.35	175.56
Claimed by the petitioner	248.97	230.80	213.52	195.15	168.38
Allowed after true up in this order	248.97	230.67	213.42	195.17	168.38

(₹ in lakh)

Particulars	Asset-8				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide order dated 20.7.2011	26.27	34.43	32.26	29.35	26.44
Claimed by the petitioner	23.78	33.24	31.57	30.90	25.47
Allowed after true up in this order	23.76	33.16	31.55	30.91	25.47

(₹ in lakh)

Particulars	Asset-11	Combined Asset-11,12	Combined Asset-11,12,13			
	2010-11 (pro-rata)	2010-11 (pro-rata)	2010-11 (pro-rata)	2011-12	2012-13	2013-14
As approved vide order dated 29.11.2011	196.94	147.71	49.88	578.88	533.30	476.87
Claimed by the petitioner	263.34	155.87	50.91	625.78	632.70	545.69
Allowed after true up in this order	259.70	153.78	50.25	617.65	624.98	538.93

(₹ in lakh)

Particulars	Asset-14		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 27.1.2014	4.71	8.42	7.79
Claimed by the petitioner	4.28	10.37	11.32
Allowed after true up in this order	4.28	10.38	11.32

(₹ in lakh)

Particulars	Asset-15		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 13.2.2014	274.17	819.60	773.70
Claimed by the petitioner	317.65	1095.88	1037.69
Allowed after true up in this order	317.65	1095.87	1037.68

(₹ in lakh)

Particulars	Asset-16		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 13.2.2014	44.86	132.19	125.59
Claimed by the petitioner	48.23	145.09	128.71
Allowed after true up in this order	48.22	145.12	128.71

(₹ in lakh)

Particulars	Asset-17		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 30.10.2014	3.22	12.69	11.77
Claimed by the petitioner	3.52	13.37	11.47
Allowed after true up in this order	3.52	13.37	11.47



(₹ in lakh)

Particulars	Asset-18	
	2012-13 (pro-rata)	2013-14
As approved vide order dated 21.2.2014	22.33	26.53
Claimed by the petitioner	22.78	28.02
Allowed after true up in this order	22.77	28.02

The difference in the approved IoL and that allowed after truing up is on account of change in the weighted average rate of interest which is computed based on actual loan portfolio and rate of interest.

Depreciation

40. The depreciation has been worked out as per the methodology provided in the Regulation 17 of the 2009 Tariff Regulations. The depreciation allowed is as follows:-

(₹ in lakh)

Particulars	Combined Asset-1,3,5,6	Combined Asset-1,3,5,6,9	Combined Asset-1,3,5,6,9,10				
	2009-10 (pro-rata)	2009-10 (pro-rata)	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide orders dated 25.4.2012 & 28.5.2012	1508.66	987.89	664.79	4026.30	4044.54	4049.12	4049.12
Claimed by the petitioner	1511.99	992.04	669.57	4026.02	4038.72	4051.52	4052.68
Allowed after true up in this order	1505.76	988.61	668.66	4020.45	4033.15	4045.95	4047.12

(₹ in lakh)

Particulars	Combined Asset-2,4,7				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide order dated 25.4.2012	334.75	342.73	346.90	346.90	346.90
Claimed by the petitioner	334.57	341.18	345.71	347.25	347.25



Particulars	Combined Asset-2,4,7				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Allowed after true up in this order	334.57	341.17	345.71	347.25	347.25

(₹ in lakh)

Particulars	Asset-8				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide order dated 20.7.2011	75.10	105.30	107.28	107.28	107.28
Claimed by the petitioner	75.63	105.60	106.88	107.28	107.28
Allowed after true up in this order	75.63	105.60	106.88	107.28	107.28

(₹ in lakh)

Particulars	Asset-11	Combined Asset-11,12	Combined Asset-11,12,13			
	2010-11 (pro-rata)	2010-11 (pro-rata)	2010-11 (pro-rata)	2011-12	2012-13	2013-14
As approved vide order dated 29.11.2011	457.43	343.07	116.96	1431.44	1462.61	1466.96
Claimed by the petitioner	559.19	344.14	117.31	1438.31	1472.45	1477.50
Allowed after true up in this order	551.31	339.47	115.84	1420.73	1454.87	1459.92

(₹ in lakh)

Particulars	Asset-14		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 27.1.2014	10.65	20.16	20.42
Claimed by the petitioner	10.18	20.12	21.98
Allowed after true up in this order	10.18	20.13	21.99

(₹ in lakh)

Particulars	Asset-15		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 13.2.2014	471.32	1461.96	1461.96
Claimed by the petitioner	491.29	1611.58	1641.83
Allowed after true up in this order	491.29	1611.57	1641.83



(₹ in lakh)

Particulars	Asset-16		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 13.2.2014	108.40	334.50	341.59
Claimed by the petitioner	108.34	330.55	333.87
Allowed after true up in this order	108.34	330.55	333.87

(₹ in lakh)

Particulars	Asset-17		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 30.10.2014	9.28	38.54	39.25
Claimed by the petitioner	9.10	36.54	36.66
Allowed after true up in this order	9.10	36.54	36.66

(₹ in lakh)

Particulars	Asset-18	
	2012-13 (pro-rata)	2013-14
As approved vide order dated 21.2.2014	25.64	32.37
Claimed by the petitioner	26.15	33.61
Allowed after true up in this order	26.15	33.61

The difference in the approved depreciation and that allowed after trueing up is on account of change gross block during the 2009-14 tariff period.

Operation & Maintenance Expenses (O&M Expenses)

41. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The normative O&M Expenses are not required to be trued up. Accordingly, the total allowable O&M expenses for the instant assets have been worked out based on norms of O&M Expenses and the details are as follows:-

(₹ in lakh)

Particulars	Combined Asset-1,3,5,6	Combined Asset-1,3,5,6,9	Combined Asset-1,3,5,6,9,10				
	2009-10 (pro-rata)	2009-10 (pro-rata)	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide orders dated 25.4.2012 & 28.5.2012	550.20	316.64	219.82	1394.52	1474.36	1558.63	1647.53
Claimed by the petitioner	550.20	316.64	219.82	1394.52	1474.36	1558.63	1647.53
Allowed after true up in this order	550.20	316.64	219.82	1394.52	1474.36	1558.63	1647.53

(₹ in lakh)

Particulars	Combined Asset-2,4,7				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide order dated 25.4.2012	377.28	398.88	421.71	445.80	471.30
Claimed by the petitioner	377.28	398.88	421.71	445.80	471.30
Allowed after true up in this order	377.28	398.88	421.71	445.80	471.30

(₹ in lakh)

Particulars	Asset-8				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide order dated 20.7.2011	66.81	94.18	99.57	105.26	111.28
Claimed by the petitioner	66.81	94.18	99.57	105.26	111.28
Allowed after true up in this order	66.81	94.18	99.57	105.26	111.28

(₹ in lakh)

Particulars	Asset-11	Combined Asset-11,12	Combined Asset-11,12,13			
	2010-11 (pro-rata)	2010-11 (pro-rata)	2010-11 (pro-rata)	2011-12	2012-13	2013-14
As approved vide order dated 29.11.2011	88.27	66.20	26.68	338.55	357.89	378.33
Claimed by the petitioner	87.26	66.20	26.69	338.55	357.89	378.33
Allowed after true up in this order	87.26	66.20	26.68	338.55	357.89	378.33



(₹ in lakh)

Particulars	Asset-14		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 27.1.2014	47.83	86.68	91.64
Claimed by the petitioner	47.83	86.68	91.64
Allowed after true up in this order	47.83	86.68	91.64

(₹ in lakh)

Particulars	Asset-15		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 13.2.2014	125.01	396.48	419.10
Claimed by the petitioner	125.01	396.48	419.10
Allowed after true up in this order	125.01	396.48	419.10

(₹ in lakh)

Particulars	Asset-16		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 13.2.2014	121.05	383.88	405.84
Claimed by the petitioner	121.05	383.88	405.84
Allowed after true up in this order	121.05	383.88	405.84

(₹ in lakh)

Particulars	Asset-17		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 30.10.2014	14.64	61.92	65.46
Claimed by the petitioner	14.64	61.92	65.46
Allowed after true up in this order	14.64	61.92	65.46

(₹ in lakh)

Particulars	Asset-18	
	2012-13 (pro-rata)	2013-14
As approved vide order dated 21.2.2014	51.60	65.46
Claimed by the petitioner	51.60	65.46
Allowed after true up in this order	51.60	65.46

Interest on Working Capital (IWC)

42. The IWC has been worked out as per the methodology provided in the Regulation 18 of the 2009 Tariff Regulations and allowed as under:-

(₹ in lakh)

Particulars	Combined Asset-1,3,5,6	Combined Asset-1,3,5,6,9	Combined Asset-1,3,5,6,9,10				
	2009-10 (pro-rata)	2009-10 (pro-rata)	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide orders dated 25.4.2012 & 28.5.2012	123.91	75.46	51.10	309.43	308.37	306.29	304.16
Claimed by the petitioner	126.51	76.38	51.58	314.64	313.51	312.86	311.38
Allowed after true up in this order	126.10	76.17	51.53	314.32	313.14	312.54	311.07

(₹ in lakh)

Particulars	Combined Asset-2,4,7				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide order dated 25.4.2012	38.14	39.24	40.15	40.86	41.64
Claimed by the petitioner	38.43	39.69	40.68	41.57	42.38
Allowed after true up in this order	38.43	39.69	40.68	41.57	42.38

(₹ in lakh)

Particulars	Asset-8				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14

Particulars	Asset-8				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
As approved vide order dated 20.7.2011	7.01	9.80	10.11	10.33	10.57
Claimed by the petitioner	7.09	10.03	10.32	10.61	10.82
Allowed after true up in this order	7.09	10.02	10.32	10.61	10.82

(₹ in lakh)

Particulars	Asset-11	Combined Asset-11,12	Combined Asset-11,12,13			
	2010-11 (pro-rata)	2010-11 (pro-rata)	2010-11 (pro-rata)	2011-12	2012-13	2013-14
As approved vide order dated 29.11.2011	24.71	18.54	6.50	79.45	80.66	80.69
Claimed by the petitioner	30.83	19.42	6.76	83.51	85.88	85.76
Allowed after true up in this order	30.45	19.19	6.69	82.67	85.05	84.94

(₹ in lakh)

Particulars	Asset-14		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 27.1.2014	2.81	5.12	5.36
Claimed by the petitioner	2.81	5.20	5.55
Allowed after true up in this order	2.80	5.21	5.55

(₹ in lakh)

Particulars	Asset-15		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 13.2.2014	31.31	96.85	97.02
Claimed by the petitioner	34.15	112.27	114.07
Allowed after true up in this order	34.15	112.27	114.07

(₹ in lakh)

Particulars	Asset-16		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 13.2.2014	11.01	34.36	35.56



Claimed by the petitioner	11.31	35.17	36.12
Allowed after true up in this order	11.31	35.17	36.12

(₹ in lakh)

Particulars	Asset-17		
	2011-12 (pro-rata)	2012-13	2013-14
As approved vide order dated 30.10.2014	1.14	4.76	4.94
Claimed by the petitioner	1.16	4.77	4.92
Allowed after true up in this order	1.15	4.77	4.92

(₹ in lakh)

Particulars	Asset-18	
	2012-13 (pro-rata)	2013-14
As approved vide order dated 21.2.2014	4.54	5.71
Claimed by the petitioner	4.64	5.90
Allowed after true up in this order	4.64	5.90

The difference in the approved IWC and that allowed after truing up is on account of change in the receivables during the 2009-14 tariff period.

APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

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

(₹ in lakh)

Particulars	Combined Asset-1,3,5,6	Combined Asset-1,3,5,6,9	Combined Asset-1,3,5,6,9,10				
	2009-10 (pro-rata)	2009-10 (pro-rata)	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Depreciation							
Opening Gross Block	48977.95	74906.05	76069.05	76390.57	76398.87	76877.31	76889.23
Additional Capitalisation	0.00	8.30	8.30	478.44	478.44	11.92	36.64
Closing Gross Block	49246.90	75370.22	76390.57	76398.87	76877.31	76889.23	76925.87
Average Gross Block	49112.42	75138.14	76229.81	76394.72	76638.09	76883.27	76907.55



Particulars	Combined Asset-1,3,5,6	Combined Asset-1,3,5,6,9	Combined Asset-1,3,5,6,9,10				
	2009-10 (pro-rata)	2009-10 (pro-rata)	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Rate of Depreciation	3.07%	1.32%	0.88%	5.26%	5.26%	5.26%	5.26%
Depreciable Value	44038.28	67461.42	68443.93	68592.35	68811.38	69032.04	69053.90
Balance Useful life of the asset	33	34	33	32	31	30	29
Elapsed Life	0	0	0	1	2	3	4
Remaining Depreciable Value	43622.90	65540.28	65534.17	65013.94	61213.34	57400.85	53376.75
Depreciation during the year	1505.76	988.61	668.66	4020.45	4033.15	4045.95	4047.12
Cumulative depreciation	1921.14	2909.76	3578.41	7598.87	11631.19	15677.15	19724.27
Interest on Loan							
Gross Normative Loan	34284.56	52434.24	53248.34	53473.40	53479.21	53814.12	53822.46
Cumulative Repayment upto Previous Year	415.38	1921.14	2909.76	3578.41	7598.87	11632.02	15677.97
Net Loan-Opening	33869.18	50513.09	50338.58	49894.99	45880.34	42182.10	38144.49
Additions	188.27	324.92	225.06	5.81	334.91	8.34	25.65
Repayment during the year	1505.76	988.61	668.66	4020.45	4033.15	4045.95	4047.12
Net Loan-Closing	32551.69	49849.40	49894.99	45880.34	42182.10	38144.49	34123.01
Average Loan	33210.43	50181.25	50116.78	47887.67	44031.22	40163.29	36133.75
Weighted Average Rate of Interest on Loan (%)	8.3580%	6.8036%	6.7564%	6.8430%	0.07	0.07	0.07
Interest on Loan	1619.18	853.54	564.35	3276.96	2997.68	2739.63	2399.40
Return on Equity							
Opening Equity	14693.38	22471.82	22820.72	22917.17	22919.66	23063.19	23066.77
Additions	80.69	139.25	96.46	2.49	143.53	3.58	10.99
Closing Equity	14774.07	22611.07	22917.17	22919.66	23063.19	23066.77	23077.76
Average Equity	14733.73	22541.44	22868.94	22918.42	22991.43	23064.98	23072.27
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%	15.500%	15.500%
MAT rate for the respective year	16.995%	16.995%	16.995%	19.931%	20.008%	20.008%	20.961%
Rate of Return on Equity	18.674%	18.674%	18.674%	19.358%	19.377%	19.377%	19.610%
Return on Equity	1604.93	1052.32	711.74	4436.62	4455.03	4469.29	4524.57
Interest on Working Capital							
O & M expenses	78.60	105.55	109.91	116.21	122.86	129.89	137.29
Maintenance Spares	141.48	189.98	197.84	209.18	221.15	233.80	247.13
Receivables	1544.62	2191.52	2216.10	2240.48	2212.23	2187.67	2154.95



Particulars	Combined Asset-1,3,5,6	Combined Asset-1,3,5,6,9	Combined Asset-1,3,5,6,9,10				
	2009-10 (pro-rata)	2009-10 (pro-rata)	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Total	1764.70	2487.04	2523.85	2565.87	2556.25	2551.36	2539.37
Rate of Interest(%)	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	126.10	76.17	51.53	314.32	313.14	312.54	311.07
Annual Transmission Charges							
Depreciation	1505.76	988.61	668.66	4020.45	4033.15	4045.95	4047.12
Interest on Loan	1619.18	853.54	564.35	3276.96	2997.68	2739.63	2399.40
Return on Equity	1604.93	1052.32	711.74	4436.62	4455.03	4469.29	4524.57
Interest on Working Capital	126.10	76.17	51.53	314.32	313.14	312.54	311.07
O & M Expenses	550.20	316.64	219.82	1394.52	1474.36	1558.63	1647.53
Total	5406.17	3287.28	2216.10	13442.88	13273.37	13126.05	12929.70

(₹ in lakh)

Particulars	Combined Asset-2,4,7				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Depreciation					
Opening Gross Block	6264.16	6400.98	6514.44	6572.78	6572.78
Additional Capitalisation	113.46	58.34	58.34	0.00	0.00
Closing Gross Block	6400.98	6514.44	6572.78	6572.78	6572.78
Average Gross Block	6332.57	6457.71	6543.61	6572.78	6572.78
Rate of Depreciation	5.28%	5.28%	5.28%	5.28%	5.28%
Depreciable Value	5699.31	5811.94	5889.25	5915.50	5915.50
Balance Useful life of the asset	25	24	23	22	21
Elapsed Life	0	1	2	3	4
Remaining Depreciable Value	5578.71	5356.77	5092.91	4773.45	4426.20
Depreciation during the year	334.57	341.17	345.71	347.25	347.25
Cumulative depreciation	455.17	796.34	1142.05	1489.30	1836.55
Interest on Loan					
Gross Normative Loan	4384.93	4480.70	4560.13	4600.96	4600.96
Cumulative Repayment upto Previous Year	120.60	455.17	796.34	1142.05	1489.30
Net Loan-Opening	4264.33	4025.54	3763.79	3458.91	3111.67
Additions	95.77	79.42	40.84	0.00	0.00
Repayment during the year	334.57	341.17	345.71	347.25	347.25
Net Loan-Closing	4025.54	3763.79	3458.91	3111.67	2764.42
Average Loan	4144.93	3894.66	3611.35	3285.29	2938.04
Weighted Average Rate of Interest on Loan (%)	6.0065%	5.9228%	5.9097%	5.9406%	5.7309%
Interest on Loan	248.97	230.67	213.42	195.17	168.38
Return on Equity					
Opening Equity	1879.23	1920.28	1954.31	1971.82	1971.82
Additions	41.05	34.04	17.50	0.00	0.00



Particulars	Combined Asset-2,4,7				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Closing Equity	1920.28	1954.31	1971.82	1971.82	1971.82
Average Equity	1899.75	1937.30	1963.07	1971.82	1971.82
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
MAT rate for the respective year	16.995%	19.931%	20.008%	20.008%	20.961%
Rate of Return on Equity	18.674%	19.358%	19.377%	19.377%	19.610%
Return on Equity	354.75	375.03	380.38	382.08	386.68
Interest on Working Capital					
O & M expenses	31.44	33.24	35.14	37.15	39.28
Maintenance Spares	56.59	59.83	63.26	66.87	70.70
Receivables	225.67	230.91	233.65	235.31	236.00
Total	313.70	323.98	332.05	339.33	345.97
Rate of Interest(%)	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	38.43	39.69	40.68	41.57	42.38
Annual Transmission Charges					
Depreciation	334.57	341.17	345.71	347.25	347.25
Interest on Loan	248.97	230.67	213.42	195.17	168.38
Return on Equity	354.75	375.03	380.38	382.08	386.68
Interest on Working Capital	38.43	39.69	40.68	41.57	42.38
O & M Expenses	377.28	398.88	421.71	445.80	471.30
Total	1353.99	1385.44	1401.90	1411.86	1415.99

(₹ in lakh)

Particulars	Asset-8				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Depreciation					
Opening Gross Block	1836.16	1983.33	2016.54	2031.77	2031.77
Additional Capitalisation	33.21	15.23	15.23	0.00	0.00
Closing Gross Block	1983.33	2016.54	2031.77	2031.77	2031.77
Average Gross Block	1909.75	1999.94	2024.16	2031.77	2031.77
Rate of Depreciation	3.96%	5.28%	5.28%	5.28%	5.28%
Depreciable Value	1718.77	1799.94	1821.74	1828.59	1828.59
Balance Useful life of the asset	25	24	23	22	21
Elapsed Life	0	1	2	3	4
Remaining Depreciable Value	1718.77	1724.32	1640.52	1540.50	1433.22
Depreciation during the year	75.63	105.60	106.88	107.28	107.28
Cumulative depreciation	75.63	181.22	288.10	395.38	502.65
Interest on Loan					
Gross Normative Loan	1285.33	1388.35	1411.60	1422.26	1422.26
Cumulative Repayment upto Previous Year	0.00	75.63	181.22	288.10	395.38
Net Loan-Opening	1285.33	1312.72	1230.37	1134.16	1026.88
Additions	103.02	23.25	10.66	0.00	0.00
Repayment during the year	75.63	105.60	106.88	107.28	107.28
Net Loan-Closing	1312.72	1230.37	1134.16	1026.88	919.60
Average Loan	1299.03	1271.55	1182.27	1080.52	973.24



Particulars	Asset-8				
	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Weighted Average Rate of Interest on Loan (%)	2.4391%	2.6075%	0.03	0.03	0.03
Interest on Loan	23.76	33.16	31.55	30.91	25.47
Return on Equity					
Opening Equity	550.83	594.98	604.94	609.51	609.51
Additions	44.15	9.96	4.57	0.00	0.00
Closing Equity	594.98	604.94	609.51	609.51	609.51
Average Equity	572.91	599.96	607.23	609.51	609.51
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
MAT rate for the respective year	16.995%	19.931%	20.008%	20.008%	20.961%
Rate of Return on Equity	18.674%	19.358%	19.377%	19.377%	19.610%
Return on Equity	80.24	116.14	117.66	118.10	119.53
Interest on Working Capital					
O & M expenses	7.42	7.85	8.30	8.77	9.27
Maintenance Spares	13.36	14.13	14.94	15.79	16.69
Receivables	56.34	59.85	61.00	62.03	62.40
Total	77.12	81.83	84.23	86.59	88.36
Rate of Interest(%)	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	7.09	10.02	10.32	10.61	10.82
Annual Transmission Charges					
Depreciation	75.63	105.60	106.88	107.28	107.28
Interest on Loan	23.76	33.16	31.55	30.91	25.47
Return on Equity	80.24	116.14	117.66	118.10	119.53
Interest on Working Capital	7.09	10.02	10.32	10.61	10.82
O & M Expenses	66.81	94.18	99.57	105.26	111.28
Total	253.52	359.10	365.98	372.15	374.38

(₹ in lakh)

Particulars	Asset-11	Combined Asset-11,12	Combined Asset-11,12,13			
	2010-11 (pro-rata)	2010-11 (pro-rata)	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Depreciation						
Opening Gross Block	25110.89	25865.03	26478.32	26525.74	27679.75	27891.92
Additional Capitalisation	0.00	0.00	1154.01	1154.01	212.17	18.10
Closing Gross Block	25307.98	25883.92	26525.74	27679.75	27891.92	27910.02
Average Gross Block	25209.43	25874.48	26502.03	27102.75	27785.84	27900.97
Rate of Depreciation	2.19%	1.31%	0.44%	5.24%	5.24%	5.23%
Depreciable Value	22688.49	23287.03	23851.83	24392.47	25007.25	25110.87
Balance Useful life of	35.00	34.00	34.00	33	32	31



Particulars	Asset-11	Combined Asset-11,12	Combined Asset-11,12,13			
	2010-11 (pro-rata)	2010-11 (pro-rata)	2010-11 (pro-rata)	2011-12	2012-13	2013-14
the asset						
Elapsed Life	0	0	0	1	2	3
Remaining Depreciable Value	22599.80	22404.75	23374.25	23374.25	22568.30	21217.05
Depreciation during the year	551.31	339.47	115.84	1420.73	1454.87	1459.92
Cumulative depreciation	551.31	890.78	1018.22	2438.95	3893.82	5353.74
Interest on Loan						
Gross Normative Loan	17577.62	18105.52	18534.82	18568.02	19375.83	19524.34
Cumulative Repayment upto Previous Year	0.00	551.31	902.38	1018.22	2438.95	3893.82
Net Loan-Opening	17577.62	17554.21	17632.44	17549.80	16936.87	15630.52
Additions	137.96	13.22	33.19	807.81	148.52	12.67
Repayment during the year	551.31	339.47	115.84	1420.73	1454.87	1459.92
Net Loan-Closing	17164.28	17227.97	17549.80	16936.87	15630.52	14183.27
Average Loan	17370.95	17391.09	17591.12	17243.34	16283.70	14906.90
Weighted Average Rate of Interest on Loan (%)	3.5880%	3.5370%	3.4281%	3.5820%	3.8381%	3.6153%
Interest on Loan	259.70	153.78	50.25	617.65	624.98	538.93
Return on Equity						
Opening Equity	7533.27	7759.51	7943.50	7957.72	8303.93	8367.58
Additions	59.13	5.67	14.23	346.20	63.65	5.43
Closing Equity	7592.39	7765.18	7957.72	8303.93	8367.58	8373.01
Average Equity	7562.83	7762.34	7950.61	8130.82	8335.75	8370.29
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%	15.500%
MAT rate for the respective year	19.931%	19.931%	19.931%	20.008%	20.008%	20.961%
Rate of Return on Equity	19.358%	19.358%	19.358%	19.377%	19.377%	19.610%
Return on Equity	610.01	375.66	128.26	1575.50	1615.21	1641.45
Interest on Working Capital						
O & M expenses	17.45	22.07	26.68	28.21	29.82	31.53
Maintenance Spares	31.41	39.72	48.03	50.78	53.68	56.75
Receivables	615.49	636.21	655.46	672.52	689.67	683.93
Total	664.36	698.00	730.18	751.51	773.17	772.20
Rate of Interest(%)	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%
Interest	30.45	19.19	6.69	82.67	85.05	84.94



Particulars	Asset-11	Combined Asset-11,12	Combined Asset-11,12,13			
	2010-11 (pro-rata)	2010-11 (pro-rata)	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Annual Transmission Charges						
Depreciation	551.31	339.47	115.84	1420.73	1454.87	1459.92
Interest on Loan	259.70	153.78	50.25	617.65	624.98	538.93
Return on Equity	610.01	375.66	128.26	1575.50	1615.21	1641.45
Interest on Working Capital	30.45	19.19	6.69	82.67	85.05	84.94
O & M Expenses	87.26	66.20	26.68	338.55	357.89	378.33
Total	1538.73	954.31	327.73	4035.10	4138.00	4103.56

(₹ in lakh)

Particulars	Asset-14		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation			
Opening Gross Block	313.63	344.78	415.27
Additional Capitalisation	31.15	70.49	0.00
Closing Gross Block	344.78	415.27	415.27
Average Gross Block	329.21	380.03	415.27
Rate of Depreciation	5.30%	5.30%	5.29%
Depreciable Value	296.28	342.02	373.74
Balance Useful life of the asset	25.00	24.00	23.00
Elapsed Life	0.00	1.00	2.00
Remaining Depreciable Value	296.28	331.85	343.44
Depreciation during the year	10.18	20.13	21.99
Cumulative depreciation	10.18	30.30	52.29
Interest on Loan			
Gross Normative Loan	219.54	241.35	290.69
Cumulative Repayment upto Previous Year	0.00	10.18	30.30
Net Loan-Opening	219.54	231.18	260.39
Additions	21.81	49.34	0.00
Repayment during the year	10.18	20.13	21.99
Net Loan-Closing	231.18	260.39	238.40
Average Loan	225.36	245.78	249.40
Weighted Average Rate of Interest on Loan (%)	3.2548%	4.2229%	4.5407%
Interest on Loan	4.28	10.38	11.32
Return on Equity			
Opening Equity	94.09	103.43	124.58
Additions	9.34	21.15	0.00
Closing Equity	103.43	124.58	124.58
Average Equity	98.76	114.00	124.58
Return on Equity (Base Rate)	15.500%	15.500%	15.500%
MAT rate for the respective year	20.008%	20.008%	20.961%
Rate of Return on Equity	19.377%	19.377%	19.610%
Return on Equity	11.16	22.09	24.43



Particulars	Asset-14		
	2011-12 (pro-rata)	2012-13	2013-14
Interest on Working Capital			
O & M expenses	6.83	7.22	7.64
Maintenance Spares	12.30	13.00	13.75
Receivables	21.79	24.08	25.82
Total	40.92	44.31	47.20
Rate of Interest(%)	11.75%	11.75%	11.75%
Interest	2.80	5.21	5.55
Annual Transmission Charges			
Depreciation	10.18	20.13	21.99
Interest on Loan	4.28	10.38	11.32
Return on Equity	11.16	22.09	24.43
Interest on Working Capital	2.80	5.21	5.55
O & M Expenses	47.83	86.68	91.64
Total	76.26	144.48	154.93

(₹ in lakh)

Particulars	Asset-15		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation			
Opening Gross Block	28930.83	33077.51	34420.83
Additional Capitalisation	4146.68	1343.32	21.70
Closing Gross Block	33077.51	34420.83	34442.53
Average Gross Block	31004.17	33749.17	34431.68
Rate of Depreciation	4.75%	4.78%	4.77%
Depreciable Value	25601.13	28071.63	28685.89
Balance Useful life of the asset	33.00	32.00	31.00
Elapsed Life	0.00	1.00	2.00
Remaining Depreciable Value	25601.13	27580.34	26583.03
Depreciation during the year	491.29	1611.57	1641.83
Cumulative depreciation	491.29	2102.86	3744.69
Interest on Loan			
Gross Normative Loan	20252.67	23155.35	24095.67
Cumulative Repayment upto Previous Year	0.00	491.29	2102.86
Net Loan-Opening	20252.67	22664.06	21992.81
Additions	2902.68	940.32	15.19
Repayment during the year	491.29	1611.57	1641.83
Net Loan-Closing	22664.06	21992.81	20366.17
Average Loan	21458.36	22328.43	21179.49
Weighted Average Rate of Interest on Loan (%)	4.4409%	4.9080%	4.8995%
Interest on Loan	317.65	1095.87	1037.68
Return on Equity			
Opening Equity	8678.16	9922.16	10325.16
Additions	1244.00	403.00	6.51
Closing Equity	9922.16	10325.16	10331.67
Average Equity	9300.16	10123.66	10328.42
Return on Equity (Base Rate)	15.500%	15.500%	15.500%
MAT rate for the respective year	20.008%	20.008%	20.961%
Rate of Return on Equity	19.377%	19.377%	19.610%
Return on Equity	600.70	1961.66	2025.45



Particulars	Asset-15		
	2011-12 (pro-rata)	2012-13	2013-14
Interest on Working Capital			
O & M expenses	31.25	33.04	34.93
Maintenance Spares	56.26	59.47	62.87
Receivables	784.40	862.97	873.02
Total	871.90	955.49	970.81
Rate of Interest(%)	11.75%	11.75%	11.75%
Interest	34.15	112.27	114.07
Annual Transmission Charges			
Depreciation	491.29	1611.57	1641.83
Interest on Loan	317.65	1095.87	1037.68
Return on Equity	600.70	1961.66	2025.45
Interest on Working Capital	34.15	112.27	114.07
O & M Expenses	125.01	396.48	419.10
Total	1568.79	5177.85	5238.13

(₹ in lakh)

Particulars	Asset-16		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation			
Opening Gross Block	6113.76	6197.54	6323.30
Additional Capitalisation	83.78	125.76	0.00
Closing Gross Block	6197.54	6323.30	6323.30
Average Gross Block	6155.65	6260.42	6323.30
Rate of Depreciation	1.76%	5.28%	5.28%
Depreciable Value	5540.09	5634.38	5690.97
Balance Useful life of the asset	25.00	24.00	23.00
Elapsed Life	0.00	1.00	2.00
Remaining Depreciable Value	5540.09	5526.04	5252.08
Depreciation during the year	108.34	330.55	333.87
Cumulative depreciation	108.34	438.89	772.76
Interest on Loan			
Gross Normative Loan	4280.01	4338.66	4426.69
Cumulative Repayment upto Previous Year	0.00	108.34	438.89
Net Loan-Opening	4280.01	4230.32	3987.80
Additions	58.65	88.03	0.00
Repayment during the year	108.34	330.55	333.87
Net Loan-Closing	4230.32	3987.80	3653.93
Average Loan	4255.16	4109.06	3820.86
Weighted Average Rate of Interest on Loan (%)	3.4000%	3.5318%	3.3686%
Interest on Loan	48.22	145.12	128.71
Return on Equity			
Opening Equity	1833.75	1858.88	1896.61
Additions	25.13	37.73	0.00
Closing Equity	1858.88	1896.61	1896.61
Average Equity	1846.32	1877.75	1896.61
Return on Equity (Base Rate)	15.500%	15.500%	15.500%
MAT rate for the respective year	20.008%	20.008%	20.961%
Rate of Return on Equity	19.377%	19.377%	19.610%
Return on Equity	119.25	363.85	371.93



Particulars	Asset-16		
	2011-12 (pro-rata)	2012-13	2013-14
Interest on Working Capital			
O & M expenses	30.26	31.99	33.82
Maintenance Spares	54.47	57.58	60.88
Receivables	204.09	209.76	212.75
Total	288.82	299.33	307.44
Rate of Interest(%)	11.75%	11.75%	11.75%
Interest	11.31	35.17	36.12
Annual Transmission Charges			
Depreciation	108.34	330.55	333.87
Interest on Loan	48.22	145.12	128.71
Return on Equity	119.25	363.85	371.93
Interest on Working Capital	11.31	35.17	36.12
O & M Expenses	121.05	383.88	405.84
Total	408.18	1258.58	1276.48

(₹ in lakh)

Particulars	Asset-17		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation			
Opening Gross Block	689.65	689.65	694.27
Additional Capitalisation	0.00	4.62	0.00
Closing Gross Block	689.65	694.27	694.27
Average Gross Block	689.65	691.96	694.27
Rate of Depreciation	1.32%	5.28%	5.28%
Depreciable Value	620.69	622.76	624.84
Balance Useful life of the asset	25.00	24.00	23.00
Elapsed Life	0.00	1.00	2.00
Remaining Depreciable Value	620.69	613.66	579.20
Depreciation during the year	9.10	36.54	36.66
Cumulative depreciation	9.10	45.64	82.30
Interest on Loan			
Gross Normative Loan	482.76	482.76	485.99
Cumulative Repayment upto Previous Year	0.00	9.10	45.64
Net Loan-Opening	482.76	473.66	440.36
Additions	0.00	3.23	0.00
Repayment during the year	9.10	36.54	36.66
Net Loan-Closing	473.66	440.36	403.70
Average Loan	478.21	457.01	422.03
Weighted Average Rate of Interest on Loan (%)	2.9413%	2.9257%	2.7177%
Interest on Loan	3.52	13.37	11.47
Return on Equity			



Particulars	Asset-17		
	2011-12 (pro-rata)	2012-13	2013-14
Opening Equity	206.89	206.89	208.28
Additions	0.00	1.39	0.00
Closing Equity	206.89	208.28	208.28
Average Equity	206.89	207.58	208.28
Return on Equity (Base Rate)	15.500%	15.500%	15.500%
MAT rate for the respective year	20.008%	20.008%	20.961%
Rate of Return on Equity	19.377%	19.377%	19.610%
Return on Equity	10.02	40.22	40.84
Interest on Working Capital			
O & M expenses	4.88	5.16	5.46
Maintenance Spares	8.79	9.29	9.82
Receivables	25.63	26.14	26.56
Total	39.29	40.58	41.83
Rate of Interest(%)	11.75%	11.75%	11.75%
Interest	1.15	4.77	4.92
Annual Transmission Charges			
Depreciation	9.10	36.54	36.66
Interest on Loan	3.52	13.37	11.47
Return on Equity	10.02	40.22	40.84
Interest on Working Capital	1.15	4.77	4.92
O & M Expenses	14.64	61.92	65.46
Total	38.44	156.82	159.35

(₹ in lakh)

Particulars	Asset-18	
	2012-13 (pro-rata)	2013-14
Depreciation		
Opening Gross Block	552.14	636.46
Additional Capitalisation	84.32	0.00
Closing Gross Block	636.46	636.46
Average Gross Block	594.30	636.46
Rate of Depreciation	4.40%	5.28%
Depreciable Value	534.87	572.81
Balance Useful life of the asset	25.00	24.00
Elapsed Life	0.00	1.00
Remaining Depreciable Value	534.87	546.66
Depreciation during the year	26.15	33.61
Cumulative depreciation	26.15	59.75
Interest on Loan		



Particulars	Asset-18	
	Gross Normative Loan	386.50
Cumulative Repayment upto Previous Year	0.00	26.15
Net Loan-Opening	386.50	419.37
Additions	59.02	0.00
Repayment during the year	26.15	33.61
Net Loan-Closing	419.37	385.77
Average Loan	402.94	402.57
Weighted Average Rate of Interest on Loan (%)	6.7826%	6.9591%
Interest on Loan	22.77	28.02
Return on Equity		
Opening Equity	165.64	190.94
Additions	25.30	0.00
Closing Equity	190.94	190.94
Average Equity	178.29	190.94
Return on Equity (Base Rate)	15.500%	15.500%
MAT rate for the respective year	20.008%	20.961%
Rate of Return on Equity	19.377%	19.610%
Return on Equity	28.79	37.44
Interest on Working Capital		
O & M expenses	5.16	5.46
Maintenance Spares	9.29	9.82
Receivables	26.79	28.40
Total	41.24	43.68
Rate of Interest (%)	13.50%	13.50%
Interest	4.64	5.90
Annual Transmission Charges		
Depreciation	26.15	33.61
Interest on Loan	22.77	28.02
Return on Equity	28.79	37.44
Interest on Working Capital	4.64	5.90
O & M Expenses	51.60	65.46
Total	133.95	170.42

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

44. The tariff charges claimed by the petitioner for 2014-19 tariff period is as follows:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	8054.42	8054.42	8054.42	8054.42	8054.42
Interest on Loan	3961.59	3469.74	2983.99	2508.32	2045.66



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity	9200.47	9200.47	9200.47	9200.47	9200.47
Interest on Working Capital	673.80	668.64	663.81	659.44	655.57
O & M Expenses	3356.84	3468.37	3583.40	3702.41	3825.22
Total	25247.12	24861.64	24486.09	24125.06	23781.34

Capital Cost

45. Clause (3) and (6) of Regulation 9 of 2014 Tariff Regulation provide as follows:-

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

- (a) the capital cost admitted by the Commission prior to 1.4.2014 duly tried up by excluding liability, if any, as on 1.4.2014;
- (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and
- (c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”

“(6) The following shall be excluded or removed from the capital cost of the existing and new project:

- (a) The assets forming part of the project, but not in use; (b) Decapitalisation of Asset;”

46. The capital cost of ₹155952.27 lakh worked out by the Commission as on 31.3.2014 for the Combined Assets has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations.

Additional Capital Expenditure

47. The petitioner has not claimed any additional capital expenditure during 2014-19.

Debt: Equity

48. Clause (1) and (3) of Regulation 19 of the 2014 Tariff Regulations provide as under:-

“19. Debt-Equity Ratio: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity

actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.”

“(3) In case of the generating station and the transmission system including communication 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.”

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as maybe 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.”

49. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

(₹ in lakh)					
Funding	Capital cost as on 1.4.2014	(%)	Additional capital expenditure during 2014-19	Total Cost as on 31.3.2019	(%)
Debt	109166.97	70.00	00.00	109166.97	70.00
Equity	46785.30	30.00	00.00	46785.30	30.00
Total	155952.27	100.00	00.00	155952.27	100.00

Return on Equity (ROE)

50. Clause (1) and (2) of Regulations 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.”

51. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during the 2013-14 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in accordance with Clause (3) of Regulation 25 of the 2014 Tariff Regulations. The ROE has been worked out and allowed as follows:-

(₹ in lakh)

Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	46785.68	46785.68	46785.68	46785.68	46785.68
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	46785.68	46785.68	46785.68	46785.68	46785.68
Average Equity	46785.68	46785.68	46785.68	46785.68	46785.68
Return on Equity (Base Rate) (%)	15.500%	15.500%	15.500%	15.500%	15.500%
MAT Rate for respective year (%)	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (%)	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity	9174.88	9174.88	9174.88	9174.88	9174.88

Interest on Loan (“IoL”)

52. Clause 5 and Clause 6 of Regulation 26 of the 2014 Tariff Regulations provides that:-

“(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.”

53. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2014. The petitioner has prayed that the change in interest rate due

to floating rate of interest applicable, if any, during 2014-19 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. By considering above, the IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest for 2014-19 tariff period are placed in Annexure-2 and the IoL has been worked out and allowed as follows:-

(₹ in lakh)					
Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	109166.59	109166.59	109166.59	109166.59	109166.59
Cumulative Repayment upto Previous Year	32150.80	40182.06	48213.31	56244.57	64275.82
Net Loan-Opening	77015.78	68984.53	60953.27	52922.02	44890.76
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	8031.25	8031.25	8031.25	8031.25	8031.25
Net Loan-Closing	68984.53	60953.27	52922.02	44890.76	36859.51
Average Loan	73000.16	64968.90	56937.65	48906.39	40875.14
Weighted Average Rate of Interest on Loan (%)	5.4099%	5.3238%	5.2240%	5.1122%	4.9881%
Interest on Loan	3949.24	3458.80	2974.45	2500.20	2038.89

Depreciation

54. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide that:-

"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.”

55. KSEB has raised objection regarding the mismatch in the values of “depreciation up to previous year” and “cumulative repayment of loan up to previous year”. The petitioner has since addressed the concern raised by KSEB and has submitted the revised forms.

56. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2014 and accumulated depreciation up to 31.3.2014. The depreciation allowed for the instant transmission assets are as follows:-

(₹ in lakh)

Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	155952.27	155952.27	155952.27	155952.27	155952.27
Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	155952.27	155952.27	155952.27	155952.27	155952.27
Average Gross Block	155952.27	155952.27	155952.27	155952.27	155952.27
Rate of Depreciation (%)	5.15%	5.15%	5.15%	5.15%	5.15%
Elapsed life	5	6	7	8	9
Balance Useful life of the asset	27	26	25	24	23
Remaining Depreciable Value	105625.47	97594.22	89562.96	81531.71	73500.45
Depreciation during the year	8031.25	8031.25	8031.25	8031.25	8031.25
Depreciation upto previous year	32150.80	40182.06	48213.31	56244.57	64275.82
Cumulative depreciation (incl. of AAD)	40182.06	48213.31	56244.57	64275.82	72307.08

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

57. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specify the norms for O&M Expenses for the transmission system. The total allowable O&M Expenses for the instant assets have been worked out and allowed are as follows:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV Bays:					
No. of Bays	33	33	33	33	33
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
220 kV Bays:					
No. of Bays	19	19	19	19	19
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.1
Line: D/C bundled (4 or more sub- conductor):					
Line Length (km)	230.22	230.22	230.22	230.22	230.22
Norms (₹ lakh/km)	1.062	1.097	1.133	1.171	1.21
Line: D/C (Twin Conductor):					
Line Length (km)	453.258	453.258	453.258	453.258	453.258
Norms (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
Total O&M Expenses (₹ lakh)	3356.84	3468.37	3583.40	3702.41	3825.22

58. The petitioner has further submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rate specified for the 2014-19 tariff period. The petitioner has also prayed that it will approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

59. KSEB has submitted that the petitioner’s request for enhancement of O&M charges beyond the norms specified in the 2014 Tariff Regulations may not be allowed.

60. We have considered the submissions of the petitioner and KSEB. Any application filed by the petitioner for revision of O&M Expenses on account of wage revision will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The O&M Expenses are allowed for the instant transmission asset as per prevailing norms.

Interest on Working Capital (“IWC”)

61. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specifies as follows:

“28. Interest on Working Capital

- (c) (i) Receivables equivalent to two months of fixed cost;
(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and
(iii) Operation and maintenance expenses for one month”

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

62. The petitioner has submitted that it has computed interest on working capital for the tariff block 2014-19 considering the SBI Base Rate plus 350 basis points as on 1.4.2014. The rate of interest on working capital considered is 13.50%.

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

(₹ in lakh)

Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	279.74	289.03	298.62	308.53	318.77
Maintenance Spares	503.53	520.26	537.51	555.36	573.78
Receivables	4197.44	4133.43	4071.08	4011.15	3954.09

Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
Total	4980.70	4942.72	4907.20	4875.04	4846.64
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	672.39	667.27	662.47	658.13	654.30

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

64. The transmission charges allowed for the instant transmission assets for the 2014-19 tariff period are summarised below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	155952.27	155952.27	155952.27	155952.27	155952.27
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	155952.27	155952.27	155952.27	155952.27	155952.27
Average Gross Block	155952.27	155952.27	155952.27	155952.27	155952.27
Rate of Depreciation	5.15%	5.15%	5.15%	5.15%	5.15%
Depreciable Value	137776.28	137776.28	137776.28	137776.28	137776.28
Balance Useful life of the asset	27	26	25	24	23
Elapsed Life	5	6	7	8	9
Remaining Depreciable Value	105625.47	97594.22	89562.96	81531.71	73500.45
Depreciation	8031.25	8031.25	8031.25	8031.25	8031.25
Cumulative depreciation	40182.06	48213.31	56244.57	64275.82	72307.08
Interest on Loan					
Gross Normative Loan	109166.59	109166.59	109166.59	109166.59	109166.59
Cumulative Repayment upto Previous Year	32150.80	40182.06	48213.31	56244.57	64275.82
Net Loan-Opening	77015.78	68984.53	60953.27	52922.02	44890.76
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	8031.25	8031.25	8031.25	8031.25	8031.25
Net Loan-Closing	68984.53	60953.27	52922.02	44890.76	36859.51
Average Loan	73000.16	64968.90	56937.65	48906.39	40875.14
Weighted Average Rate of Interest on Loan	5.4099%	5.3238%	5.2240%	5.1122%	4.9881%
Interest	3949.24	3458.80	2974.45	2500.20	2038.89
Return on Equity					
Opening Equity	46785.68	46785.68	46785.68	46785.68	46785.68
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	46785.68	46785.68	46785.68	46785.68	46785.68
Average Equity	46785.68	46785.68	46785.68	46785.68	46785.68
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
MAT rate for the respective year	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity	9174.88	9174.88	9174.88	9174.88	9174.88
Interest on Working Capital					
O & M expenses	279.74	289.03	298.62	308.53	318.77
Maintenance Spares	503.53	520.26	537.51	555.36	573.78
Receivables	4197.44	4133.43	4071.08	4011.15	3954.09
Total	4980.70	4942.72	4907.20	4875.04	4846.64
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on working capital	672.39	667.27	662.47	658.13	654.30
Annual Transmission Charges					
Depreciation	8031.25	8031.25	8031.25	8031.25	8031.25
Interest on Loan	3949.24	3458.80	2974.45	2500.20	2038.89
Return on Equity	9174.88	9174.88	9174.88	9174.88	9174.88
Interest on Working Capital	672.39	667.27	662.47	658.13	654.30
O & M Expenses	3356.84	3468.37	3583.40	3702.41	3825.22
Total	25184.61	24800.57	24426.45	24066.87	23724.55

Deferred Tax Liability

65. The petitioner has sought recovery of deferred tax liability before 31.3.2019 from the beneficiaries or long term consumers/ DICs as and when materialized. The deferred tax liability shall be dealt as per Regulations 49 of the 2014 Tariff Regulations. Accordingly, the petitioner is entitled to recover the deferred tax liability upto 31.3.2009 whenever the same gets materialized directly from the beneficiaries or long term transmission customers /DICs.

Filing Fee and the Publication Expenses

66. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the

beneficiaries on pro-rata basis in accordance with Regulation 52 (1) of the 2014 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

67. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 52 (2) (b) of the 2014 Tariff Regulations for 2014-19 tariff period. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with Regulations 52 (2) (a) of the 2014 Tariff Regulations for 2014-19 tariff period.

Service Tax

68. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. We are of the view that the petitioner's prayer is premature.

Foreign Exchange Rate Variation

69. 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 Clause 1 of Regulation 51 of the 2014 Tariff Regulations.

Sharing of Transmission Charges

70. 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.

71. This order disposes of Petition No. 53/TT/2015.

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

Sd/-
(A.S. Bakshi)
Member

Combined Asset 1,3,5,6,9,10:

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

Particulars	Interest Rate (%)					Loan deployed as on 1.4.2009	Additions during the tariff period	Total
	2009-10	2010-11	2011-12	2012-13	2013-14			
BOND XIX-DOCO-	9.25	9.25	9.25	9.25	9.25	574.00	0.00	574.00
BOND XX-DOCO-	8.93	8.93	8.93	8.93	8.93	40.00	0.00	40.00
BOND XXI-DOCO-	8.73	8.73	8.73	8.73	8.73	4648.00	0.00	4648.00
BOND XXII-DOCO-	8.68	8.68	8.63	8.68	8.68	5540.00	0.00	5540.00
BOND XXIV-DOCO-	9.95	9.95	9.95	9.95	9.95	1880.00	0.00	1880.00
BOND XXV-ADD CAP FOR 2009-2010 add cap-	10.10	10.10	10.10	10.10	10.10	0.00	225.07	225.07
BOND XXV-ADD CAP FOR 2010-2011 add cap-	0.00	10.10	10.10	10.10	10.10	0.00	5.81	5.81
BOND XXV-ADD CAP FOR 2011-2012 add cap-	0.00	0.00	10.10	10.10	10.10	0.00	237.51	237.51
BOND XXV-DOCO-	10.10	10.10	10.10	10.10	10.10	15335.19	0.00	15335.19
BOND XXVI-ADDCAP FOR 2011-2012 add cap-	0.00	0.00	9.30	9.30	9.30	0.00	83.32	83.32
BOND XXVI-DOCO-	9.30	9.30	9.30	9.30	9.30	1549.20	0.00	1549.20
ADB III-DOCO 1-40.87	1.7200	1.9300	1.8943	2.1134	1.8844	4495.70	0.00	4495.70
ADB III-DOCO 2-49.4	1.7200	1.9300	1.8943	2.1134	1.8844	296.40	0.00	296.40
ADB III-DOCO 3-49.57	1.7200	1.9300	1.8943	2.1134	1.8844	892.26	0.00	892.26
ADB III-DOCO 4-47.41	1.7200	1.9300	1.8943	2.1134	1.8844	13417.03	0.00	13417.03
BOND XXVIII-ADDCAP FOR 2011-2012 add cap-	0.00	2.91	5.57	5.09	4.61	0.00	14.07	14.07
BOND XXVII-DOCO-	9.33	9.33	9.33	9.33	9.33	4653.70	0.00	4653.70
BOND XXXVI-ADD CAP FOR 2012-2013 add	0.00	0.00	0.00	9.35	9.35	0.00	8.34	8.34

Particulars	Interest Rate (%)					Loan deployed as on 1.4.2009	Additions during the tariff period	Total
cap-								
BOND XXXVIII-ADDCAP FOR 2013-2014 add cap-	0.00	0.00	0.00	0.00	9.25	0.00	25.65	25.65
Total						53321.48	599.77	53921.25

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

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	53321.48	53546.55	53552.36	53887.26	53895.60
Cumulative Repayments of Loans upto Previous Year	254.59	254.59	1891.69	5063.50	8710.65
Net Loans Opening	53066.89	53291.96	51660.67	48823.76	45184.95
Add: Draw(s) during the Year	225.07	5.81	334.90	8.34	25.65
Less: Repayments of Loan during the year	0.00	1637.10	3171.81	3647.15	3732.56
Net Closing Loan	53291.96	51660.67	48823.76	45184.95	41478.04
Average Net Loan	53179.43	52476.32	50242.22	47004.36	43331.50
Rate of Interest on Loan (%)	6.7564%	6.8430%	6.8081%	6.8212%	6.6403%
Interest on Loan	3593.02	3590.97	3420.53	3206.28	2877.35



Combined Asset 2,4,7:

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

Particulars	Interest Rate (%)					Loan deployed as on 1.4.2009	Additions during the tariff period	Total
	2009-10	2010-11	2011-12	2012-13	2013-14			
BOND XIX-DOCO-	9.25	9.25	9.25	9.25	9.25	57.00	0.00	57.00
BOND XX-DOCO-	8.93	8.93	8.93	8.93	8.93	4.00	0.00	4.00
BOND XXI-DOCO-	8.73	8.73	8.73	8.73	8.73	1242.00	0.00	1242.00
BOND XXII-DOCO-	8.68	8.68	8.63	8.68	8.68	200.00	0.00	200.00
BOND XXIV-DOCO-	9.95	9.95	9.95	9.95	9.95	100.00	0.00	100.00
BOND XXV-ADD CAP FOR 2009-2010 add cap-	10.10	10.10	10.10	10.10	10.10	0.00	95.77	95.77
BOND XXV-ADD CAP FOR 2010-2011 add cap-	0.00	10.10	10.10	10.10	10.10	0.00	79.42	79.42
BOND XXV-ADD CAP FOR 2011-2012 add cap-	0.00	0.00	10.10	10.10	10.10	0.00	4.70	4.70
BOND XXV-DOCO-	10.10	10.10	10.10	10.10	10.10	325.00	0.00	325.00
BOND XXVI-ADDCAP FOR 2011-2012 add cap-	0.00	0.00	9.30	9.30	9.30	0.00	16.48	16.48
BOND XXVI-DOCO-	9.30	9.30	9.30	9.30	9.30	153.00	0.00	153.00
ADB III-DOCO 1-40.87	2.2781	1.9196	1.8943	2.1134	1.8844	408.70	0.00	408.70
ADB III-DOCO 2-49.4	2.2781	1.9196	1.8943	2.1134	1.8844	592.80	0.00	592.80
ADB III-DOCO 3-51.55	2.2781	1.9196	1.8943	2.1134	1.8844	1018.63	0.00	1018.63
BOND XXVIII-ADDCAP FOR 2011-2012 add cap-	0.00	0.00	9.33	9.33	9.33	0.00	19.66	19.66
BOND XXVIII-DOCO-	9.33	9.33	9.33	9.33	9.33	283.80	0.00	283.80
Total						4384.93	216.03	4600.96



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

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	4384.93	4480.70	4560.12	4600.96	4600.96
Cumulative Repayments of Loans upto Previous Year	0.00	26.93	221.89	481.68	775.94
Net Loans Opening	4384.93	4453.77	4338.23	4119.28	3825.02
Add: Draw(s) during the Year	95.77	79.42	40.84	0.00	0.00
Less: Repayments of Loan during the year	26.93	194.96	259.79	294.26	303.24
Net Closing Loan	4453.77	4338.23	4119.28	3825.02	3521.78
Average Net Loan	4419.35	4396.00	4228.76	3972.15	3673.40
Rate of Interest on Loan (%)	6.0065%	5.9228%	5.9097%	5.9406%	5.7309%
Interest on Loan	265.45	260.36	249.91	235.97	210.52

Asset 8:**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14**

(₹ in lakh)

Particulars	Interest Rate (%)					Loan deployed as on 1.4.2009	Additions during the tariff period	Total
	2009-10	2010-11	2011-12	2012-13	2013-14			
BOND XXV-ADDCAP FOR 2009-2010 DOCO.	10.10	10.10	10.10	10.10	10.10	0.00	103.02	103.02
BOND XXV-ADDCAP FOR 2010-2011 add cap-	0.00	10.10	10.10	10.10	10.10	0.00	23.25	23.25
ADB III-DOCO-48.65	2.1300	1.9196	1.8943	2.1134	1.8844	1285.33	0.00	1285.33
BOND XXVIII-ADDCAP FOR 2011-2012 DOCO.	0.00	0.00	9.33	9.33	9.33	0.00	10.66	10.66
Total						1285.33	136.93	1422.26

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

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	1285.33	1388.35	1411.60	1422.26	1422.26
Cumulative Repayments of Loans upto Previous Year	0.00	17.13	56.18	111.25	173.06
Net Loans Opening	1285.33	1371.22	1355.42	1311.01	1249.20
Add: Draw(s) during the Year	103.02	23.25	10.66	0.00	0.00
Less: Repayments of Loan during the year	17.13	39.05	55.07	61.81	67.52
Net Closing Loan	1371.22	1355.42	1311.01	1249.20	1181.68
Average Net Loan	1328.28	1363.32	1333.22	1280.11	1215.44
Rate of Interest on Loan (%)	2.4391%	2.6075%	2.6688%	2.8602%	2.6171%
Interest on Loan	32.40	35.55	35.58	36.61	31.81



Combined Asset 11,12,13:

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

Particulars	Interest Rate (%)				Loan deployed as on 1.4.2009/COD	Additions during the tariff period	Total
	2010-11	2011-12	2012-13	2013-14			
BOND XXI-DOCO-	8.73	8.73	8.73	8.73	212.54	0.00	212.54
BOND XXII-DOCO-	8.68	8.68	8.68	8.68	2500.00	0.00	2500.00
BOND XXIV-DOCO-	9.95	9.95	9.95	9.95	500.00	0.00	500.00
BOND XXV-ADDCAP FOR 2010-2011 add cap-	10.10	10.10	10.10	10.10	0.00	33.20	33.20
BOND XXV-ADDCAP FOR 2011-12	10.10	10.10	10.10	10.10	0.00	643.88	643.88
BOND XXV-DOCO-	10.10	10.10	10.10	10.10	916.59	0.00	916.59
BOND XXV-DOCO-	0.00	9.30	9.30	9.30	0.00	99.80	99.80
ADB III-DOCO 1-47.26	1.8300	1.8943	2.1134	1.8844	13940.28	0.00	13940.28
ADB III-DOCO 2-46.26	1.8300	1.8943	2.1134	1.8844	335.39	0.00	335.39
ADB III-DOCO 3-45.69	1.8300	1.8943	2.1134	1.8844	363.24	0.00	363.24
BOND XXVIII-ADDCAP FOR 2011-2012 add cap-	0.00	9.33	9.33	9.33	0.00	64.12	64.12
Total					18768.04	841.00	19609.04

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

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	18768.04	18801.24	19609.04	19757.57
Cumulative Repayments of Loans upto Previous Year	865.87	907.54	1823.72	2811.80
Net Loans Opening	17902.17	17893.70	17785.32	16945.77
Add: Draw(s) during the Year	33.20	807.80	148.53	12.67
Less: Repayments of Loan during the year	41.67	916.18	988.08	1053.14



Particulars	2010-11	2011-12	2012-13	2013-14
Net Closing Loan	17893.70	17785.32	16945.77	15905.30
Average Net Loan	17897.94	17839.51	17365.55	16425.54
Rate of Interest on Loan (%)	3.4281%	3.5820%	3.8381%	3.6153%
Interest on Loan	613.56	639.00	666.50	593.83

Asset 14:**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14**

(₹ in lakh)

Particulars	Interest Rate (%)			Loan deployed as on 1.4.2009/COD	Additions during the tariff period	Total
	2011-12	2012-13	2013-14			
ADB III-DOCO-46.51	1.95	2.11	1.88	192.09	0.00	192.09
BOND XXVIII-DOCO-	9.33	9.33	9.33	27.45	0.00	27.45
BOND XXXVI-ADDCAP FOR 2013.-2012 Add Cap-	9.35	9.35	9.35	0.00	21.81	21.81
BOND XXXVI-ADDCAP FOR 2012-2013 Add Cap-	0.00	9.25	9.25	0.00	49.34	49.34
Total				219.54	71.15	290.69

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

(₹ in lakh)

Particulars	2011-12	2012-13	2013-14
Gross Opening Loan	219.54	241.35	290.69
Cumulative Repayments of Loans upto Previous Year	11.62	15.05	26.69
Net Loans Opening	207.92	226.30	264.00
Add: Draw(s) during the Year	21.81	49.34	0.00
Less: Repayments of Loan during the year	3.43	11.64	12.50
Net Closing Loan	226.30	264.00	251.50
Average Net Loan	217.11	245.15	257.75
Rate of Interest on Loan (%)	3.2548%	4.2229%	4.5407%
Interest on Loan	7.07	10.35	11.70



Asset 15:**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14**

(₹ in lakh)

Particulars	Interest Rate (%)			Loan deployed as on 1.4.2009/COD	Additions during the tariff period	Total
	2011-12	2012-13	2013-14			
BOND XXI- DOCO-	8.73	8.73	8.73	500.00	0.00	500.00
BOND XXII- DOCO-	8.68	8.68	8.68	1000.00	0.00	1000.00
BOND XXIV- DOCO-	9.95	9.95	9.95	500.00	0.00	500.00
BOND XXV- DOCO	10.10	10.10	10.10	705.00	0.00	705.00
ADB III-DOCO - 52.28	2.06	2.11	1.88	14747.67	0.00	14747.67
BOND-XXVIII	9.33	9.33	9.33	0.00	220.12	220.12
BOND-xxxiv	8.84	8.84	8.84	0.00	36.68	36.68
BOND-XXXIV- DOCO-	8.84	8.84	8.84	600.00	0.00	600.00
BOND-XXXV- Add cap	9.64	9.64	9.64	0.00	0.00	0.00
BOND-XXXV- DOCO-	9.64	9.64	9.64	2200.00	0.00	2200.00
Total				20252.67	256.80	20509.47

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

(₹ in lakh)

Particulars	2011-12	2012-13	2013-14
Gross Opening Loan	20252.67	23155.35	24095.65
Cumulative Repayments of Loans upto Previous Year	1159.61	1547.76	2369.68
Net Loans Opening	19093.06	21607.59	21725.97
Add: Draw(s) during the Year	2902.68	940.30	15.19
Less: Repayments of Loan during the year	388.15	821.92	887.47
Net Closing Loan	21607.59	21725.97	20853.69
Average Net Loan	20350.33	21666.78	21289.83



Particulars	2011-12	2012-13	2013-14
Rate of Interest on Loan (%)	4.4409%	4.9080%	4.8995%
Interest on Loan	903.73	1063.40	1043.09



Asset 16:**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14**

(₹ in lakh)

Particulars	Interest Rate (%)			Loan deployed as on 1.4.2009/COD	Additions during the tariff period	Total
	2011-12	2012-13	2013-14			
BOND XXV-DOCO-	10.10	10.10	10.10	526.50	0.00	526.50
BOND XXVI-DOCO-	9.30	9.30	9.30	109.00	0.00	109.00
ADB III - DOCO 52.28	2.0600	2.1134	1.8844	3571.51	0.00	3571.51
BOND XXVIII-DOCO	9.33	9.33	9.33	73.00	0.00	73.00
BOND XXXVI-ADDCAP FOR 2011-2012 add cap-	9.35	9.35	9.35	0.00	8.94	8.94
BOND XXXVIII-ADDCAP FOR 2011-12 add cap-	9.25	9.25	9.25	0.00	49.70	49.70
BOND XXXVIII-ADDCAP FOR 2012-2013 add cap-	0.00	9.25	9.25	0.00	88.03	88.03
Total				4280.01	146.67	4426.68

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

(₹ in lakh)

Particulars	2011-12	2012-13	2013-14
Gross Opening Loan	4280.01	4338.65	4426.68
Cumulative Repayments of Loans upto Previous Year	260.03	332.84	531.90
Net Loans Opening	4019.98	4005.81	3894.78
Add: Draw(s) during the Year	58.64	88.03	0.00
Less: Repayments of Loan during the year	72.81	199.06	214.93
Net Closing Loan	4005.81	3894.78	3679.85
Average Net Loan	4012.90	3950.30	3787.32
Rate of Interest on Loan (%)	3.4000%	3.5318%	3.3686%
Interest on Loan	136.44	139.52	127.58



Asset 17:**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14**

(₹ in lakh)

Particulars	Interest Rate (%)			Loan deployed as on 1.4.2009/COD	Additions during the tariff period	Total
	2011-12	2012-13	2013-14			
ADB III-DOCO-53.73	2.1500	2.1134	1.8844	432.74	0.00	432.74
BOND XXVIII-DOCO-	9.33	9.33	9.33	50.00	0.00	50.00
BOND XXXVIII-ADDCAP FOR 2012-2013 add cap-	0.00	9.25	9.25	0.00	3.23	3.23
Total				482.74	3.23	485.97

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

(₹ in lakh)

Particulars	2011-12	2012-13	2013-14
Gross Opening Loan	482.74	482.74	485.97
Cumulative Repayments of Loans upto Previous Year	26.19	33.91	55.04
Net Loans Opening	456.55	448.83	430.93
Add: Draw(s) during the Year	0.00	3.23	0.00
Less: Repayments of Loan during the year	7.72	21.13	23.06
Net Closing Loan	448.83	430.93	407.87
Average Net Loan	452.69	439.88	419.40
Rate of Interest on Loan (%)	2.9413%	2.9257%	2.7177%
Interest on Loan	13.32	12.87	11.40

Asset 18:**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14**

(₹ in lakh)

Particulars	Interest Rate (%)		Loan deployed as on 1.4.2009/COD	Additions during the tariff period	Total
	2012-13	2013-14			
ADB III DOCO -56.32	2.0900	1.8844	137.98	0.00	137.98
BOND-XXXIV-DOCO-	8.84	8.84	248.50	0.00	248.50
BOND XXXVIII-ADDCAP FOR 2012-2013 add cap-	9.25	9.25	0.00	59.02	59.02
Total			386.48	59.02	445.50

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

(₹ in lakh)

Particulars	2012-13	2013-14
Gross Opening Loan	386.48	445.50
Cumulative Repayments of Loans upto Previous Year	10.81	16.22
Net Loans Opening	375.67	429.28
Add: Draw(s) during the Year	59.02	0.00
Less: Repayments of Loan during the year	5.41	6.02
Net Closing Loan	429.28	423.26
Average Net Loan	402.48	426.27
Rate of Interest on Loan (%)	6.7826%	6.9591%
Interest on Loan	27.30	29.66



Combined Assets:

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2014-19

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
	2014-15			
BOND XIX-DOCO-	9.25	631.00	0.00	631.00
BOND XX-DOCO-	8.93	44.00	0.00	44.00
BOND XXI-DOCO-	8.73	6602.54	0.00	6602.54
BOND XXII- DOCO	8.68	9240.00	0.00	9240.00
BOND XXIV-DOCO	9.95	3048.10	0.00	3048.10
BOND XXV-DOCO-	10.10	19289.22	0.00	19289.22
BOND XXVI-DOCO-	9.30	1927.48	0.00	1927.48
ADB III-DOCO 1-40.87	1.9784	4904.40	0.00	4904.40
ADB III-DOCO 10-46.51	1.9784	192.09	0.00	192.09
ADB III DOCO 11-52.28	1.9784	18319.17	0.00	18319.17
ADB III - DOCO 12-53.73	1.9784	432.74	0.00	432.74
ADB III-DOCO 13-56.32	1.9784	137.98	0.00	137.98
ADB III-DOCO 2-49.4	1.9784	889.20	0.00	889.20
ADB III-DOCO 3-49.57	1.9784	892.26	0.00	892.26
ADS III-DOCO 4-51.55	1.9784	1018.63	0.00	1018.63
ADS III-DOCO 5-48 .65	1.9784	1285.33	0.00	1285.33
ADB III-DOCO 6-47.41	1.9784	13417.03	379.53	13796.56
ADB III-DOCO 7-47.26	1.9784	13940.28	3961.85	17902.13
ADB III-DOCO 8-46.25	1.9784	335.39	4116.37	4451.76
ADB III-DOCO 9-45.69	1.9784	363.24	99.03	462.27
BOND XXVIII -DOCO -	9.33	5424.32	107.25	5531.57
BOND XXXIV-DOCO-	8.84	1237.00	2260.15	3497.15
BOND XXXV -DOCO-	9.64	2303.00	515.40	2818.40
BOND XXXVI-DOCO-	9.35	2200.00	767.68	2967.68
BOND XXXVIII-doco-	9.25	1400.00	440.01	1840.01
Total		109474.40	12647.27	122121.67

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	109474.40	109474.40	109474.40	109474.40	109474.40
Cumulative Repayments of Loans upto Previous Year	21778.22	28430.08	35550.50	43128.18	51044.45



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Net Loans Opening	87696.18	81044.32	73923.90	66346.22	58429.95
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	6651.86	7120.42	7577.68	7916.27	8283.27
Net Closing Loan	81044.32	73923.90	66346.22	58429.95	50146.68
Average Net Loan	84370.25	77484.11	70135.06	62388.09	54288.32
Rate of Interest on Loan (%)	5.4099%	5.3238%	5.2240%	5.1122%	4.9881%
Interest on Loan	4564.36	4125.08	3663.88	3189.41	2707.96

