

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO.505/TT/2014

Coram:

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

**Date of Hearing: 03.02.2016
Date of Order : 29.02.2016**

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 Combined Assets for Transmission System associated with Northern Region Bus Reactor Scheme in NR, Asset 1. Extension of 400/220kV Jalandhar (POWERGRID) sub-station-I no. 400kV, 125MVAR Bus-Reactor, Asset 2 Extension of 400/220kV Amritsar (POWERGRID) sub-station 400kV, 80 MVAR Bus-Reactor, Asset 3: Extension of 400/220kV Hissar (POWERGRID) sub-station 400kV, 125 MVAR Bus-Reactor & Asset 4. Extension of 400/220kV Naiagarh (POWERGRID) sub-station 400kV, 125 MVAR Bus- Reactor 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. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Janpath,
Jaipur.
2. Ajmer Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
3. Jaipur Vidyut Vitran Nigam Ltd.,



- 400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
4. Jodhpur Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur
 5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla - 171 004.
 6. Punjab State Electricity Board.,
Thermal Shed T-1A, Patiala.
 7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector - 6
Panchkula (Haryana) - 134 109
 8. Power Development Department,
Janipura Grid Station,
Jammu (Tawi) 180 007 .
 9. Uttar Pradesh Power Corporation Ltd.,
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226 001.
 10. Delhi Transco Ltd.,
Shakti Sadan, Kotla Road,
New Delhi - 110 002
 11. Chandigarh Administration,
Sector - 9, Chandigarh
 12. Uttarakhand Power Corporation Ltd.,
Urja Bhawan, Kanwali Road,
Dehradun
 13. North Central Railway
Allahabad
 14. BSES Yamuna Power Ltd.,
Shakti Kiran Building, Karkardooma,
Delhi – 110 092.
 15. BSES Rajdhani Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
 16. North Delhi Power Limited

Power trading & load Dispatch group
Pitampura, New Delhi 110034

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

.....Respondent(s)

The following were present:

For Petitioner: Shri M.M. Mondal, PGCIL
Shri S.S. Raju, PGCIL
Shri Rakesh Prasad, PGCIL
Smt. S. Edwards, PGCIL
Shri S.C. Taneja, PGCIL
Shri Mohd. Mohsin, PGCIL

For Respondent: Shri B.L.Sharma, Advocate, Rajasthan Discoms

ORDER

The petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as "the petitioner") 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 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 for Combined Assets of Transmission System associated with Northern Region Bus Reactor Scheme in NR- Asset 1: Extension of 400/220 kV Jalandhar (POWERGRID) Sub-station-I no. 400 kV, 125 MVAR Bus Reactor, Asset 2: Extension of 400/220 kV Amritsar (POWERGRID) Sub-station 400 kV, 80 MVAR Bus Reactor, Asset 3: Extension of 400/220 kV Hisar (POWERGRID) Sub-station 400 kV, 125 MVAR Bus Reactor & Asset 4: Extension of 400/220 kV Nalagarh (POWERGRID) sub-station 400 kV, 125 MVAR Bus Reactor (hereinafter collectively referred to as "the transmission assets").



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

3. The assets covered under the under the instant petition are follows:-

Assets	COD	Description
Asset 1	1.4.2012	Extension of 400/220kV Jalandhar (POWERGRID) sub-station-I no. 400kV, 125MVAR Bus-Reactor,
Asset 2	1.4.2012	Extension of 400/220kV Amritsar (POWERGRID) sub-station 400kV, 80 MVAR Bus-Reactor
Asset 3	1.5.2012	Extension of 400/220kV Hissar (POWERGRID) sub-station 400kV, 125 MVAR Bus-Reactor
Asset 4	1.5.2012	Extension of 400/220kV Nalagarh (POWERGRID) sub-station 400kV, 125 MVAR Bus- Reactor

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

a) The administrative approval and expenditure sanction of the transmission scheme was accorded by the Board of Directors of petitioner Company vide letter dated 15.12.2010 for ₹9003 lakh, including IDC of ₹391 lakh (based on 3rd quarter, 2010 price level).

b) The annual transmission charges from respective COD to 31.3.2014 based on admitted capital cost of the transmission asset and debt:equity as on COD were determined in order dated 2.12.2013 in Petition No. 102/TT/2012.

c) The annual transmission charges were determined based on the following approved capital cost on COD and estimated additional capital expenditure towards the balance and retention payments from COD to 31.3.2014 after deduction of excess initial spares of ₹1.37 lakh from Asset 2, as depicted below:-

(₹ in lakh)

Asset	COD	Approved apportioned cost	Admitted cost as on COD	Additional capital expenditure allowed during 2009-14			Estimated total cost up to 31.3.2014
				2012-13	2013-14	Total	
Asset 1	1.4.2012	1234.16	522.96	182.20	165.41	347.61	870.57
Asset 2	1.4.2012	928.36	82.99	404.18	58.33	462.51	545.50
Asset 3	1.5.2012	988.89	405.94	154.21	154.08	308.29	714.23
Asset 4	1.5.2012	1252.98	331.06	195.67	166.38	362.05	693.11

d) The tariff for 2009-14 tariff period was determined based on the above capital cost and estimated additional capital expenditure for the transmission assets during 2009-14 as given below:-

Asset-1

(₹ in lakh)

Particulars	2012-13	2013-14
Depreciation	32.42	41.60
Interest on Loan	37.94	45.47
Return on Equity	32.20	41.32
Interest on Working Capital	5.78	6.57
O & M Expenses	61.92	65.46
Total	170.26	200.42

Asset-2

(₹ in lakh)

Particulars	2012-13	2013-14
Depreciation	15.05	27.26
Interest on Loan	17.17	29.62
Return on Equity	14.95	27.08
Interest on Working Capital	4.51	5.55
O & M Expenses	61.92	65.46
Total	113.60	154.97

Assets-3

(₹ in lakh)

Particulars	2012-13 (Pro-rata)	2013-14
Depreciation	23.38	33.64
Interest on Loan	27.62	37.46
Return on Equity	23.22	33.42
Interest on Working Capital	4.84	6.02
O & M Expenses	56.76	65.46
Total	135.82	176.00



Asset - 4

(₹ in lakh)

Particulars	2012-13 (Pro-rata)	2013-14
Depreciation	20.76	32.20
Interest on Loan	24.24	35.36
Return on Equity	20.62	31.99
Interest on Working Capital	4.65	5.91
O & M Expenses	56.76	65.46
Total	127.03	170.92

5. 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.

6. 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. 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 ("the Act"). No comments/objections have been received from the public in response to the notice in newspaper. No comments/objections have been received from any of the respondents in this matter.

7. The hearing in this matter was held on 3.2.2016. During the hearing, the petitioner was directed to submit reasons for difference in cost of Asset-1 and Asset-2 despite both assets are identical in terms of size and location, details depicting the un-discharged liabilities, if any, to be recovered in future in respect of the assets covered in

the instant petition and an undertaking/certificate depicting that the actual equity infused during the tariff period 2009-14 and 2014-19. In response, the petitioner has submitted the information vide affidavit dated 22.2.2016.

8. Having heard the representatives of the parties 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 petitioner has claimed the following opening capital in respect of each of the transmission asset for the purpose of tariff determination. The details of capital cost claimed are as follows:-

(₹in lakh)

Asset	COD	Actual capital cost claimed in the instant petition
Asset1	1.4.2012	522.96
Asset 2	1.4.2012	84.36
Asset 3	1.5.2012	406.55
Asset 4	1.5.2012	330.45

12. In response to query of the Commission, the petitioner has submitted, vide affidavit dated 22.2.2016, that Asset 2 is inadvertently mentioned as 'Extension of 400/220kV Amritsar (POWERGRID) sub-station 400kV, 125 MVAR Bus-Reactor' in place of 'Extension of 400/220kV Amritsar (POWERGRID) sub-station 400kV, 80 MVAR Bus-Reactor' in the petition. In Amritsar, 80 MVAR Bus reactor is installed and same was considered vide order dated 2.12.2013 in Petition No.102/TT/2014. The petitioner has submitted the copy of investment approval to substantiate the specifications of Asset 2. In respect of the cost difference between Asset 1 and Asset 2, the petitioner has submitted that the configuration of Asset 1 and Asset 2 is not same and in case of Asset 1, 125 MVAR Bus reactor is installed and in Asset 2, 80 MVAR Bus reactor is installed. Further, the cost of switchgear and foundation at Jalandhar (Asset 1) is comparatively more than Amritsar (Asset 2) because in Amritsar spare bay in 400 kV **dia** was available but for Jalandhar Sub-station a new 400kV dia was constructed, thus effecting increase in cost. The cost of Bus reactor at Jalandhar Sub-station in fact is less than Amritsar Sub-station. The petitioner submit that due to above reason, the apportioned approved cost of Bus Reactor at Jalandhar Sub-station ('Asset 1') and Bus Reactor at Amritsar Sub-station ('Asset 2') was kept higher as compared to the Amritsar Sub-station.

13. The Commission has considered the submissions of the petitioner. The capital cost as claimed by the petitioner above is certified by the Auditor's Certificates dated 11.8.2014. Accordingly, the same is considered for truing up tariff in accordance with Regulation 7 of the 2009 Tariff Regulations.

Treatment of Initial Spares

14. The Commission in its previous order dated 2.12.2013 in Petition No. 102/TT/2012 had disallowed the excess initial spares of ₹1.37 lakh in Asset-2.

15. We have worked out the admissible initial spares by considering actual capital cost and additional capital expenditure as per Auditor's Certificate dated 11.8.2014 in accordance with the 2009 Tariff Regulations.

16. Regulation 8 of the 2009 Tariff Regulations provide for ceiling norms for capitalization of initial spares in respect of sub-station at 2.50%. Accordingly, the initial spares have been allowed as under:-

(₹ in lakh)

Particulars	Formula	Substation			
		Asset -1	Asset-2	Asset -3	Asset-4
Capital cost as on cut off date	(a)	891.96	620.16	711.75	690.00
Capital Cost after deducting excess IDC	(b)	891.96	620.16	711.75	690.00
Initial Spares as per Auditor's Certificate	(c)	20.14	15.01	17.24	16.74
Proportionate Initial Spares claimed after deducting IDC	(d) = (c)/(a) * (b)	20.14	15.01	17.24	16.74
Ceiling limit as per Regulation 8 of 2009 regulations	(e)	22.35	15.52	17.81	17.26
Initial spares worked out	(f) = ((b-d)*e) / (100%-e)	20.14	15.01	17.24	16.74
Excess initial spares	(g) = (d) - (f)	0.00	0.00	0.00	0.00

17. Accordingly, the capital cost as on COD for tariff computation of 2009-14 tariff period is considered as claimed by the petitioner.



Additional Capital Expenditure

18. 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...”

15. The petitioner has claimed additional capitalization for expenditure incurred before cut-off date against the transmission asset under Clause (1) (i) of Regulation 9 of the 2009 Tariff Regulations.

16. Clause 1 of Regulation 9 of the 2009 Tariff Regulations provides as follows:-

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

(i) Undischarged liabilities...;”

17. The petitioner has submitted that it has incurred following additional capital expenditure for all of the assets during 2009-14 period towards balance and retention payments as certified vide Auditor’s Certificate dated 11.8.2014 as depicted below:-

(₹in lakh)

Name of Asset	Capital Cost as on COD	Approved Cost	Additional Capital Expenditure			Total cost as on 31.3.2014
			2012-13	2013-14	Total	
Asset-1	Approved by the Commission	522.96	182.20	165.41	347.61	870.57
	Claimed by the Petitioner	522.96	194.14	113.06	307.20	830.16
Asset-2	Approved by the Commission	82.99	404.18	58.33	462.51	545.50
	Claimed by the Petitioner	84.36	402.92	49.52	452.44	536.80
Asset-3	Approved by the Commission	405.94	154.21	154.08	308.29	714.23
	Claimed by the Petitioner	406.55	143.00	85.89	228.89	635.44
Asset-4	Approved by the Commission	331.06	195.67	166.38	362.05	693.11
	Claimed by the Petitioner	330.45	172.73	111.96	284.69	615.14

We have considered the submissions of the petitioner with regard to the actual capital expenditure incurred during 2009-14 period. The capital addition is based on actual

capital expenditure incurred as per the Auditor's Certificate dated 11.8.2014, and the total completion cost up to 31.3.2014 is within the apportioned approved cost of the assets. Thus, we allow the same for the purpose of revision of tariff in accordance with Regulation 6 of the 2009 Tariff Regulations.

Debt: Equity

18. 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."

19. The normative debt:equity ratio was considered in the order dated 2.12.2013 in Petition No. 102/TT/2012, has been considered for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations.

20. The petitioner was directed to submit an undertaking/certificate depicting that the actual equity infused in the project is not less than 30% during the tariff period 2009-14 and 2014- 19. The petitioner has submitted, vide affidavit dated 22.2.2016 that actual equity infused during the period is not less than 30%.

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

Funding	Capital cost as on DOCO	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Asset 1						
Debt	366.07	70.00	215.04	70.00	581.11	70.00
Equity	156.89	30.00	92.16	30.00	249.05	30.00
Total	522.96	100.00	307.20	100.00	830.16	100.00
Asset 2						
Debt	59.05	70.00	316.71	70.00	375.76	70.00
Equity	25.31	30.00	135.73	30.00	161.04	30.00
Total	84.36	100.00	452.44	100.00	536.80	100.00
Asset 3						
Debt	284.59	70.00	160.22	70.00	444.81	70.00
Equity	121.97	30.00	68.67	30.00	190.63	30.00
Total	406.55	100.00	228.89	100.00	635.44	100.00
Asset 4						
Debt	231.32	70.00	199.28	70.00	430.60	70.00
Equity	99.14	30.00	85.41	30.00	184.54	30.00
Total	330.45	100.00	284.69	100.00	615.14	100.00

Return on Equity (“ROE”)

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

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

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

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

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

(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.”



23. The 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

24. The ROE as trued up and allowed is shown below:-

Asset 1

(₹ in lakh)

Return on Equity	2012-13	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	32.20	41.32
Claimed by the petitioner	36.04	45.51
Allowed after trued up in this order	36.04	45.51

Asset 2

(₹ in lakh)

Return on Equity	2012-13	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	14.95	27.08
Claimed by the petitioner	16.62	30.12
Allowed after trued up in this order	16.61	30.12

Asset 3

(₹ in lakh)

Return on Equity	2012-13 (pro-rata)	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	23.22	33.42
Claimed by the petitioner	25.47	34.86
Allowed after trued up in this order	25.47	34.86

Asset 4

(₹ in lakh)

Return on Equity	2012-13 (Pro-rata)	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	20.62	31.99
Claimed by the petitioner	22.21	32.90
Allowed after trued up in this order	22.21	32.90

The difference in the approved ROE and that allowed after truing up is on account of actual grossed up ROE based on actual MAT rate and increase due to actual additional capital expenditure.

Interest on Loan (“IoL”)

25. 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”.

26. 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 are placed in Annexure-1. The IoL worked out is as follows:-

Asset 1

(₹ in lakh)

Interest on Loan	2012-13	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	37.94	45.47
Claimed by the petitioner	39.09	46.19
Allowed after trued up in this order	39.09	46.19



Asset 2

(₹ in lakh)

Interest on Loan	2012-13	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	17.17	29.62
Claimed by the petitioner	17.16	29.48
Allowed after trued up in this order	17.16	29.48

Asset 3

(₹ in lakh)

Interest on Loan	2012-13 (pro-rata)	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	27.62	37.46
Claimed by the petitioner	27.16	34.64
Allowed after trued up in this order	27.16	34.64

Asset 4

(₹ in lakh)

Interest on Loan	2012-13 (pro-rata)	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	24.24	35.36
Claimed by the petitioner	23.61	32.85
Allowed after trued up in this order	23.61	32.84

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

27. The depreciation has been worked out as per the methodology provided in the Regulation 17 of the 2009 Tariff Regulations. We have considered the submissions of the petitioner. The depreciation allowed is as follows:-

Asset 1

(₹in lakh)

Depreciation	2012-13	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	32.42	41.60
Claimed by the petitioner	32.74	40.85
Allowed after trued up in this order	32.74	40.85

Asset 2

(₹in lakh)

Depreciation	2012-13	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	15.05	27.26
Claimed by the petitioner	15.09	27.04
Allowed after trued up in this order	15.09	27.04

Asset 3

(₹ in lakh)

Depreciation	2012-13 (pro-rata)	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	23.38	33.64
Claimed by the petitioner	23.14	31.28
Allowed after trued up in this order	23.14	31.28

Asset 4

(₹in lakh)

Depreciation	2012-13 (pro-rata)	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	20.76	32.20
Claimed by the petitioner	20.17	29.52
Allowed after trued up in this order	20.17	29.52

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

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

28. 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:-

Asset 1

(₹ in lakh)		
O&M Expenses	2012-13	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	61.92	65.46
Claimed by the petitioner	61.92	65.46
Allowed after trued up in this order	61.92	65.46

Asset 2

(₹ in lakh)		
O&M Expenses	2012-13	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	61.92	65.46
Claimed by the petitioner	61.92	65.46
Allowed after trued up in this order	61.92	65.46

Asset 3

(₹ in lakh)		
O&M Expenses	2012-13 (pro-rata)	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	56.76	65.46
Claimed by the petitioner	56.76	65.46
Allowed after trued up in this order	56.76	65.46

Asset 4

(₹ in lakh)		
O&M Expenses	2012-13 (pro-rata)	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	56.76	65.46
Claimed by the petitioner	56.76	65.46

O&M Expenses	2012-13 (pro-rata)	2013-14
Allowed after trued up in this order	56.76	65.46

Interest on Working Capital ('IWC')

29. The IWC has been worked out as per the methodology provided in the Regulation 18 of the 2009 Tariff Regulations. We have considered the submission of the petitioner. The computation of the maintenance spares submitted by the petitioner are in line with the methodology provided in the Regulation 18 of the 2009 Tariff Regulations and the same is allowed as under:-

Asset 1

	(₹in lakh)	
Interest on Working Capital	2012-13	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	5.78	6.57
Claimed by the petitioner	5.9	6.67
Allowed after trued up in this order	5.90	6.67

Asset 2

	(₹in lakh)	
Interest on Working Capital	2012-13	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	4.51	5.55
Claimed by the petitioner	4.55	5.61
Allowed after trued up in this order	4.55	5.61

Asset 3

	(₹ in lakh)	
Interest on Working Capital	2012-13 (pro-rata)	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	4.84	6.02
Claimed by the petitioner	4.88	5.94
Allowed after trued up in this order	4.88	5.94

Asset 4

	(₹ in lakh)	
Interest on Working Capital	2012-13 (pro-rata)	2013-14
Approved vide order dated 2.12.2013 in Petition No. 102/TT/2012	4.65	5.91
Claimed by the petitioner	4.66	5.81
Allowed after trued up in this order	4.65	5.81

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

30. 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:-

Asset 1

	(₹ in lakh)	
Particulars	2012-13	2013-14
Depreciation		
Opening Gross Block	522.96	717.10
Additional Capitalisation	194.14	113.06
Closing Gross Block	717.10	830.16
Average Gross Block	620.03	773.63
Rate of Depreciation	5.28	5.28
Depreciable Value	558.03	783.63
Balance Useful life of the asset	25	24
Elapsed Life	0	1
Remaining Depreciable Value	558.03	663.53
Depreciation during the year	32.74	40.85
Cumulative depreciation (incl. of AAD)	32.74	73.59
Interest on Loan		
Gross Normative Loan	366.07	501.97

Particulars	2012-13	2013-14
Cumulative Repayment upto Previous Year	0.00	32.74
Net Loan-Opening	366.07	469.23
Additions	135.90	79.14
Repayment during the year	32.74	40.85
Net Loan-Closing	469.23	507.53
Average Loan	417.65	488.38
Weighted Average Rate of Interest on Loan (%)	9.3606	9.4570
Interest on Loan	39.09	46.19
Return on Equity		
Opening Equity	156.89	215.13
Additions	58.24	33.92
Closing Equity	215.13	249.05
Average Equity	186.01	232.09
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	36.04	45.51
Interest on Working Capital		
O & M expenses	5.16	5.45
Maintenance Spares	9.29	9.82
Receivables	29.28	34.11
Total	43.73	49.38
Rate of Interest	13.50	13.50
Interest on Working Capital	5.90	6.67
Annual Transmission Charges		
Depreciation	32.74	40.85
Interest on Loan	39.09	46.19
Return on Equity	36.04	45.51
Interest on Working Capital	5.90	6.67
O & M Expenses	61.92	65.46
Total	175.70	204.67

Asset 2

(₹ in lakh)

Particulars	2012-13	2013-14
Depreciation		
Opening Gross Block	84.36	487.28
Additional Capitalisation	402.92	49.52
Closing Gross Block	487.28	536.80
Average Gross Block	285.82	512.04



Particulars	2012-13	2013-14
Rate of Depreciation	5.28	5.28
Depreciable Value	257.24	642.15
Balance Useful life of the asset	25	24
Elapsed Life	0	1
Remaining Depreciable Value	257.24	445.74
Depreciation during the year	15.09	27.04
Cumulative depreciation (incl. of AAD)	15.09	42.13
Interest on Loan		
Gross Normative Loan	59.05	341.10
Cumulative Repayment upto Previous Year	0.00	15.09
Net Loan-Opening	59.05	326.00
Additions	282.04	34.66
Repayment during the year	15.09	27.04
Net Loan-Closing	326.00	333.63
Average Loan	192.53	329.82
Weighted Average Rate of Interest on Loan (%)	8.9124	8.9377
Interest on Loan	17.16	29.48
Return on Equity		
Opening Equity	25.31	146.18
Additions	120.88	14.86
Closing Equity	146.18	161.04
Average Equity	85.75	153.61
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	16.61	30.12
Interest on Working Capital		
O & M expenses	5.16	5.45
Maintenance Spares	9.29	9.82
Receivables	19.22	26.28
Total	33.67	41.56
Rate of Interest	13.50	13.50
Interest on Working Capital	4.55	5.61
Annual Transmission Charges		
Depreciation	15.09	27.04
Interest on Loan	17.16	29.48
Return on Equity	16.61	30.12
Interest on Working Capital	4.55	5.61
O & M Expenses	61.92	65.46
Total	115.33	157.71

Asset 3

(₹in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Depreciation		
Opening Gross Block	406.55	549.55
Additional Capitalisation	143.00	85.89
Closing Gross Block	549.55	635.44
Average Gross Block	478.05	592.50
Rate of Depreciation	5.28	5.28
Depreciable Value	430.25	597.60
Balance Useful life of the asset	25	24
Elapsed Life	0	1
Remaining Depreciable Value	430.25	510.11
Depreciation during the year	23.14	31.28
Cumulative depreciation (incl. of AAD)	23.14	54.42
Interest on Loan		
Gross Normative Loan	284.59	384.69
Cumulative Repayment upto Previous Year	0.00	23.14
Net Loan-Opening	284.59	361.55
Additions	100.10	60.12
Repayment during the year	23.14	31.28
Net Loan-Closing	361.55	390.39
Average Loan	323.07	375.97
Weighted Average Rate of Interest on Loan (%)	9.1719	9.2141
Interest on Loan	29.63	34.64
Return on Equity		
Opening Equity	121.97	164.87
Additions	42.90	25.77
Closing Equity	164.87	190.63
Average Equity	143.42	177.75
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	27.79	34.86
Interest on Working Capital		
O & M expenses	5.16	5.45
Maintenance Spares	9.29	9.82
Receivables	24.98	28.70
Total	39.43	43.97
Rate of Interest	13.50	13.50
Interest on Working Capital	5.32	5.94
Annual Transmission Charges		
Depreciation	23.14	31.28
Interest on Loan	27.16	34.64



Particulars	2012-13 (pro-rata)	2013-14
Return on Equity	25.47	34.86
Interest on Working Capital	4.88	5.94
O & M Expenses	56.76	65.46
Total	137.41	172.18

Asset 4

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Depreciation		
Opening Gross Block	330.45	503.18
Additional Capitalisation	172.73	111.96
Closing Gross Block	503.18	615.14
Average Gross Block	416.82	559.16
Rate of Depreciation	5.28	5.28
Depreciable Value	375.13	580.97
Balance Useful life of the asset	25	24
Elapsed Life	0	1
Remaining Depreciable Value	375.13	483.07
Depreciation during the year	20.17	29.52
Cumulative depreciation (incl. of AAD)	20.17	49.70
Interest on Loan		
Gross Normative Loan	231.32	352.23
Cumulative Repayment upto Previous Year	0.00	20.17
Net Loan-Opening	231.32	332.05
Additions	120.91	78.37
Repayment during the year	20.17	29.52
Net Loan-Closing	332.05	380.90
Average Loan	281.68	356.48
Weighted Average Rate of Interest on Loan (%)	9.1445	9.2137
Interest on Loan	25.76	32.84
Return on Equity		
Opening Equity	99.14	150.95
Additions	51.82	33.59
Closing Equity	150.95	184.54
Average Equity	125.04	167.75
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	24.23	32.90
Interest on Working Capital		
O & M expenses	5.16	5.45

Particulars	2012-13 (pro-rata)	2013-14
Maintenance Spares	9.29	9.82
Receivables	23.17	27.76
Total	37.61	43.03
Rate of Interest	13.50	13.50
Interest on Working Capital	5.08	5.81
Annual Transmission Charges		
Depreciation	20.17	29.52
Interest on Loan	23.61	32.84
Return on Equity	22.21	32.90
Interest on Working Capital	4.65	5.81
O & M Expenses	56.76	65.46
Total	127.41	166.53

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

31. The petitioner has claimed the tariff charges for 2014-19 tariff period as under:-

(₹in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	146.03	153.85	153.85	153.85	153.85
Interest on Loan	152.80	148.52	134.16	119.72	105.31
Return on Equity	162.71	171.42	171.42	171.42	171.42
Interest on Working Capital	23.95	24.67	24.80	24.94	25.09
O & M Expenses	241.20	249.20	257.48	266.04	274.84
Total	726.69	747.66	741.71	735.97	730.51

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

(₹in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	20.10	20.77	21.46	22.17	22.90
Maintenance Spares	36.18	37.38	38.62	39.91	41.23
Receivables	121.12	124.61	123.62	122.66	121.75
Total	177.40	182.76	182.76	184.74	185.88
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	23.95	24.67	24.67	24.94	25.09

Capital Cost

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

“(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;”

34. The petitioner has claimed capital cost for the tariff period 2014-19 by combining Asset-1, Asset-2, Asset-3 and Asset- 4. The claimed actual capital expenditure as on 31.3.2014 is ₹2617.54 lakh and the same has been considered as opening capital cost as on 1.4.2014 for determination of tariff for 2014-19 tariff period in accordance with Regulation 9 of the 2014 Tariff Regulations.

Name of Asset	Capital cost as on 31.3.2014
Asset1	830.16
Asset 2	536.80
Asset 3	635.44
Asset 4	615.14
Total cost of assets	2617.54

Additional Capital Expenditure

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

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

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
- (ii) Change in law or compliance of any existing law;
- (iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;

- (iv) Deferred works relating to ash pond or ash handling system in the original scope of work;
- (v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;
- (vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments.”

36. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines “cut-off” as follows:-

“Cut - off Date” means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of a year, the cut - off date shall be 31st March of the year closing after three years of the year of commercial operation.”

37. The notional COD of the Combined Assets is 1.5.2012 and the cut-off date works out to be 31.3.2015. The petitioner has claimed additional capital expenditure of ₹296.33 lakh for 2014-15 period.

38. Accordingly, the capital cost of the instant assets including additional capital expenditure during 2014-19 tariff period is admitted under Regulation 14(1)(i) as below, subject to true up on actual basis:-

(₹ in lakh)			
Asset	Admitted cost as on 1.4.2014	Additional capital expenditure allowed during 2014-15	Estimated total on 31.3.2019
Combined Assets	2617.54	296.33	2913.87

Debt: Equity

39. 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.”

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

(₹ in lakh)

Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	1832.28	70.00	207.43	70.00	2039.71	70.00
Equity	785.26	30.00	88.90	30.00	874.16	30.00
Total	2617.54	100.00	296.33	100.00	2913.87	100.00

Return on Equity (“ROE”)

41. 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.”

42. 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	785.26	874.16	874.16	874.16	874.16
Additions	88.90	0.00	0.00	0.00	0.00
Closing Equity	874.16	874.16	874.16	874.16	874.16
Average Equity	829.71	874.16	874.16	874.16	874.16
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	162.71	171.43	171.43	171.43	171.43

Interest on Loan (“IoL”)

43. Clause 5 and Clause 6 of Regulation 26 of the 2014 Tariff Regulations provides as follows:-

“(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.”

44. 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. The details of weighted average rate of interest for 2014-19 tariff period are placed in Annexure 2, IoL allowed is as follows:-

(₹in lakh)

Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1832.28	2039.71	2039.71	2039.71	2039.71
Cumulative Repayment upto Previous Year	219.84	365.87	519.72	673.57	827.43
Net Loan-Opening	1612.44	1673.84	1519.99	1366.14	1212.28
Additions	207.43	0.00	0.00	0.00	0.00
Repayment during the year	146.03	153.85	153.85	153.85	153.85
Net Loan-Closing	1673.84	1519.99	1366.14	1212.28	1058.43
Average Loan	1643.14	1596.91	1443.06	1289.21	1135.36
Weighted Average Rate of Interest on Loan (%)	9.2991	9.3006	9.2966	9.2864	9.2754
Interest on Loan	152.80	148.52	134.16	119.72	105.31

Depreciation

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

"27. Depreciation:

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

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

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



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

46. 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 detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-

(₹ in lakh)

Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	2617.54	2913.87	2913.87	2913.87	2913.87
Additional Capitalisation	296.33	0.00	0.00	0.00	0.00
Closing Gross Block	2913.87	2913.87	2913.87	2913.87	2913.87
Average Gross Block	2765.71	2913.87	2913.87	2913.87	2913.87
Rate of Depreciation	5.28	5.28	5.28	5.28	5.28
Depreciable Value	2489.13	2755.83	2622.48	2622.48	2622.48
Balance Useful life of the asset	23	22	21	20	19
Elapsed Life	2	3	4	5	6
Remaining Depreciable Value	2489.13	2476.45	2322.60	2168.75	2014.90
Depreciation	146.03	153.85	153.85	153.85	153.85
Cumulative depreciation	365.87	519.72	673.57	827.43	981.28

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

47. The petitioner has 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 submitted that it will approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

48. We have considered the submissions of the petitioner. We would like to clarify that 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 assets as per the prevailing norms.

49. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total allowable O&M Expenses for the instant assets are as follows:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV Bays :					
No. of Bays	4	4	4	4	4
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
Total O&M Expenses (₹ lakh)	241.20	249.20	257.48	266.04	274.84

Interest on Working Capital (“IWC”)

50. 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;”

51. 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%.

52. 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	20.09	20.76	21.45	22.16	22.89
Maintenance Spares	36.18	37.38	38.62	39.91	41.23
Receivables	121.11	124.61	123.62	122.66	121.75
Total	177.39	182.75	183.69	184.73	185.87
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	23.95	24.67	24.80	24.94	25.09

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

53. 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	2617.54	2913.87	2913.87	2913.87	2913.87
Additional Capitalisation	296.33	0.00	0.00	0.00	0.00
Closing Gross Block	2913.87	2913.87	2913.87	2913.87	2913.87
Average Gross Block	2765.71	2913.87	2913.87	2913.87	2913.87
Rate of Depreciation	5.28	5.28	5.28	5.28	5.28
Depreciable Value	2489.13	2755.83	2622.48	2622.48	2622.48
Balance Useful life	23	22	21	20	19
Elapsed Life	2	3	4	5	6
Remaining Depreciable Value	2489.13	2476.45	2322.60	2168.75	2014.90
Depreciation	146.03	153.85	153.85	153.85	153.85
Cumulative depreciation	365.87	519.72	673.57	827.43	981.28
Interest on Loan					



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1832.28	2039.71	2039.71	2039.71	2039.71
Cumulative Repayment upto Previous Year	219.84	365.87	519.72	673.57	827.43
Net Loan-Opening	1612.44	1673.84	1519.99	1366.14	1212.28
Additions	207.43	0.00	0.00	0.00	0.00
Repayment during the year	146.03	153.85	153.85	153.85	153.85
Net Loan-Closing	1673.84	1519.99	1366.14	1212.28	1058.43
Average Loan	1643.14	1596.91	1443.06	1289.21	1135.36
Weighted Average Rate of Interest on Loan	9.2991	9.3006	9.2966	9.2864	9.2754
Interest	152.80	148.52	134.16	119.72	105.31
Return on Equity					
Opening Equity	785.26	874.16	874.16	874.16	874.16
Additions	88.90	0.00	0.00	0.00	0.00
Closing Equity	874.16	874.16	874.16	874.16	874.16
Average Equity	829.71	874.16	874.16	874.16	874.16
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity	19.610	19.610	19.610	19.610	19.610
Return on Equity	162.71	171.43	171.43	171.43	171.43
Interest on Working Capital					
O & M expenses	20.09	20.76	21.45	22.16	22.89
Maintenance Spares	36.18	37.38	38.62	39.91	41.23
Receivables	121.11	124.61	123.62	122.66	121.75
Total	177.39	182.75	183.69	184.73	185.87
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	23.95	24.67	24.80	24.94	25.09
Annual Transmission Charges					
Depreciation	146.03	153.85	153.85	153.85	153.85
Interest on Loan	152.80	148.52	134.16	119.72	105.31
Return on Equity	162.71	171.43	171.43	171.43	171.43
Interest on Working Capital	23.95	24.67	24.80	24.94	25.09
O & M Expenses	241.20	249.20	257.48	266.04	274.84
Total	726.68	747.67	741.71	735.98	730.52

58. The petitioner has prayed to allow to recover the deferred tax liability upto 31.3.2019 from the beneficiaries or the long term customers/DICs as and when the same gets materialised. As per Regulation 49 of the 2014 Tariff regulations, the deferred tax liabilities for the period 1.4.2009 up to 31.3.2014 and 1.4.2014 up to

31.3.2019 shall not be recoverable from the beneficiaries or the long term customers/DICs. Accordingly, the petitioner's prayer is rejected.

Filing Fee and the Publication Expenses

54. 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

55. 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

56. 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.

Sharing of Transmission Charges

57. 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.

58. This order disposes of Petition No.505/TT/2014.

Sd/-

**(Dr. M.K. Iyer)
Member**

Sd/-

**(A.S. Bakshi)
Member**

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)**Asset-1**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2012	Additions during the tariff period	Total
BOND-XXXIV-DOCO DRAWL ON 01-APR-2012-	8.84	20.00	0.00	20.00
BOND XXXVI-DOCO DRAWL ON 01-APR-2012-	9.35	40.00	0.00	40.00
BOND XXXVIII-DOCO DRAWL ON 01-APR-2012-	9.25	306.07	0.00	306.07
SBI (21.03.2012)-ADDCAP FOR 2012-2013 ADD CAP-	10.61	0.00	91.49	91.49
SBI (21.03.2012)-ADDCAP FOR 2013-2014 ADD CAP-	0.00	0.00	79.14	79.14
BOND - XLII-ADDCAP FOR 2012-2013 ADD CAP-	8.80	0.00	44.41	44.41
Total		366.07	215.04	581.11

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

(₹ in lakh)

Particulars	2012-13	2013-14
Gross Opening Loan	366.07	501.97
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
Net Loans Opening	366.07	501.97
Add: Draw(s) during the Year	135.90	79.14
Less: Repayments of Loan during the year	0.00	0.00
Net Closing Loan	501.97	581.11
Average Net Loan	434.02	541.54
Rate of Interest on Loan* (%)	9.3606%	9.4570%
Interest on Loan	40.63	51.21

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)

Asset2

(₹in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2012	Additions during the tariff period	Total
BOND-XXXIV-DOCO DRAWL ON 01-APR-2012-	8.84	14.00	0.00	14.00
BOND XXXVI-DOCO DRAWL ON 01-APR-2012-	9.35	6.00	0.00	6.00
BOND XXXVIII-DOCO DRAWL ON 01-APR-2012-	9.25	39.05	0.00	39.05
SBI (21.03.2012)-ADDCAP FOR 2013-2014 ADD CAP-	0.00	0.00	34.66	34.66
BOND - XLI-ADDCAP FOR 2012-2013 ADD CAP-	8.85	0.00	42.02	42.02
BOND - XLII-ADDCAP FOR 2012-2013 ADD CAP-	8.80	0.00	240.02	240.02
Total		59.05	316.70	375.75

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

(₹in lakh)

Particulars	2012-13	2013-14
Gross Opening Loan	59.05	341.09
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
Net Loans Opening	59.05	341.09
Add: Draw(s) during the Year	282.04	34.66
Less: Repayments of Loan during the year	0.00	0.00
Net Closing Loan	341.09	375.75
Average Net Loan	200.07	358.42
Rate of Interest on Loan* (%)	8.9124%	8.9377%
Interest on Loan	17.83	32.03



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)

Asset 3

(₹in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2012	Additions during the tariff period	Total
BOND-XXXIV-DOCO-	8.84	19.90	0.00	19.90
BOND XXXVI-DOCO DRAWL ON 01-MAY-2012-	9.35	30.00	0.00	30.00
BOND XXXVIII-DOCO-	9.25	232.53	0.00	232.53
SBI (21.03.2012)-ADDCAP FOR 2013-2014 ADD CAP-	0.00	0.00	60.12	60.12
BOND - XLI-ADDCAP FOR 2012-2013 ADD CAP-	8.85	0.00	100.10	100.10
BOND - XLII-DOCO-	8.80	2.16	0.00	2.16
Total		284.59	160.22	444.81

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

(₹in lakh)

Particulars	2012-13	2013-14
Gross Opening Loan	284.59	384.69
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
Net Loans Opening	284.59	384.69
Add: Draw(s) during the Year	100.10	60.12
Less: Repayments of Loan during the year	0.00	0.00
Net Closing Loan	384.69	444.81
Average Net Loan	334.64	414.75
Rate of Interest on Loan* (%)	9.1719%	9.2141%
Interest on Loan	30.69	38.22



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)

Asset4

(₹in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2012	Additions during the tariff period	Total
BOND-XXXIV-DOCO DRAWL ON 01-MAY-2012-	8.84	20.00	0.00	20.00
BOND XXXVI-DOCO DRAWL ON 01-MAY-2012-	9.35	24.00	0.00	24.00
BOND XXXVIII-DOCO DRAWL ON 01-MAY-2012-	9.25	185.56	0.00	185.56
SBI (21.03.2012)-ADDCAP FOR 2013-2014 ADD CAP-	0.00	0.00	78.37	78.37
BOND - XLI-ADDCAP FOR 2012-2013 ADD CAP-	8.85	0.00	120.91	120.91
BOND - XLII-DOCO-	8.80	1.76	0.00	1.76
Total		231.32	199.28	430.60

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

(₹in lakh)

Particulars	2012-13	2013-14
Gross Opening Loan	231.32	352.23
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
Net Loans Opening	231.32	352.23
Add: Draw(s) during the Year	120.91	78.37
Less: Repayments of Loan during the year	0.00	0.00
Net Closing Loan	352.23	430.60
Average Net Loan	291.78	391.42
Rate of Interest on Loan* (%)	9.1445%	9.2137%
Interest on Loan	26.68	36.06



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2014-19)**Combined Asset-**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND-XXXIV-1.DOCO DRAWL ON 01-APR-2012-	8.84	20.00	0.00	20.00
BOND-XXXIV-14.DOCO-	8.84	19.90	0.00	19.90
BOND-XXXIV-7.DOCO DRAWL ON 01-APR-2012-	8.84	14.00	0.00	14.00
BOND-XXXIV-DOCO-	8.84	20.00	0.00	20.00
BOND XXXVI-13.DOCO DRAWL ON 01-MAY- 2012-	9.35	30.00	0.00	30.00
BOND XXXVI-2.DOCO DRAWL ON 01-APR-2012-	9.35	40.00	0.00	40.00
BOND XXXVI-20.DOCO DRAWL ON 01-MAY-2012-	9.35	24.00	0.00	24.00
BOND XXXVI-8.DOCO DRAWL ON 01-APR-2012-	9.35	6.00	0.00	6.00
BOND XXXVIII-15.DOCO-	9.25	232.53	0.00	232.53
BOND XXXVIII-21.DOCO DRAWL ON 01-MAY-2012-	9.25	185.56	0.00	185.56
BOND XXXVIII-3.DOCO DRAWL ON 01-APR-2012-	9.25	306.07	0.00	306.07
BOND XXXVIII-9.DOCO DRAWL ON 01-APR- 2012-	9.25	39.05	0.00	39.05
SBI (21.03.2012)-12.ADDCAP FOR 2013-2014 ADD CAP-	10.25	34.66	0.00	34.66
SBI (21.03.2012)-18.ADDCAP FOR 2013-2014 ADDCAP-	10.25	60.12	0.00	60.12
SBI (21.03.2012)-23.ADDCAP FOR 2013-2014 ADD CAP-	10.25	78.37	0.00	78.37
SBI (21.03.2012)-5.ADDCAP FOR 2012-2013 ADD CAP-	10.25	91.49	0.00	91.49
SBI (21.03.2012)-6.ADDCAP FOR 2013-2014 ADD CAP-	10.25	79.14	0.00	79.14
BOND - XLI-10.ADDCAP FOR 2012-2013 ADD CAP-	8.85	42.02	0.00	42.02
BOND - XLI-17.ADDCAP FOR 2012-2013 ADD CAP-	8.85	100.10	0.00	100.10
BOND - XLI-22.ADDCAP FOR 2012-2013 ADD CAP-	8.85	120.91	0.00	120.91
BOND - XLII-11.ADDCAP FOR 2012-2013 ADD CAP-	8.80	240.02	0.00	240.02



Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND - XLII-16.DOCO-	8.80	2.16	0.00	2.16
BOND - XLII-24.DOCO-	8.80	1.76	0.00	1.76
BOND - XLII-4.ADDCAP FOR 2012-2013 ADD CAP-	8.80	44.41	0.00	44.41
Total		1832.27	0.00	1832.27

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	1832.27	1832.27	1832.27	1832.27	1832.27
Cumulative Repayments of Loans up to Previous Year	0.00	6.17	12.34	78.35	144.36
Net Loans Opening	1832.27	1826.10	1819.93	1753.92	1687.91
Add: Drawl(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments during the year	6.17	6.17	66.01	66.01	66.01
Net Closing Loan	1826.10	1819.93	1753.92	1687.91	1621.90
Average Net Loan	1829.19	1823.02	1786.93	1720.92	1654.91
Rate of Interest on Loan (%)	9.2991%	9.3006%	9.2966%	9.2864%	9.2754%
Interest on Loan	170.10	169.55	166.12	159.81	153.50

