CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

PETITION NO.225/TT/2015

Coram:

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

Date of Hearing: 08.02.2016 Date of Order : 29.02.2016

In the Matter of:

Truing up of transmission tariff of Asset I (Combined assets): Asset 1: 765 kV S/C Bina-Gwalior transmission line, Asset 2: 315 MVA, 400/220/33 KV ICT-I along with associated bays at Gwalior sub-station, Asset 3: LILO of 400 KV S/C Korba-Raipur transmission line at Bhatapara sub-station along with associated bays, Asset 4: 400 kV Khandwa-Rajgarh ckt II along with associated bays and 765/400 KV ICT-III at Seoni sub-station, Asset 5: 400 KV Khandwa-Rajgarh Ckt -I along with associated bays, 63 MVAR Bus Reactor at Bina sub-station, Asset II (Single asset): 400 kv ICT-II at Gwalior sub-station and Asset III: 400/220kV ICT-II at Bhatapara under Sipat-II Transmission system in Western Region 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.

And in the Matter of:

Power Grid Corporation of India Ltd, SAUDAMINI, Plot No.-2, Sector-29, Gurgaon-122001 (Haryana)

.....Petitioner

Versus

- Madhya Pradesh Power Trading Company Ltd. Shakti Bhawan, Rampur Jabalpur - 482 008
- 2. Maharashtra State Electricity Distribution Co. Ltd. Prakashgad, 4th Floor



Andheri (East), Mumbai - 400 052

 Gujarat Urja Vikas Nigam Ltd. Sardar Patel Vidyut Bhawan, Race Course Road Vadodara - 390 007

- Electricity Department Govt. Of Goa Vidyut Bhawan, Panaji, Ner Mandvi Hotel, Goa - 403 001
- Electricity Department
 Administration Of Daman & Diu
 Daman 396 210
- Electricity Department
 Administration Of Dadra Nagar Haveli
 U.T., Silvassa 396 230
- Chhattisgarh State Electricity Board P.O.Sunder Nagar, Dangania, Raipur Chhatisgaarh-492013
- Madhya Pradesh Audyogik Kendra Vikas Nigam(Indore) Ltd.
 3/54, Press Complex, Agra-Bombay Road, Indore- 452 008

.....Respondent(s)

The following were present:

For Petitioner: Shri M.M. Mondal, PGCIL

Shri S.K Venkatesan, PGCIL

Shri S.S. Raju, PGCIL Shri Jasbir Singh, PGCIL Shri Rakesh Prasad, PGCIL Shri Mohd. Mohsin, PGCIL Smt.Sonam Gangwar, PGCIL

Shri A.M. Pavgi, PGCIL Shri Pankaj Sharma Shri S.C. Taneja

For Respondent: None



ORDER

- 1. 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 from date of commercial operation 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 Asset I (Combined assets): Asset 1: 765 kV S/C Bina-Gwalior transmission line (COD: 01.04.2007), Asset 2: 315 MVA, 400/220/33 KV ICT-I along with associated bays at Gwalior sub-station (COD: 01.05.2007), Asset 3: LILO of 400 KV S/C Korba-Raipur transmission line at Bhatapara sub-station along with associated bays (COD: 01.12.2007), Asset 4: 400 kV Khandwa-Rajgarh ckt II along with associated bays and 765/400 KV ICT-III at Seoni sub-station (COD. 01.04.2008), Asset 5: 400 KV Khandwa-Rajgarh Ckt -I along with associated bays, 63 MVAR Bus Reactor at Bina sub-station (COD: 01.05.2008), Asset II (Single asset): 400 kv ICT-il at Gwalior sub-station (COD: 01.04.2008) and Asset III: 400/220kV ICT-II at Bhatapara (COD. 01.01.2009) under Sipat-II Transmission system in Western Region(hereinafter collectively referred to as "the transmission assets").
- 2. The respondents are distribution licensees, who are procuring transmission service from the petitioner, mainly beneficiaries of Western Region.
- 3. The brief facts of the case are as follows:-

- a) The investment approval to the Asset III transmission system was accorded by Board of Directors of the petitioner company vide RCE dated 26.12.2008 at an estimated cost of ₹79351 lakh, including IDC of ₹3788 lakh (based on 2ndQuarter, 2008 price level.
 - b) The assets covered under the under the instant petition are follows:-

Assets	COD	Description
Asset I (combined asset)	1.5.2008	Asset 1: 765 kV S/C Bina-Gwalior transmission line (COD: 01.04.2007), Asset 2: 315 MVA, 400/220/33 KV ICT-I along with associated bays at Gwalior S/S (COD: 01.05.2007), Asset 3: LILO of 400 KV S/C Korba-Raipur transmission line at Bhatapara S/S along with associated bays (COD: 01.12.2007), Asset 4: 400 kV Khandwa-Rajgarh ckt-II along with associated bays and 765/400 KV ICT-III at Seoni S/S (COD. 01.04.2008), Asset 5 400 KV Khandwa-Rajgarh ckt-I along with associated bays, 63 MVAR Bus Reactor at Bina S/S (COD: 01.05.2008)
Asset II	1.4.2008	400 kV ICT-II at Gwalior S/S
Asset III	1.1.2009	400/220kV ICT-II at Bhatapara

c) The annual transmission charges from 1.4.2009 to 31.3.2014 based on admitted capital cost of the transmission asset and debt:equity as on 1.4.2009 were determined through various orders as follows:-

Assets	Date of Order	Petition No	Description
Combined Asset-I	19.4.2011	291/20102	Capital cost of ₹70997.08 lakh on 1.4.2009 and ₹1396.46 lakh and ₹2214.74 lakh as additional capital expenditure for 2009-10 and 2010-11 respectively was approved
ASSCET	Asset-I		2009-10 and 2010-11 respectively was approved.

Asset-II	19.4.2011	291/20102	Capital cost of ₹1214.51lakh on 1.4.2009 and ₹30.78lakh and ₹124.98lakh, as additional capital expenditure during for 2009-10 and 2010-11 respectively was approved.
Asset III	Order dated 18.10.2012 and Revised Order dated 5.1.2015	Order 130/TT/2012 and Revised Order 242/2009	Capital cost of₹1509.07 lakh on 1.4.2009 and ₹119.28 lakhas additional capital expenditure for 2009-14period was approved.

d) The annual transmission charges were determined based on the following approved capital cost on respective COD's and estimated additional capital expenditure towards the balance and retention payments from COD to 31.3.2014, as depicted below:-

(₹in lakh)

Asset	COD	Approved apportioned cost	Admitted cost as on 1.4.2009	Additional capital expenditure allowed during 2009-14	Estimated total cost up to 31.3.2014
Combined Asset-I	1.5.2008	76163.34	70997.10	3611.20	74608.28
Asset-II	1.4.2008	1408.56	1214.51	155.76	1370.27
Asset III	1.1.2009	1778.90	1509.07	119.28	1628.35

e) The IEDC & IDC in respect Asset III for 16 months was disallowed in order dated 18.6.2010 in Petition No. 242/2009. The petitioner filed Review petition No. 213/2010 seeking review of order dated 18.6.2010 in Petition No. 242/2009. The Commission vide order dated 3.2.2012 in Review Petition did not condone the delay. The petitioner filed Appeal No. 118 of 2012 against the said order and review orders before Hon'ble Appellate Tribunal for Electricity, contending that the disallowance of IDC/ IEDC by the Commission on grounds of time over run was

not attributable to the petitioner. The APTEL has issued its judgement dated 3.5.2013 in Appeal No.118 of 2012 in this matter stating:-

- "i) BHEL was experiencing shortage of CRGO steel due to unavailability in the international market affecting supply of Inter Connecting Transformers to POWERGRID, In view of crunch in supply of ICTs POWERGRD was constrained to prioritize the supplies of ICTs to its various Sub-Stations depending on the system requirements,
- ii) In view of delay in commissioning of Sipat-II Thermal Power Station, the commissioning of ICT-II at Bhattapara was not critical and accordingly, POWERGRID diverted the ICT from Bhattapara to meet the critical requirements of Muzaffarpur Sub-Station as it was considered necessary keeping in view the system requirements. This resulted in delay in commissioning of ICT-II at Battapara.
- iii) Prioritizing the commissioning of the ICTs from system consideration due to crunch in supply of transformers caused due to CRGO crisis was a prudent decision. In a similar case, the Central Commission in its order dated 20.72009 considered the delay in commissioning of 'CTS due to shortage of CRGO steel which was beyond the control of POWERGRID
- iv) The delay in commissioning of ICT-II at Bhattapara Sub-Station was beyond the control of POWERGRID.
- v) The Liquidated Damages recovered by POWERGRID from BHEL for delay in supply of the ICT will be deducted from the capital cost of the ICT.
- f) The APTEL directed the petitioner to furnish the Liquidated Damages (LD) recovered from BHEL for the delay in supply of the ICT. In response, the petitioner vide affidavit dated 4.9.2014 submitted that an amount of ₹5.57 lakh has been recovered from BHEL as LD.
- g) The Commission revised capital cost by capitalizing the IDC and IEDC of 16 months as directed by the Tribunal and taking into consideration the details of LD recovered from BHEL by the petitioner
- h) The revised capital cost and additional capital expenditure in respect of Asset III as considered by the Commission while determining tariff in order dated 5.1.2015 in Petition No. 242/2009 is as below:-

COD	Apportioned Approved Cost	Expenditure upto COD	Liquidated	Expenditure from COD to 31.3.09	Capital expenditure as on 1.4.2009
1.1.2009	1778.90	1485.63	5.57	29.01	1509.07

Asset	COD	Approved apportioned cost	Admitted cost as on 1.4.2009	Additional capital expenditure allowed during 2009-14	Estimated total cost up to 31.3.2014
Asset-III	1.1.2009	1778.90	1509.07	119.28	1628.35

i) The Commission determined the tariff for 2009-14 tariff period, based on the above capital costs and estimated additional capital expenditure for the transmission assets during 2009-14 as given below:-

Combined Asset-I

(₹in lakh)

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Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3741.39	3835.71	3894.15	3894.15	3894.15
Interest on Loan	4028.83	3811.52	3540.91	3196.88	2852.8
Return on Equity	3759.85	3854.54	3912.61	3912.61	3912.61
Interest on Working Capital	307.06	310.3	311.12	308.22	305.55
O & M Expenses	1334.4	1410.87	1491.5	1576.9	1666.93
Total	13171.53	13222.94	13150.29	12888.76	12632.04

Asset-II

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	64.94	69.05	72.35	72.35	72.35
Interest on Loan	70.85	69.82	67.46	60.94	54.43
Return on Equity	64.4	68.49	71.76	71.76	71.76
Interest on Working Capital	8.63	9.03	9.39	9.54	9.7
O & M Expenses	89.08	94.18	99.57	105.26	111.28
Total	297.90	310.57	320.53	319.85	319.52

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	77.96	78.99	80.58	82.18	82.18
Interest on Loan	91.69	85.6	80.1	74.45	66.74
Return on Equity	77.17	78.18	79.77	81.35	81.35
Interest on Working					
Capital	9.6	9.77	9.99	10.23	10.37
O & M Expenses	89.08	94.18	99.57	105.26	111.28
Total	345.50	346.72	350.01	353.47	351.92

- 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 ("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 the respondents in this matter.

- 7. The hearing in this matter was held on 8.2.2016. During the hearing, the petitioner was directed to submit the reply to the Commission's Letter dated 8.2.2016. In response, the petitioner has submitted the information vide affidavit dated 17.2.2016.
- 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 Regulationsprovides 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 is as follows:-

Asset	COD	Actual capital cost as on 1.4.2009 claimed in the instant petition
Combined Asset I	1.5.2008	70997.10
Asset II	1.4.2008	1214.51
Asset III	1.1.2009	1514.64

- 12. The capital cost as on 1.4.2009 of ₹70997.10 lakh and ₹1214.51 lakh for Combined Asset I and Asset II are certified by the Auditor's Certificates dated 19.7.2014 and 10.6.2015. Accordingly, the same is considered for truing up tariff in accordance with Regulation 7 of the 2009 Tariff Regulations.
- 13. In Petition No. 242/2009, the petitioner vide affidavit dated 4.9.2014 submitted that an amount of ₹5.57 lakh was received from BHEL towards LD. In order dated 5.1.2015 in Petition No. 242/2009, the capital cost of ₹1509.07 lakh for Asset-III as on 1.4.2009 was considered, after deduction of ₹5.57 lakh, as per directions of APTEL. However, in the instant petition, the petitioner has submitted that an LD amount of ₹5.17 lakh only has been recovered from BHEL and not ₹5.57 lakh as stated in Petition No. 242/2009 and the same has been adjusted in the capital expenditure of 2011-12. Accordingly, the petitioner has claimed capital cost of ₹1514.64 lakh as on 1.4.2009. We have considered the submission of the petitioner. We would like to go as per order dated 5.1.2015 in Petition No. 242/2009. Accordingly, an amount of ₹5.57 lakh received from BHEL as LD, has been deducted from the capital cost as on COD and as such, capital cost as on 1.4.2009 for Asset-III has been considered as ₹1509.07 lakh. The LD of ₹5.17 amount adjusted by the petitioner in 2011-12 additional capital expenditure has been allowed as the additional capital expenditure during 2011-12.
- 14. Accordingly, the capital cost considered for truing up tariff in accordance with Regulation 7 of the 2009 Tariff Regulations is:-.

Asset	COD	Actual capital cost as on 1.4.2009 considered in the instant petition
Combined Asset I	1.5.2008	70997.10

Asset	COD	Actual capital cost as on 1.4.2009 considered in the instant petition
Asset II	1.4.2008	1214.51
Asset III	1.1.2009	1509.07

Additional Capital Expenditure

- 15. 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 and additional capitalization for expenditure incurred after cut-off date against the transmission asset under Clause (2) of Regulation 9 of the 2009 Tariff Regulations.
- 16. Clause 1 of Regulation 9 of the 2009 Tariff Regulations provides as follows:-
 - "(1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
 - (i) Undischarged liabilities;
 - (ii) Works deferred for execution;
 - (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 8;
 - (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
 - (v) Change in law:"
- 17. Clause 1 of Regulation 9 of the 2009 Tariff Regulations provides as follows:-
 - "(2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, 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;



- (ii) Change in law;
- (iii) Deferred works relating to ash pond or ash handling system in the original scope of work:
- (iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and
- (v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:"
- 17. The petitioner has submitted that it has incurred following additional capital expenditure for all of the assets during 2010-14 period towards balance and retention payments as certified vide Auditor's Certificates dated 9.7.2014, 10.6.2015 and 14.7.2015 as depicted below:-

Name of Asset	Capital Cost	Approved Cost as on	Additional Capital Expenditure			Additional Capital Expenditure				
		1.4.2009	2009-10	2010-11	2011-12	2012-13	2013-14	31.3.2014		
Combined	Approved by the Commission	70997.10	1,396.46	2,214.74	0.00	0.00	0.00	74,608.30		
Asset-I	Claimed by the Petitioner	70997.10	1466.41	899.48	1063.04	152.70	54.18	74632.91		
Asset-II	Approved by the Commission	1214.51	30.78	124.98	0.00	0.00	0.00	1,370.27		
	Claimed by the Petitioner	1214.51	30.78	6.75	186.15	42.87	5.30	1486.36		
Asset-III	Approved by the Commission	1509.07	38.71	0.00	60.47	0.00	0.00	1,608.25		
1.555	Claimed by the Petitioner	1514.64	55.37	0.00	17.31	0.00	0.00	1587.32		

18. The petitioner was directed to submit details for increase in costs in Asset I and Asset-II and RCE, if any in case of Asset -II. In response, the petitioner vide affidavit dated 17.2.2016, has submitted:

"the Assets covered under the instant Petition were put under COD during 2004-09 tariff block. The notional COD of Asset-I is 01.05.2008 and COD of Asset-II is 01.04.2008 & COD of Asset-III is 01.01.2009 which falls under 2004-09 tariff block. During 2004-09 tariff block, apportioned approved cost was compared with the completion cost of the project in totality. In the instant case also against the combined apportioned approved cost of all the element of ₹79086.54 Lakhs, the total completion cost is ₹77706.59 Lakhs. So, completion cost of the Project is well within the approved cost, hence there is no cost overrun. Therefore, the Hon 'ble Commission may kindly approve the tariff as claimed in the instant petition."

- 19. We have considered the submission of the petitioner. The cost of an asset is allowed on the basis of the approved apportioned of that particular asset. We have adopted this approach in some of the petitions. This approach has been upheld by the Appellate Tribunal for Electricity in judgement dated 28.11.2013 in Appeal No. 165 of 2012. Accordingly, we have restricted the capital cost to approved apportioned cost of the asset in order dated 18.2.2014 in Petition No. 216/TT/2012 for the purpose of tariff determination. The same approach has been adopted in the present case and capital expenditure in case of Asset-II has been restricted to apportioned approved cost of ₹1408.56 lakh. The petitioner has claimed the completion cost as on 31.3.2014 as ₹1486.36 lakh, we have restricted the additional capital expenditure during 2009-10, 2010-11 and 2011-12 to ₹30.78 lakh, ₹6.75 lakh and ₹156.52 lakh respectively in order to ensure that completed cost for Asset- II does not exceed approved apportioned cost of ₹1408.56 lakh.
- 20. Further, in case of Asset-III, An amount of ₹5.57 lakh received from BHEL as LD, has been deducted from the capital cost as on COD and accordingly capital cost as on 1.4.2009 for Asset-III has been considered as ₹1509.07 lakh as was allowed in order

dated 5.1.2015 in Petition No. 242/2009. The LD of ₹5.17 amount adjusted by the petitioner in 2011-12 additional capital expenditure has been allowed in the additional capital expenditure during 2011-12.

21. In view of the above, the additional capital expenditure during 2009-14, considered for truing up and for the purpose of tariff determination is as follows:-

(₹ in lakh)

Accet	Capital Cost as	Act	Actual additional capital expenditure in 2009-14						
Asset	on 1.4.2009	2009-10	2010-11	2011-12	2012-13	2013-14	Total	cost as on 31.3.2014	
Combined Asset I	70997.10	1,466.41	899.48	1,063.04	152.70	54.18	3635.81	74632.91	
Asset II	1214.51	30.78	6.75	156.52	-	-	194.05	1408.56	
Asset III	1509.07	55.37	-	22.48	1	-	77.85	1586.92	

Debt: Equity

22. 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."
- 23. The admitted debt: equity ratio in order dated 19.4.2011 in Petition No. 291/2010as on 1.4.2009 for Combined Asset I &Asset Iland revised order dated 5.1.2015 in Petition No. 242/2009 as on 1.4.2009 for Asset III, has been considered for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations.

24. The petitioner was directed vide letter dated 8.2.2016 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. In response, the petitioner vide affidavit dated 16.2.2016, submitted that for additional capital expenditure for Asset- I in 2012-13 & 2013-14 for add cap of ₹152.70 Lakhs &₹54.18 Lakhs, no loan is deployed as shown in Form 13. Further, for Asset- II in 2011-12 for add cap of ₹186.15 Lakhs, ₹ 36.06 Lakhs (18.39%) loan is deployed and in 2012-13 & 2013-14 for add cap ₹ 42.87 Lakhs &₹ 5.3 Lakhs respectively no Loan has been deployed as shown in Form 13. For Asset-III in 2009-10 for add cap ₹55.37 Lakhs, ₹15.37 Lakhs (27.75%) loan is deployed and in 2011-12 no Loan has been deployed as shown In Form 13.

25. The petitioner has claimed normative debt:equity ratio of 70:30 for additional capital expenditure during 2013-14 in line with 2009 Tariff Regulations and Commission's order dated order dated 19.4.2011 in Petition No. 291/2010 as on 1.4.2009 for Combined Asset I & Asset II and revised order dated 5.1.2015 in Petition No. 242/2009 as on 1.4.2009 for Asset III. We have considered the same for capital cost as on 1.4.2009 h for computation and for additional capitalization during 2009-14. 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 COD	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
		C	Combined Asset I			
Debt	49698.38	70.00	2545.07	70.00	52243.45	70.00
Equity	21298.72	30.00	1090.74	30.00	22389.46	30.00
Total	70997.10	100.00	3635.81	100.00	74632.91	100.00

Asset II						
Debt	850.71	70.05	135.84	70.00	986.55	70.04
Equity	363.80	29.95	58.22	30.00	422.02	29.96
Total	1214.51	100.00	194.05	100.00	1408.56	100.00
			Asset III			
Debt	1056.41	70.00	54.50	70.00	1110.91	70.00
Equity	452.66	30.00	23.36	30.00	476.02	30.00
Total	1509.07	100.00	77.85	100.00	1586.92	100.00

Return on Equity ("ROE")

- 26. 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:

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

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

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

27. 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

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

CombinedAsset I

(₹in lakh)

Return on Equity	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 19.4.2011 in Petition No. 291/2010	3,759.85	3,854.54	3,912.61	3,912.61	3,912.61
Claimed by the petitioner	4018.47	4234.36	4295.56	4330.90	4389.06
Allowed after trued up in this order	4018.31	4234.35	4295.47	4330.80	4389.08

Asset II

(₹in lakh)

Return on Equity	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 19.4.2011 in Petition No. 291/2010	64.40	68.49	71.76	71.76	71.76
Claimed by the petitioner	68.74	72.35	78.03	84.68	87.12
Allowed after trued up in this order	68.80	72.41	77.22	81.77	82.76

Asset III

Return on Equity	2009-10	2010-11	2011-12	2012-13	2013-14
Approved in revised order dated 5.1.2015 in Petition No. 242/2009	77.17	78.18	79.77	81.35	81.35
Claimed by the petitioner	90.19	95.10	95.69	96.20	97.35
Allowed after trued up in this order	86.08	90.84	91.58	92.24	93.35



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, increase due to actual additional capital expenditure for Asset – I and restriction of additional capital expenditure for Asset-II.

Interest on Loan ("IoL")

- 29. 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".
- 30. 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 I

Interest on Loan	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 19.4.2011 in Petition No. 291/2010	4,028.83	3,811.52	3,540.91	3,196.88	2,852.80
Claimed by the petitioner	4030.87	3776.11	3501.20	3197.47	2859.99
Allowed after trued up in this order	4030.90	3776.14	3501.25	3197.52	2860.04

(₹in lakh)

Interest on Loan	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 19.4.2011 in Petition No. 291/2010	70.85	69.82	67.46	60.94	54.43
Claimed by the petitioner	70.88	66.25	66.26	66.88	61.41
Allowed after trued up in this order	70.85	66.22	65.33	63.81	57.11

Asset III

(₹ in lakh)

Interest on Loan	2009-10	2010-11	2011-12	2012-13	2013-14
Approved in revised order dated 5.1.2015 in Petition No. 242/2009	91.69	85.60	80.10	74.45	66.74
Claimed by the petitioner	94.21	88.27	81.02	73.72	65.84
Allowed after trued up in this order	95.71	89.80	82.74	75.62	67.74

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

31. 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:-

Combined Asset I

Depreciation	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 19.4.2011 in Petition No. 291/2010	3,741.39	3,835.71	3,894.15	3,894.15	3,894.15
Claimed by the petitioner	3743.74	3805.68	3857.10	3888.59	3893.77
Allowed after trued up in this order	3743.74	3805.67	3857.09	3888.58	3893.76

(₹in lakh)

Depreciation	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 19.4.2011 in Petition No. 291/2010	64.94	69.05	72.35	72.35	72.35
Claimed by the petitioner	64.94	65.93	71.02	77.07	78.34
Allowed after trued up in this order	64.94	65.93	70.24	74.37	74.37

Asset III

(₹ in lakh)

Depreciation	2009-10	2010-11	2011-12	2012-13	2013-14
Approved in revised order dated 5.1.2015 in Petition No. 242/2009	77.96	78.99	80.58	82.18	82.18
Claimed by the petitioner	81.71	83.17	83.63	84.08	84.08
Allowed after trued up in this order	81.41	82.87	83.47	84.06	84.06

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")

32. 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 I

O&M Expenses	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 19.4.2011 in Petition No.	1,334.40	1,410.87	1,491.50	1,576.90	1,666.93

O&M Expenses	2009-10	2010-11	2011-12	2012-13	2013-14
291/2010					
Claimed by the petitioner	1334.40	1410.87	1491.50	1576.90	1666.93
Allowed after trued up in this order	1334.40	1410.87	1491.50	1576.90	1666.93

(₹in lakh)

O&M Expenses	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 19.4.2011 in Petition No. 291/2010	89.08	94.18	99.57	105.26	111.28
Claimed by the petitioner	89.08	94.18	99.57	105.26	111.28
Allowed after trued up in this order	89.08	94.18	99.57	105.26	111.28

Asset III

(₹ in lakh)

(t iii saar)					
O&M Expenses	2009-10 (pro-rata)	2010-11	2011-12	2012-13	2013-14
Approved vide revised order dated 20.2.2013 in 72/2010	216.59	343.48	363.14	383.88	405.84
Claimed by the petitioner	216.59	343.48	363.14	383.88	405.84
Allowed after trued up in this order	216.59	343.48	363.14	383.88	405.84
O&M Expenses	2009-10	2010-11	2011-12	2012-13	2013-14
Approved in revised order dated 5.1.2015 in Petition No. 242/2009	89.08	94.18	99.57	105.26	111.28
Claimed by the petitioner	89.08	94.18	99.57	105.26	111.28
Allowed after trued up in this order	89.08	94.18	99.57	105.26	111.28

Interest on Working Capital (IWC)

- 33. The IWC has been worked out as per the methodology provided in the Regulation 18 of the 2009 Tariff Regulations.
- 34. We have considered the submission of the petitioner and the respondent. 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:-

Combined Asset I

(₹in lakh)

Interest on Working Capital	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 19.4.2011 in Petition No. 291/2010	307.06	310.30	311.12	308.22	305.55
Claimed by the petitioner	312.54	316.85	317.5	316.83	315.62
Allowed after trued up in this order	312.53	316.84	317.49	316.83	315.62

Asset II

(₹in lakh)

Interest on Working Capital	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 19.4.2011 in Petition No. 291/2010	8.63	9.03	9.39	9.54	9.70
Claimed by the petitioner	8.72	8.97	9.47	10.03	10.29
Allowed after trued up in this order	8.72	8.97	9.42	9.85	10.03

Asset III

(₹ in lakh)

Interest on Working Capital	2009-10	2010-11	2011-12	2012-13	2013-14
Approved in revised order dated 5.1.2015 in Petition No. 242/2009	9.60	9.77	9.99	10.23	10.37
Claimed by the petitioner	10.00	10.27	10.41	10.56	10.72
Allowed after trued up in this order	9.94	10.20	10.35	10.52	10.68

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

35. 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:-

Combined Asset I

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation					
Opening Gross Block	70997.10	72463.51	73362.99	74426.03	74578.73
Additional Capitalisation	1466.41	899.48	1063.04	152.70	54.18
Closing Gross Block	72463.51	73362.99	74426.03	74578.73	74632.91
Average Gross Block	71730.31	72913.25	73894.51	74502.38	74605.82
Rate of Depreciation	5.22%	5.22%	5.22%	5.22%	5.22%
Depreciable Value	64318.64	66043.17	66671.19	67291.88	66975.32
Balance Useful life of the asset	32.00	31.00	30.00	29.00	28.00
Elapsed Life	0.00	1.00	2.00	3.00	4.00
Remaining Depreciable Value	64318.64	61639.55	58717.01	55407.00	51611.52
Depreciation during the year	3743.74	3805.67	3857.09	3888.58	3893.76
Cumulative Depreciation	6643.35	10449.02	14306.12	18194.70	22088.46
Interest on Loan					
Gross Normative Loan	49698.38	50724.87	51354.50	52098.63	52205.52
Cumulative Repayment upto Previous Year	2899.61	6643.35	10449.02	14306.12	18194.70
Net Loan-Opening	46798.77	44081.52	40905.48	37792.51	34010.82
Additions	1026.49	629.64	744.13	106.89	37.93
Repayment during the year	3743.74	3805.67	3857.09	3888.58	3893.76
Net Loan-Closing	44081.52	40905.48	37792.51	34010.82	30154.99
Average Loan	45440.14	42493.50	39349.00	35901.67	32082.90
Weighted Average Rate of Interest on Loan (%)	8.8708%	8.8864%	8.8979%	8.9063%	8.9145%
Interest on Loan	4030.90	3776.14	3501.25	3197.52	2860.04
microst on Loan	1000.00	0770.11	0001.20	0107.02	2000.01
Return on Equity					
Opening Equity	21298.72	21738.64	22008.49	22327.40	22373.21
Additions	439.92	269.84	318.91	45.81	16.25
Closing Equity	21738.64	22008.49	22327.40	22373.21	22389.46
Average Equity	21518.68	21873.57	22167.94	22350.30	22381.34
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	4018.31	4234.35	4295.47	4330.80	4389.08

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Interest on Working Capital					
O & M expenses	111.16	117.53	124.24	131.36	138.86
Maintenance Spares	200.16	211.63	223.73	236.54	250.04
Receivables	2239.98	2257.31	2243.80	2218.44	2187.57
Total	2551.29	2586.47	2591.77	2586.33	2576.47
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on Working Capital	312.53	316.84	317.49	316.83	315.62
Annual Transmission Charges					
Depreciation	3743.74	3805.67	3857.09	3888.58	3893.76
Interest on Loan	4030.90	3776.14	3501.25	3197.52	2860.04
Return on Equity	4018.31	4234.35	4295.47	4330.80	4389.08
Interest on Working Capital	312.53	316.84	317.49	316.83	315.62
O & M Expenses	1334.40	1410.87	1491.50	1576.90	1666.93
Total	13439.88	13543.88	13462.80	13310.63	13125.43

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation					
Opening Gross Block	1214.51	1245.29	1252.04	1408.56	1408.56
Additional Capitalisation	30.78	6.75	156.52	0.00	0.00
Closing Gross Block	1245.29	1252.04	1408.56	1408.56	1408.56
Average Gross Block	1229.90	1248.67	1330.30	1408.56	1408.56
Rate of Depreciation	5.28%	5.28%	5.28%	5.28%	5.28%
Depreciable Value	1106.91	1137.65	1200.31	1338.14	1267.70
Balance Useful life of the asset	24.00	23.00	22.00	21.00	20.00
Elapsed Life	1.00	2.00	3.00	4.00	5.00
Remaining Depreciable Value	1106.91	1058.86	1066.40	1066.60	992.22
Depreciation during the year	64.94	65.93	70.24	74.37	74.37
Cumulative Depreciation	108.64	174.57	244.81	319.18	393.55
Interest on Loan					
Gross Normative Loan	850.71	872.26	876.98	986.55	986.55
Cumulative Repayment upto	40 -0	400.04			242.42
Previous Year	43.70	108.64	174.57	244.81	319.18
Net Loan-Opening	807.01	763.62	702.41	741.74	667.36
Additions	21.55	4.73	109.56	0.00	0.00
Repayment during the year	64.94	65.93	70.24	74.37	74.37
Net Loan-Closing	763.62	702.41	741.74	667.36	592.99
Average Loan	785.31	733.02	722.07	704.55	630.18



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Weighted Average Rate of					
Interest on Loan (%)	9.0219%	9.0340%	9.0478%	9.0571%	9.0631%
Interest on Loan	70.85	66.22	65.33	63.81	57.11
Return on Equity					
Opening Equity	363.80	373.03	375.06	422.02	422.02
Additions	9.23	2.03	46.96	0.00	0.00
Closing Equity	373.03	375.06	422.02	422.02	422.02
Average Equity	368.42	374.05	398.54	422.02	422.02
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	68.80	72.41	77.22	81.77	82.76
Interest on Working Capital					
O & M expenses	7.42	7.85	8.29	8.77	9.27
Maintenance Spares	13.36	14.13	14.94	15.79	16.69
Receivables	50.40	51.29	53.63	55.84	55.93
Total	71.18	73.26	76.86	80.40	81.89
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on Working Capital	8.72	8.97	9.42	9.85	10.03
Annual Transmission Charges					
Depreciation	64.94	65.93	70.24	74.37	74.37
Interest on Loan	70.85	66.22	65.33	63.81	57.11
Return on Equity	68.80	72.41	77.22	81.77	82.76
Interest on Working Capital	8.72	8.97	9.42	9.85	10.03
O & M Expenses	89.08	94.18	99.57	105.26	111.28
Total	302.39	307.71	321.78	335.07	335.56

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation					
Opening Gross Block	1509.07	1564.44	1564.44	1586.92	1586.92
Additional Capitalisation	55.37	0.00	22.48	0.00	0.00
Closing Gross Block	1564.44	1564.44	1586.92	1586.92	1586.92
Average Gross Block	1536.76	1564.44	1575.68	1586.92	1586.92
Rate of Depreciation	5.30%	5.30%	5.30%	5.30%	5.30%
Depreciable Value	1383.08	1432.91	1418.11	1438.34	1428.23
Balance Useful life of the asset	25.00	24.00	23.00	22.00	21.00
Elapsed Life	0.00	1.00	2.00	3.00	4.00



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Remaining Depreciable Value	1383.08	1326.58	1253.82	1180.47	1096.41
Depreciation during the year	81.41	82.87	83.47	84.06	84.06
Cumulative Depreciation	95.02	177.90	261.37	345.43	429.49
Interest on Loan					
Gross Normative Loan	1056.41	1095.17	1095.17	1110.91	1110.91
Cumulative Repayment upto					
Previous Year	13.61	95.02	177.90	261.37	345.43
Net Loan-Opening	1042.80	1000.15	917.27	849.54	765.48
Additions	38.76	0.00	15.74	0.00	0.00
Repayment during the year	81.41	82.87	83.47	84.06	84.06
Net Loan-Closing	1000.15	917.27	849.54	765.48	681.42
Average Loan	1021.47	958.71	883.41	807.51	723.45
Weighted Average Rate of Interest	0.27000/	0.26660/	0.26560/	0.26420/	0.26260/
on Loan (%)	9.3700%	9.3666%	9.3656%	9.3642%	9.3636%
Interest on Loan	95.71	89.80	82.74	75.62	67.74
Return on Equity					
Opening Equity	452.66	469.27	469.27	476.02	476.02
Additions	16.61	0.00	6.74	0.00	0.00
	469.27	469.27			
Closing Equity			476.02	476.02	476.02
Average Equity	460.97 15.500%	469.27	472.64 15.500%	476.02 15.500%	476.02 15.500%
Return on Equity (Base Rate) MAT rate for the respective year	16.995%	15.500% 19.931%	20.008%	20.008%	
•	18.674%		19.377%		20.961%
Rate of Return on Equity		19.358%		19.377%	19.610%
Return on Equity	86.08	90.84	91.58	92.24	93.35
Interest on Working Capital					
O & M expenses	7.42	7.85	8.29	8.77	9.27
Maintenance Spares	13.36	14.13	14.94	15.79	16.69
Receivables	60.37	61.32	61.29	61.28	61.18
Total	81.15	83.29	84.51	85.84	87.15
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on Working Capital	9.94	10.20	10.35	10.52	10.68
mercet en working capital	0.01	10.20	10.00	10.02	10.00
Annual Transmission Charges					
Depreciation	81.41	82.87	83.47	84.06	84.06
Interest on Loan	95.71	89.80	82.74	75.62	67.74
Return on Equity	86.08	90.84	91.58	92.24	93.35
Interest on Working Capital	9.94	10.20	10.35	10.52	10.68
O & M Expenses	89.08	94.18	99.57	105.26	111.28
Total	362.23	367.90	367.71	367.69	367.11



DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

36. 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	4057.76	4057.76	4057.76	4057.76	4057.76
Interest on Loan	2632.19	2272.9	1913.52	1554.05	1194.43
Return on Equity	4571.48	4571.48	4571.48	4571.48	4571.48
Interest on Working Capital	355.04	349.96	344.97	340.09	335.32
O & M Expenses	1734.56	1792.42	1851.73	1913.28	1976.72
Total	13351.03	13044.52	12739.46	12436.66	12135.71

37. 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	144.55	149.37	154.31	159.44	164.73		
Maintenance Spares	260.18	268.86	277.76	286.99	296.51		
Receivables	2225.17	2174.09	2123.24	2072.78	2022.62		
Total	2629.90	2592.32	2555.31	2519.21	2483.86		
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50		
Interest	355.04	349.96	344.97	340.09	335.32		

Capital Cost

- 38. 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;"



39. The petitioner has claimed capital cost for the tariff period 2014-19 by combining Combined Asset-I, Asset II and Asset-III. The claimed actual capital expenditure as on 31.3.2014 is ₹77706.59lakh. In light of earlier deductions the commission has 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 as follows.

Name of Asset	Capital cost as on 31.3.2014
Combined Asset-I	74632.91
Asset II	1408.56
Asset III	1586.92
Total cost of assets	77628.39

Additional Capital Expenditure

- 40. Clause (3) of Regulation 14 of the 2014 Tariff Regulations provides as under:-
 - "(3) The capital expenditure, in respect of existing generating station or thetransmission system including communication system, incurred or projected to beincurred on the following counts after the cut-off date, may be admitted by theCommission, 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:"
- 41. 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:"
- 42. The notional COD of the Combined Assets is 1.2.2010 and the cut-off date works out to be 31.3.2013. The petitioner has not claimed additional capital expenditure for 2014-19 tariff period.
- 43. Accordingly, the capital cost of the instant assets including additional capital expenditure during 2014-19 tariff period is as below:-

Asset

Admitted cost as on 1.4.2014

Combined Assets

Admitted cost as on 1.4.2014

Additional capital expenditure allowed during 2014-19

Combined Assets

77628.39

Combined Assets

(₹ in lakh)

Estimated total on 31.3.2019

2014-19

Debt: Equity

- 44. 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 oftariff, and renovation and modernisation expenditure for life extension shall be serviced the manner specified in clause (1) of this regulation."

45. 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	54339.87	70.00	0.00	54339.87	70.00
Equity	23288.52	30.00	0.00	23288.52	30.00
Total	77628.39	100.00	0.00	77628.39	100.00

Return on Equity ("ROE")

- 46. 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."

47. 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	23288.52	23288.52	23288.52	23288.52	23288.52
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	23288.52	23288.52	23288.52	23288.52	23288.52
Average Equity	23288.52	23288.52	23288.52	23288.52	23288.52
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	4566.98	4566.98	4566.98	4566.98	4566.98

Interest on Loan ("IoL")

- 48. 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 thegenerating 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."
- 49. 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	54339.87	54339.87	54339.87	54339.87	54339.87
Cumulative Repayment upto Previous Year	22911.50	26965.13	31018.76	35072.39	39126.01
Net Loan-Opening	31428.37	27374.74	23321.12	19267.49	15213.86
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the					
year	4053.63	4053.63	4053.63	4053.63	4053.63
Net Loan-Closing	27374.74	23321.12	19267.49	15213.86	11160.23
Average Loan	29401.56	25347.93	21294.30	17240.67	13187.04
Weighted Average Rate of					
Interest on Loan (%)	8.9389%	8.9524%	8.9706%	8.9969%	9.0381%
Interest on Loan	2628.19	2269.26	1910.24	1551.13	1191.85

Depreciation

- 50. 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."
- 51. 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	77628.39	77628.39	77628.39	77628.39	77628.39
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	77628.39	77628.39	77628.39	77628.39	77628.39
Average Gross Block	77628.39	77628.39	77628.39	77628.39	77628.39
Rate of Depreciation	5.22%	5.22%	5.22%	5.22%	5.22%
Depreciable Value	69626.92	69626.92	69626.92	69626.92	69626.92
Balance Useful life of the asset	27.00	26.00	25.00	24.00	23.00
Elapsed Life	5.00	6.00	7.00	8.00	9.00
Remaining Depreciable Value	46777.53	42723.90	38670.27	34616.64	30563.02
Depreciation	4053.63	4053.63	4053.63	4053.63	4053.63
Cumulative depreciation	26965.13	31018.76	35072.39	39126.01	43179.64

Operation & Maintenance Expenses ("O&M Expenses")

- 52. 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.
- 53. 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.

54. 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			
765 kV Bays :								
No. of Bays	1	1	1	1	1			
Norms (₹ lakh/Bay)	84.42	87.22	90.12	93.11	96.2			
400 kV Bays :								
No. of Bays	10	10	10	10	10			
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71			
220 kV Bays :								
No. of Bays	12	12	12	12	12			
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.1			
D/C (Twin/Triple Cond	uctor):							
Length (Km)	222.1325	222.1325	222.1325	222.1325	222.1325			
Norms (₹ lakh/Km)	0.707	0.731	0.755	0.780	0.806			
S/C (Bundle Conducto	r- 4 sub-c)							
Length (Km)	234.931	234.931	234.931	234.931	234.931			
Norms (₹ lakh/Km)	0.606	0.627	0.647	0.669	0.691			
Total O&M Expenses (₹ lakh)	1,734.56	1,792.42	1,851.73	1,913.28	1,976.72			

Interest on Working Capital ("IWC")

55. 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;"

- 56. 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%.
- 57. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points). The 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	144.49	149.31	154.25	159.38	164.66
Maintenance Spares	260.18	268.86	277.76	286.99	296.51
Receivables	2223.02	2171.99	2121.21	2070.81	2020.71
Total	2627.69	2590.17	2553.22	2517.18	2481.87
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	354.74	349.67	344.68	339.82	335.05

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	77628.39	77628.39	77628.39	77628.39	77628.39
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	77628.39	77628.39	77628.39	77628.39	77628.39
Average Gross Block	77628.39	77628.39	77628.39	77628.39	77628.39
Rate of Depreciation	5.22%	5.22%	5.22%	5.22%	5.22%
Depreciable Value	69626.92	69626.92	69626.92	69626.92	69626.92
Balance Useful life of the asset	27.00	26.00	25.00	24.00	23.00
Elapsed Life	5.00	6.00	7.00	8.00	9.00
Remaining Depreciable Value	46777.53	42723.90	38670.27	34616.64	30563.02
Depreciation during the year	4053.63	4053.63	4053.63	4053.63	4053.63

Cumulative Depreciation	26965.13	31018.76	35072.39	39126.01	43179.64
Interest on Loan					
Gross Normative Loan	54339.87	54339.87	54339.87	54339.87	54339.87
Cumulative Repayment upto Previous					
Year	22911.50	26965.13	31018.76	35072.39	39126.01
Net Loan-Opening	31428.37	27374.74	23321.12	19267.49	15213.86
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	4053.63	4053.63	4053.63	4053.63	4053.63
Net Loan-Closing	27374.74	23321.12	19267.49	15213.86	11160.23
Average Loan	29401.56	25347.93	21294.30	17240.67	13187.04
Weighted Average Rate of Interest on Loan (%)	8.9389%	8.9524%	8.9706%	8.9969%	9.0381%
Interest on Loan	2628.19	2269.26	1910.24	1551.13	1191.85
Return on Equity					
Opening Equity	23288.52	23288.52	23288.52	23288.52	23288.52
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	23288.52	23288.52	23288.52	23288.52	23288.52
Average Equity	23288.52	23288.52	23288.52	23288.52	23288.52
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	4566.98	4566.98	4566.98	4566.98	4566.98
Interest on Working Capital					
O & M expenses	144.49	149.31	154.25	159.38	164.66
Maintenance Spares	260.18	268.86	277.76	286.99	296.51
Receivables	2223.02	2171.99	2121.21	2070.81	2020.71
Total	2627.69	2590.17	2553.22	2517.18	2481.87
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	354.74	349.67	344.68	339.82	335.05
Annual Transmission Charges					
Depreciation	4053.63	4053.63	4053.63	4053.63	4053.63
Interest on Loan	2628.19	2269.26	1910.24	1551.13	1191.85
Return on Equity	4566.98	4566.98	4566.98	4566.98	4566.98
Interest on Working Capital	354.74	349.67	344.68	339.82	335.05
O & M Expenses	1734.56	1792.42	1851.73	1913.28	1976.72
Total	13338.09	13031.96	12727.26	12424.84	12124.23

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 periods 1.4.2009 upto 31.3.2014 and 1.4.2014 upto 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

59. 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

60. 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

61. 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

62. 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.

63. This order disposes of Petition No.225/TT/2015.

Sd/-(Dr. M.K. lyer) Member Sd/-(A.S. Bakshi) Member

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

Combined Asset-I

(₹in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XV-COD - 01-APR-2007-	6.68	150.00	0.00	150.00
BOND XVII-Loan-2-	7.39	4039.00	0.00	4039.00
BOND XVIII-Loan-3-	8.15	4183.00	0.00	4183.00
BOND XX-Loan-4-	8.93	17495.00	0.00	17495.00
BOND XXI-Loan-5-	8.73	198.00	0.00	198.00
BOND XXII-Loan-6-	8.68	1185.00	0.00	1185.00
BOND XXIII-Loan-7-	9.25	8695.00	0.00	8695.00
BOND XXVI-Loan-9-	9.30	2341.00	0.00	2341.00
BOND XXVII-Loan-8-	9.47	5975.00	0.00	5975.00
BOND XXVIII-Loan-10-	9.33	75.00	0.00	75.00
BOND XXIX-Loan-11-	9.20	500.00	0.00	500.00
BOND XXX-ADDCAP FOR 2009-2010 AddCap-1-	8.80	0.00	933.00	933.00
BOND XXXI-ADDCAP FOR 2009-2010 AddCap-2-	8.90	0.00	93.49	93.49
BOND XXXI-ADDCAP FOR 2010-2011 AddCap-3-	8.90	0.00	629.64	629.64
BOND XXXI-ADDCAP FOR 2011-2012 AddCap-4-	8.90	0.00	146.22	146.22
BOND-XXXIV-ADDCAP FOR 2011-2012 AddCap-5-	8.84	0.00	187.00	187.00
BOND XXXVII-ADDCAP FOR 2011-2012 AddCap-6-	9.25	0.00	313.00	313.00
BOND XXXVIII-ADDCAP FOR 2011-2012 AddCap-7-	9.25	0.00	97.91	97.91
Total		44836.00	2400.26	47236.26

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

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	44836.00	45862.49	46492.13	47236.26	47236.26
Cumulative Repayments of Loans upto Previous Year	25.00	789.98	3852.71	7608.44	11412.09
Net Loans Opening	44811.00	45072.51	42639.42	39627.82	35824.17
Add: Draw(s) during the Year	1026.49	629.64	744.13	0.00	0.00
Less: Repayments of Loan	764.98	3062.73	3755.73	3803.65	3953.85



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
during the year					
Net Closing Loan	45072.51	42639.42	39627.82	35824.17	31870.32
Average Net Loan	44941.76	43855.97	41133.62	37726.00	33847.25
Rate of Interest on Loan* (%)	8.8708%	8.8864%	8.8979%	8.9063%	8.9145%
Interest on Loan	3986.69	3897.21	3660.04	3360.00	3017.32

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

Asset- II

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XVII-COD DRAWL ON 22-SEP- 2005-	7.39	39.00	0.00	39.00
BOND XVIII-COD DRAWL ON 09-MAR- 2006-	8.15	67.00	0.00	67.00
BOND XX-COD DRAWL ON 07-SEP- 2006-	8.93	305.00	0.00	305.00
BOND XXI-COD DRAWL ON 11-OCT- 2006-	8.73	3.00	0.00	3.00
BOND XXII-COD DRAWL ON 07-DEC- 2006-	8.68	22.00	0.00	22.00
BOND XXIII-COD DRAWL ON 09-FEB- 2007-	9.25	105.00	0.00	105.00
BOND XXVI-COD DRAWL ON 07-MAR- 2008-	9.30	50.00	0.00	50.00
BOND XXVII-COD DRAWL ON 31- MAR-2008-	9.47	259.00	0.00	259.00
BOND XXVIII-ADDCAP FOR 2008-2009 DRAWL ON 15-DEC-2008-	9.33	1.00	0.00	1.00
BOND XXXI-ADDCAP FOR 2009-2010 Loan 1-	8.90	0.00	21.55	21.55
BOND XXXI-ADDCAP FOR 2010-2011 Loan 2-	8.90	0.00	4.73	4.73
BOND XXXVIII-ADDCAP FOR 2011- 2012 Loan 3-	9.25	0.00	36.09	36.09
Total		851.00	62.37	913.37

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	851.00	872.55	877.28	913.37	913.37
Cumulative Repayments of	0.00	9.48	55.21	126.69	198.25
Loans upto Previous Year					
Net Loans Opening	851.00	863.07	822.07	786.68	715.12
Add: Draw(s) during the Year	21.55	4.73	36.09	0.00	0.00
Less: Repayments of Loan	9.48	45.73	71.48	71.56	73.75
during the year					
Net Closing Loan	863.07	822.07	786.68	715.12	641.37
Average Net Loan	857.04	842.57	804.38	750.90	678.25
Rate of Interest on Loan* (%)	9.0219%	9.0340%	9.0478%	9.0571%	9.0631%
Interest on Loan	77.32	76.12	72.78	68.01	61.47

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

Asset- III

(₹in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XXVI-COD-	9.30	200.00	0.00	200.00
BOND XXVII-COD DRAWL ON 01- JAN-2009-	9.47	366.00	0.00	366.00
BOND XXVIII-COD DRAWL ON 01- JAN-2009-	9.33	474.00	0.00	474.00
BOND XXXI-ADDCAP FOR 2009- 2010 add cap loan-	8.90	0.00	15.37	15.37
Total		1040.00	15.37	1055.37

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

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	1040.00	1055.37	1055.37	1055.37	1055.37
Cumulative Repayments of	0.00	0.00	0.00	47.17	133.84
Loans upto Previous Year					
Net Loans Opening	1040.00	1055.37	1055.37	1008.20	921.53
Add: Draw(s) during the Year	15.37	0.00	0.00	0.00	0.00
Less: Repayments of Loan	0.00	0.00	47.17	86.67	87.95
during the year					
Net Closing Loan	1055.37	1055.37	1008.20	921.53	833.58
Average Net Loan	1047.69	1055.37	1031.79	964.87	877.56
Rate of Interest on Loan* (%)	9.3700%	9.3666%	9.3656%	9.3642%	9.3636%
Interest on Loan	98.17	98.85	96.63	90.35	82.17



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

(₹in lakh)

				(XIII IAKII)
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XV-COD Loan-	6.68	150.00	0.00	150.00
BOND XVII-COD Loan-	7.39	4078.00	0.00	4078.00
BOND XVIII-COD Loan-	8.15	4250.00	0.00	4250.00
BOND XX-COD Loan	8.93	17800.00	0.00	17800.00
BOND XXI-COD Loan-	8.73	201.00	0.00	201.00
BOND XXII-COD Loan-	8.68	1207.00	0.00	1207.00
BOND XXIII-COD Loan-	9.25	8800.00	0.00	8800.00
BOND XXVI-COD Loan-	9.30	2591.00	0.00	2591.00
BOND XXVII-COD Loan-	9.47	6600.00	0.00	6600.00
BOND XXVIII-COD Loan-	9.33	550.00	0.00	550.00
BOND XXIX-COD Loan-	9.20	500.00	0.00	500.00
BOND XXX-ADDCAP FOR 2009-	8.80	933.00	0.00	933.00
2010 COD Loan-				
BOND XXXI-ADDCAP FOR	8.90	130.41	0.00	130.41
2009-2010 AddCap-2-				
BOND XXXI-ADDCAP FOR	8.90	634.37	0.00	634.37
2010-2011 AddCap- BOND XXXI-ADDCAP FOR	8.90	146.22	0.00	146.22
2011-2012 AddCap-1-	0.90	140.22	0.00	140.22
BOND-XXXIV-ADDCAP FOR	8.84	187.00	0.00	187.00
2011-2012 AddCap-2-	0.0		0.00	
BOND XXXVII-ADDCAP FOR	9.25	313.00	0.00	313.00
2011-2012 AddCap-3-				
BOND XXXVIII-ADDCAP FOR	9.25	134.00	0.00	134.00
2011-2012 AddCap-4-				
Total		49205.00	0.00	49205.00

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

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	49205.00	49205.00	49205.00	49205.00	49205.00
Cumulative	15859.74	19990.87	24148.08	28305.29	32462.50
Repayments of Loans upto Previous Year					
Net Loans Opening	33345.26	29214.13	25056.92	20899.71	16742.50
Add: Draw(s) during the	0.00	0.00	0.00	0.00	0.00
Year					
Less: Repayments of	4131.13	4157.21	4157.21	4157.21	4157.21
Loan during the year					

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Net Closing Loan	29214.13	25056.92	20899.71	16742.50	12585.29
Average Net Loan	31279.70	27135.53	22978.32	18821.11	14663.90
Rate of Interest on	8.9389%	8.9524%	8.9706%	8.9969%	9.0381%
Loan* (%)					
Interest on Loan	2796.07	2429.29	2061.30	1693.32	1325.33