### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### **PETITION NO.562/TT/2014**

#### Coram:

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

Date of Hearing: 03.02.2016 Date of Order : 15.03.2016

#### 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, 2014for Asset-1:400 kV S/C Uri-I-Uri-II interconnector transmission line along with Bays at NHPC; Asset-2: 400 kV S/C Uri-II-Wagoora Transmission line along with Bays at Wagoora Sub-station and; Asset-3: 400 kV 80 MVAR Bus reactor at Kishenpur under URI-II HEP Transmission System in Northern Regionunder Regulations, 1999.

#### And in the Matter of:

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

.....Petitioner

#### Versus

- Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Vidyut Bhawan, Vidyut Marg, Jaipur - 302 005.
- Ajmer Vidyut Vitran Nigam Ltd., 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur.
- Jaipur Vidyut Vitran Nigam Ltd., 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur.
- Jodhpur Vidyut Vitran Nigam Ltd., 400 kV GSS Building (Ground Floor), Ajmer Road,



Heerapura, Jaipur

- Himachal Pradesh State Electricity Board, Vidyut Bhawan, Kumar House Complex Building II, Shimla - 171 004.
- 6. Punjab State Electricity Board, The Mall, Patiala - 147 001.
- Haryana Power Purchase Centre, Shakti Bhawan, Sector - 6 Panchkula (Haryana) - 134 109
- Power Development Department, Govt. of Jammu and Kashmir Mini Secretariat, Jammu .
- 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. BSES Yamuna Power Ltd., Shakti Kiran Building, Karkardooma, Delhi – 110 092.
- 12. BSES Rajdhani Power Ltd., BSES Bhawan, Nehru Place, New Delhi.
- North Delhi Power Ltd., Power Trading & Load Dispatch Group, Cennet Building, Adjacent to 66/11kV Pitampura - , Grid Building, Near PP Jewellers, Pitampura, New Delhi - 110 034
- 14. Chandigarh Administration, Sector - 9, Chandigarh
- 15. Uttarakhand Power Corporation Ltd., Urja Bhawan, Kanwali Road, Dehradun
- 16. North Central Railway, Allahabad



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

.....Respondents

The following were present:

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

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

#### <u>ORDER</u>

The petition has been preferred 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 the 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 31.3.2019forAsset-1:400 kV S/C Uri-I-Uri-II interconnector Transmission line along with Bays at NHPC; Asset-2: 400 kV S/C Uri-II-Wagoora Transmission line along with Bays at Wagoora Sub-station and;Asset-3: 400 kV 80 MVAR Bus reactor at Kishenpur under URI-II HEP Transmission System in Northern Region (hereinafter referred to as "the transmission asset").



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

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

a) The investment approval for the transmission system was accorded by the Board of Directors of the petitioner's company vide letter dated 27.10.2006 at an estimated cost of ₹23825 lakh, including IDC of ₹2085 lakh based on 2<sup>nd</sup> quarter, 2006 price level. Subsequently, approval for the Revised Cost Estimate for the transmission system was accorded by the Board of Directors of the petitioner vide Memorandum dated 24.9.2012 at ₹27467 lakh, including IDC of ₹3347 lakh based on April, 2012 price level.

b) The annual transmission charges for 2009-14 tariff period for the transmission assets Asset-1 and Asset-2 was determined vide order dated 24.12.2013 in Petition No. 91/TT/2011 and 145/TT/2011 and for Asset-3 were determined vide order dated 19.8.2014 in Petition No. 93/TT/2012.

c) The admitted capital cost of the instant assets is as under:-

		(₹ in lakh)
Asset	Capital cost approved as on COD as per order in Petition No.91/TT/2011 and145/TT/2011	Excess initial spares disallowed
Asset-1	8449.44	87.50
Asset-2	14736.88	170.58
Asset	Capital Cost Approved as on COD as per order 93TT/2012	IDC/IEDC disallowed
Asset-3	629.86	26.60

 d) The date of commercial operations of the instant assets are given here under:-



Asset	COD	Time over-run
Asset-1	1.1.2012	7 Months
Asset-2	1.1.2012	7 Months
Asset-3	1.6.2012	12 Months

As per the investment approval, the scheduled date of commissioning of the instant assets was16.6.2011, accordingly there was time over-run of 7 months in commissioning of Assets1 and 2 and 12 months in case of Asset-3. The time over-run of 7 months in case of Assets 1 and 2 was condoned vide order dated 24.12.2013 in Petition No. 91/TT/2011 and 145/TT/2011.In case of Asset 3, the time over-run was disallowed in order dated 19.8.2014 in Petition No. 93/TT/2012 and accordingly IDC and IEDC of ₹26.60 lakh was disallowed. However, the petitioner was directed to provide necessary documentation in support of its claim and also the details of liquidated damages recovered, if any, at the time of truing up for condonation of delay.

e) In order dated 24.12.2013, an amount of ₹54.00 lakh was deducted, as on COD in case of Asset-2 on account of dismantling of existing store and construction of new store at Wagoora Sub-station at Uri-I. The petitioner has submitted that the de-capitalization of the store was pertaining to Uri-I and it was not incorporated in Uri-I since the tariff was already finalized and so the same is adjusted in Uri-II project. The Commission, in its order, had directed that the petitioner may claim the capital cost only after the de-capitalization of old store in Uri-I transmission system at time of truing up. Accordingly the amount of ₹54.00 lakh was deducted from the capital cost of Asset-2.



f) The debt:equity ratio is 70:30 as on COD for all the assets. The estimated additional capital expenditure approved was towards balance and retention payments for determination of tariff for 2009-14 tariff period and it is as follows:-

						(5	₹ in lakh)
Asset	Appor- tioned approved	Approved cost as	Allowed Additional capital expenditure during 2009-14			Cost as on	
	cost	on COD	2011-12	2012-13	2013-14	Total	31.3.2014
Asset-1	8707.54	8449.44*	71.69	186.41	0.00	258.10	8707.54
Asset-2	17864.76	14736.88*	572.94	2330.17	0.00	2903.11	17639.99
Asset-3	894.23	629.86*	0.00	20.19	183.23	203.42	833.28

\*Capital cost after adjusting the disallowed excess initial spares, IDC and IEDC.

g) The annual fixed charges were determined vide order dated 24.12.2013in Petition No. 91/TT/2011 and 145/TT/2011for Assets1 and 2 and vide order dated 19.8.2014 in Petition No. 93/TT/2012 for Asset-3 and based the above capital cost and estimated additional capital expenditure for the transmission assets during 2009-14 as given below:-

(₹ in lakh) Asset-1 2011-12 2012-13 2013-14 Particulars (pro-rata) Depreciation 111.86 454.27 459.19 Interest on Loan 132.86 513.78 478.17 Return on Equity 111.25 451.76 456.65 Interest on Working Capital 7.90 31.7 31.38 O & M Expenses 73.65 16.47 69.67 Total 380.34 1521.19 1499.04

(₹ in lakh)

Asset-2							
Particulars	2011-12 (pro-rata)	2012-13	2013-14				
Depreciation	194.54	854.48	915.71				
Interest on Loan	236.67	991.78	984.92				
Return on Equity	196.97	863.99	925.09				
Interest on Working Capital	13.76	59.24	61.84				
O & M Expenses	25.19	106.54	112.61				
Total	667.12	2876.04	3000.18				



(₹ in lakh)	
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Asset-3					
Particulars	2012-13 (pro-rata)	2013-14			
Depreciation	28.16	39.16			
Interest on Loan	32.47	42.33			
Return on Equity	27.97	38.90			
Interest on Working Capital	2.04	2.77			
O & M Expenses	0.00	0.00			
Total	90.63	123.16			

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. 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.

5. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/objections have been received from the public in response to the notice in newspaper. None of the respondents have filed the reply in the matter. The hearing in this matter was held on 3.2.2016. The petitioner was directed to submit the details of LD amount recovered, actual equity infused during 2009-14 and 2014-19 tariff periods, details of balance and payment and un-discharged liabilities. The



petitioner has filed its reply vide affidavit dated 19.2.2016. The same has been incorporated in the instant petition.

6. 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:-

- 7. 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".

8. 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

9. The petitioner has submitted that the actual capital cost as on COD for all assets, as certified vide Auditor's Certificates dated 1.9.2014. However, the petitioner had claimed capital cost on COD after deducting excess initial spares for the purpose of tariff determination. Details of capital cost claimed is as under:-

(₹ in lakh)

Asset	Capital Cost as on COD as per auditor certificate	Excess initial spares as per petitioner's submission	Claimed capital cost as on COD
	(a)	(b)	(c)=(a)-(b)
Asset-1	8616.33	0.00	8616.33
Asset-2	14887.70	99.89	14787.81
Asset-3	657.46	0.00	657.46



- 10. Regulation 7(1) of the 2009 Tariff Regulations provides as follows:-
  - "(1) Capital cost for a project shall include:
  - (a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;
  - (b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and (c) additional capital expenditure determined under regulation 9:

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

11. The admissible capital cost of the transmission asset as on COD for the purpose of computation of tariff for 2009-14 tariff period is worked out in the subsequent paragraphs considering the IDC, IEDC and initial spares claimed and allowed.

#### Treatment of IDC/IEDC

12. On account of time over-run of 12 months in commissioning of Asset-3, IDC and IEDC for 12 months amounting to ₹26.60 lakh was disallowed in order dated 19.8.2014 in Petition No. 93/TT/2012. However, the petitioner was directed to provide the necessary documentation in support of its claim and the details of Liquidated Damages realised from the original supplier, if any, at the time of truing up for review.

13. In the Instant petition, the petitioner has submitted that the delay in commissioning of Asset-3, i.e. bus reactor was due to change in location. As per the investment approval, the 80 MVAR bus reactor was planned at Wagoora 400/220 kV sub-station. Meanwhile, a new sub-station at New Wapnoh along with the LILO of Kishenpur-Wagoora 400 kV D/C line at New Wapnoh was agreed under NRSS-XVI in the 23<sup>rd</sup>



Standing Committee Meeting of Northern Region transmission planning held on 16.2.2008. The petitioner has submitted that the line length of Kishenpur-Wagoora is 185 km and 50 MVAR line reactor is existing on each circuit of Kishenpur-Wagoora 400 kV D/C line at Wagoora end. After LILO of the line, the length of New Wanpoh-Wagoora line section would become around 65 km. The scheme was taken up for implementation after investment approval of NRSS-XVI. Considering above, the reactive compensation under Uri-II and NRSS-XVI was reviewed and 80 MVAR Bus Reactor at Wagoora was shifted to Kishenpur. Accordingly, the Board of Directors of the petitioner vide Memorandum dated 24.09.2012 has accorded Revised Cost Estimate of URI-II HEP Transmission system wherein the shifting of the location has been recorded. The location of bus reactor was shifted from Wagoora to Kishenpur. The said bus reactor was to be commissioned at Wagoora Sub-station as per original scheme of URI-II System but due to upcoming transmission system under NRSS-XVI, which was agreed in the 23<sup>rd</sup> Standing Committee meeting of Northern Region transmission planning held on 16.2.2008 in coordination with CEA the scheme was amended for installation of bus reactor at Kishenpur.

14. During the hearing, the representative of the petitioner further submitted that certain elements in Asset-1 were dismantled and accordingly ₹58 lakh are required to be de-capitalized. Even though Asset-1 is part of URI-II, the cost of de-capitalization will be adjusted in URI-I, which is covered in Petition No. 190/TT/2014. The said petition was heard on 28.1.2016 and the amount of de-capitalization will be adjusted and the required information will be submitted in Petition No. 190/TT/2014. The petitioner should adjust the de-capitalization in the assets of URI-I from the date of commissioning



of the assets in this petition. Subject to above, the amount of certain elements capitalized in the Asset -1 is allowed in the instant petition.

15. After change of scheme, the matter was taken up with main contractor and was asked to implement for installation of bus reactor at Kishenpur. Since the installation of Bus reactor at Kishenpur was beyond the original scope of the award, after a lot of persuasion, contractor agreed for only supplying material to Kishenpur but asked for abnormally high rates for execution of work at Kishenpur. The communication with TATA regarding the change of scope and location of the reactor was placed on record by the petitioner. TATA vide their letter dated 17.9.2010 has revised their initial offer and gave a final quote of ₹ 479.58 lakh for the aforesaid works.

16. The petitioner has submitted the revised offer by TATA was examined in detail and it was observed that the major difference is in items for dismantling and re-erection of Reactors/Fire protection System/cable laying rates. As the rates quoted by TATA were high and not justified, the petitioner through its internal validation process decided to go for a fresh tendering of works. The petitioner has submitted that it was decided to carry out the work through open tender. There after the petitioner awarded the works through open tender to other party at the rate lower then rates quoted by main contractor. The cost estimate of ₹119.48 lakh for balance supply and erection was prepared . Administrative approval was accorded and on 31.1.11 LOA was placed on JSL at a total cost of (₹64.96 lakh for supply portion and of ₹56.95 lakh for erection portion). Through this process cost is saved but this tendering process took its time and all these led to delay in commissioning of Bus reactor at Kishenpur. In view of the



above it is submitted that delay may be condoned. Further, the amount of LD recovered from the supplier is ₹0.33 only.

17. We have considered the submissions made by the petitioner regarding the time over-run in case of Asset-3. In Petition No.93/TT/2012, the time over-run of 12 months in case of Asset-3 was disallowed and the petitioner was directed to provide the necessary documentation in support of its claim and the amount of LD realised. The petitioner has submitted copies of the correspondence made with the TATA regarding the finalisation of the new rates. We have gone through these documents. The 80 MVAR Bus Reactor at Wagoora was shifted to Kishenpur in consultation with CEA as per the system requirements. It is observed that the petitioner has diligently followed up with TATA for shifting the Bus Reactor to Kishenpur who were demanding higher charges. As attempts failed, the petitioner resorted to fresh tendering to carry out the work of shifting the Bus Reactor from Wagoora to Kishenpur. The time over-run of 12 months was due to fresh tendering to shift the Bus Reactor from Wagoora to Kishenpur. The petitioner has made sincere attempts to get the work done through TATA, the original contractors. Since the attempts failed, the petitioner had to call for fresh tenders which led to the time over-run. We are of the view that the petitioner was forced to resort to fresh tendering for reasons beyond its control and hence the time over-run of 12 months is condoned. Accordingly, IDC and IEDC for these 12 months are allowed to be capitalised. The LD amounting to ₹0.33 lakh recovered from the TATA is adjusted in the capital cost as on COD of Asset-3 as mentioned hereunder:-

(₹ in lakh)

Cost as on COD	LD recovered	Adjusted Capital Cost as on
(a)	(b)	COD(c)=(a)-(b)
657.46	0.33	657.13



### **Treatment of Initial Spares**

18. The petitioner has claimed initial spares of ₹324.76 lakh, pertaining to sub-station (GIS sub-station) on the cut-off date of 31.3.2015 for Asset-1. In case of Asset-2, the petitioner has claimed initial spares of ₹224.66 lakh for the transmission line and ₹158.09 lakh towards to sub-station (GIS sub-station) as on the cut-off date of 31.3.2015. In case of Asset-3, the petitioner has claimed initial spares of ₹4.01 lakh for the sub-station as on the cut-off date.

19. Regulation 8 of the 2009 Tariff Regulations provide for ceiling norms for capitalization of initial spares. In case of GIS sub-station it is 3.50%, transmission line it is 0.75% and sub-station it is 2.50% of the capital cost. Accordingly, the initial spares are allowed as specified in the 2009 Tariff Regulations and it is as under:-

(₹ in lakh) Asset-2 Asset-1 Asset-3 Particulars Formula **GIS Sub-GIS Sub-**Transmi-Substation Station ssion line Station Capital cost as on cut-off (a) 6888.57 2655.23 14733.30 888.43 date Capital cost after deducting excess (b) 6835.93 2655.23 14733.30 888.43 IDC/restricting upto RCE Initial spares as per (C) 324.76 158.09 224.66 4.01 Auditor`s Certificate Proportionate initial spares (d) = (claimed after deducting 322.28 158.09 224.66 4.01 c)/(a) \*(b) IDC/restricting upto RCE Ceiling limit as per Regulation 8 of 2009 (e) 3.50 3.50 0.75 2.50 regulations (f)= ((b-Initial spares worked out d)\*e))/(100 109.64 22.69 236.25 90.57 %-e) Excess initial spares 86.03 0.00 67.52 115.02 (g)=(d)-(f)claimed



20. Accordingly, the capital cost considered for truing up of tariff of 2009-14 tariff period is as follows:-

			(₹ in lakh)
Particulars	Asset -1	Asset-2	Asset -3
Capital cost as on COD	8616.33	14887.70	657.46
Less LD Recovered	0.00	0.00	0.33
Less excess initial spares claimed	86.03	182.54	0.00
Capital cost as on COD	8530.30	14705.16	657.13

#### Additional Capital Expenditure

21. 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"

22. The petitioner has submitted that it has actually incurred an additional capital expenditure of ₹222.01 lakh, ₹2388.04 lakh and ₹137.19 lakh for Assets-1, 2 and 3 respectively during 2009-14 towards balance and retention payments for the works completed before the cut-off date.

23. The completion cost Asset-1 of ₹8838.34 lakh as on 31.3.2014 exceeds the apportioned approved cost of ₹8707.54 lakh. The petitioner was asked to submit the Revised Cost Estimates (RCE), if any. The petitioner has not submitted any RCE. Accordingly, the capital cost is restricted to the approved apportioned cost by restricting the additional capital expenditure during 2009-14.

24. The capital cost is worked out as below:-



(₹ in lakh)

Asset	Appor- tioned	. Particulars	Capital cost as	Additional capital expenditure			Capital cost as on
ASSEL	approved cost	Faiticulais	on COD	2011- 12	2012-13	2013-14	31.3.2014
		Approved in Order dated 24.12.2013	8449.44	71.69	186.41	0.00	8707.54
Asset- 1	8707.54	Claimed by the petitioner	8616.33	115.58	69.30	37.13	8838.34
		Allowed in this Order	8530.30	115.58	61.66	0.00	8707.54
		Approved in Order dated 24.12.2013	14736.88	572.94	2330.17	0.00	17639.99
Asset- 2	17864.76	Claimed by the petitioner	14787.81	803.76	738.00	846.28	17175.85
		Allowed in this Order	14705.16	803.76	738.00	846.28	17093.20
		Approved in Order dated 19.8.2014	629.86	0.00	20.19	183.23	833.28
Asset- 3	894.32	Claimed by the petitioner	657.46	0.00	20.19	117.00	794.65
		Allowed in this Order	657.13	0.00	20.19	117.00	794.32

25. The petitioner has claimed the additional capital expenditure before the cut-off date under Regulation 9(1)(i) of 2009 Tariff Regulations. We have considered the submissions of the petitioner. The above mentioned additional capital expenditure is towards balance and retention payments and the same has been certified by the Auditor vide certificate dated 18.9.2014. The total capital expenditure during 2009-14 is within total approved capital expenditure and the total cost as on 31.3.2014 is within the approved cost of the project, except in case of Asset-1. Thus, the same is considered in case of Assets 2 and 3 for the purpose of revision of tariff in accordance with Regulation 9(1)(i) and Regulation 6 of the 2009 Tariff Regulations. However, in case of Asset-1, the capital cost is restricted to the approved apportioned cost.



#### Debt: Equity

26. 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."

27. The debt:equity ratio admitted by the Commission vide order dated 24.12.2013

and 19.8.2014 in Petition Nos. 91/TT/2011,145/TT/2011 and 93/TT/2012 for Asset-1,

Asset-2 and Asset-3 respectively as on COD was 70:30, for determination of tariff in

accordance with the Regulation 12 of the 2009 Tariff Regulations. The petitioner was

directed to confirm that actual equity corresponding to additional capital expenditure is

not less than 30%. In response, the petitioner vide affidavit dated 19.2.2016, has

submitted that the actual equity infusion during 2009-14 period is not less than 30%.

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



					(₹ in lakh)		
Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)	
			Asset-1				
Debt	5971.21	70.00	124.07	70.00	6095.28	70.00	
Equity	2559.09	30.00	53.17	30.00	2612.26	30.00	
Total	8530.30	100.00	177.24	100.00	8707.54	100.00	
			Asset-2				
Debt	10293.61	70.00	1,671.63	70.00	11965.24	70.00	
Equity	4411.55	30.00	716.41	30.00	5127.96	30.00	
Total	14705.16	100.00	2388.04	100.00	17093.20	100.00	
	Asset-3						
Debt	459.99	70.00	96.03	70.00	556.02	70.00	
Equity	197.14	30.00	41.16	30.00	238.30	30.00	
Total	657.13	100.00	137.19	100.00	794.32	100.00	

### Return on Equity ("ROE")

29. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provide

as follows:-

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

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

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."

30. 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

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

		(₹	₹ in lakh)
A	Asset-1		
Return on Equity	2011-12 (pro-rata)	2012-13	2013-14
Approved in Order dated 24.12.2013	111.25	451.76	456.65
Claimed by the petitioner	126.06	509.61	518.87
Allowed in this Order	124.81	504.38	512.28
		(3	₹ in lakh)

			(< 111 laki)	
Asset-2				
Return on Equity	2011-12 (pro-rata)	2012-13	2013-14	
Approved in Order dated 24.12.2013	196.97	863.99	925.09	
Claimed by the petitioner	220.75	927.81	985.56	
Allowed in this Order	219.55	923.00	980.72	

(₹ in lakh)

Asset-3			
Return on Equity	2012-13 (pro-rata)	2013-14	
Approved in Order dated 19.8.2014	27.97	38.90	
Claimed by the petitioner	32.34	43.31	
Allowed in this Order	32.32	43.29	



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")

32. 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".

33. 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:-

(₹ in lakh)

		1		
Asset-1				
Interest on Loan	2011-12 (pro-rata)	2012-13	2013-14	
Approved in Order dated 24.12.2013	132.86	513.78	478.17	
Claimed by the petitioner	135.87	523.17	484.58	
Allowed in this Order	134.52	517.81	478.28	
		/=	E in Inlah	

(₹ in lakh)

Asset-2			
Interest on Loan 2011-12 (pro-rata) 2012-13			2013-14
Approved in Order dated 24.12.2013	236.67	991.78	984.92
Claimed by the petitioner	239.30	958.69	933.06
Allowed in this Order	237.99	953.73	928.49



		(₹ in lakh <u>)</u>
Asset-3		
Interest on Loan	2012-13 (pro-rata)	2013-14
Approved in Order dated 19.8.2014	32.47	42.33
Claimed by the petitioner	33.94	42.10
Allowed in this Order	33.92	42.08

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**

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

(₹ in lakh) Asset-1 2011-12 Depreciation 2012-13 2013-14 (pro-rata) Approved in Order dated 24.12.2013 111.86 454.27 459.19 114.35 462.31 Claimed by the petitioner 465.12 Allowed in this Order 113.22 457.57 459.19

/		
(ナ	in	lakh)
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		(	
Asset-2			
Depreciation	2011-12 (pro-rata)	2012-13	2013-14
Approved in Order dated 24.12.2013	194.54	854.48	915.71
Claimed by the petitioner	196.48	826.57	868.40
Allowed in this Order	195.39	822.20	864.03

	(₹ in lakh)	
Asset-3		
Depreciation	2012-13 (pro- rata)	2013-14
Approved in Order dated 19.8.2014	28.16	39.16
Claimed by the petitioner	29.37	38.87
Allowed in this Order	29.36	38.85



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")**

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

(₹ in lakh)

Asset-1				
O&M Expenses	2011-12 (pro-rata)	2012-13	2013-14	
Approved in Order dated 24.12.2013	16.47	69.67	73.65	
Claimed by the petitioner	16.47	69.67	73.65	
Allowed in this Order	16.47	69.67	73.65	

(₹ in lakh)

Asset-2				
O&M Expenses	2012-13	2013-14		
Approved in Order dated 24.12.2013	25.19	106.54	112.61	
Claimed by the petitioner	25.19	106.54	112.61	
Allowed in this Order	25.19	106.54	112.61	

36. The petitioner had not claimed any O&M Expenses for Asset-3 in Petition No. 93/TT/2012 as the same were charged from the breaker of another bay and there were no bays in case of Assets-3. Accordingly, no O&M Expenses were allowed in order dated 19.8.2014. However, in the instant petition, the petitioner has claimed the O&M Expenses for the bays in case of Assets-3. As there are no bays in case of Asset-3, no O&M Expenses are allowed for the said assets.



		(₹ in lakh)
Asset-3		
O&M Expenses	2012-13 (pro- rata)	2013-14
Approved in Order dated 19.8.2014	0.00	0.00
Claimed by the petitioner	51.60	65.46
Allowed in this Order	0.00	0.00

### Interest on Working Capital ("IWC")

37. The IWC has been worked out as per the methodology provided in the Regulation

18 of the 2009 Tariff Regulations and allowed as under:-

			(₹ in lakh)
Asset	:-1		
Interest on Working Capital	2011-12 (pro-rata)	2012-13	2013-14
Approved in Order dated 24.12.2013	7.90	31.70	31.38
Claimed by the petitioner	8.31	33.20	32.87
Allowed in this Order	8.23	32.90	32.49

(₹ in lakh)

Asset-2						
Interest on Working Capital	2011-12 (pro-rata)	2012-13	2013-14			
Approved in Order dated 24.12.2013	13.76	59.24	61.84			
Claimed by the petitioner	14.32	59.30	61.07			
Allowed in this Order	14.25	59.02	60.79			

	(	₹ in lakh)				
Asset-3						
Interest on Working Capital	2012-13 (pro-rata)	2013-14				
Approved in Order dated 19.8.2014	2.04	2.77				
Claimed by the petitioner	5.05	6.48				
Allowed in this Order	2.20	2.86				



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

38. 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)							
Asset-1							
Particulars	2011-12 (pro-rata)	2012-13	2013-14				
Depreciation							
Opening Gross Block	8530.30	8645.88	8707.54				
Additional Capitalisation	115.58	61.66	0.00				
Closing Gross Block	8645.88	8707.54	8707.54				
Average Gross Block	8588.09	8676.71	8707.54				
Rate of Depreciation (%)	5.27	5.27	5.27				
Depreciable Value	7729.28	7809.04	7836.78				
Balance useful life of the asset	27.00	26.00	25.00				
Elapsed life	0.00	1.00	2.00				
Remaining Depreciable Value	7729.28	7695.82	7266.00				
Depreciation during the year	113.22	457.57	459.19				
Depreciation upto previous year	0.00	113.22	570.79				
Cumulative depreciation (incl. of AAD)	113.22	570.79	1029.98				
Interest on Loan							
Gross Normative Loan	5971.21	6052.11	6095.28				
Cumulative Repayment upto Previous Year	0.00	113.22	570.79				
Net Loan-Opening	5971.21	5938.89	5524.49				
Additions	80.91	43.16	0.00				
Repayment during the year	113.22	457.57	459.19				
Net Loan-Closing	5938.89	5524.49	5065.29				
Average Loan	5955.05	5731.69	5294.89				
Weighted Average Rate of Interest on	9.0359	9.0341	9.0329				





Asset-1						
Particulars	2011-12 (pro-rata)	2012-13	2013-14			
Loan (%)						
Interest on Loan	134.52	517.81	478.28			
Return on Equity						
Opening Equity	2559.09	2593.76	2612.26			
Additions	34.67	18.50	0.00			
Closing Equity	2593.76	2612.26	2612.26			
Average Equity	2576.43	2603.01	2612.26			
Return on Equity (Base Rate )(%)	15.500	15.500	15.500			
MAT rate for the respective year (%)	20.008	20.008	20.961			
Rate of Return on Equity (%)	19.377	19.377	19.610			
Return on Equity	124.81	504.38	512.28			
Interest on Working Capital						
O & M expenses	5.49	5.81	6.14			
Maintenance Spares	9.88	10.45	11.05			
Receivables	264.84	263.72	259.31			
Total	280.22	279.98	276.50			
Rate of Interest(%)	11.75	11.75	11.75			
Interest on Working Capital	8.23	32.90	32.49			
Annual Transmission Charges						
Depreciation	113.22	457.57	459.19			
Interest on Loan	134.52	517.81	478.28			
Return on Equity	124.81	504.38	512.28			
Interest on Working Capital	8.23	32.90	32.49			
O & M Expenses	16.47	69.67	73.65			
Total	397.26	1582.32	1555.89			

### Asset 2:

		(₹ in lakh)				
Asset-2						
Particulars	2011-12 (pro-rata)	2012-13	2013-14			
Depreciation						
Opening Gross Block	14705.16	15508.92	16246.92			
Additional Capitalisation	803.76	738.00	846.28			
Closing Gross Block	15508.92	16246.92	17093.20			
Average Gross Block	15107.04	15877.92	16670.06			
Rate of Depreciation (%)	5.17	5.18	5.18			



Asset-2						
Particulars	2011-12 (pro-rata)	2012-13	2013-14			
Depreciable Value	13596.33	14290.13	15003.05			
Balance useful life of the asset	34.00	33.00	32.00			
Elapsed life	0.00	1.00	2.00			
Remaining Depreciable Value	13596.33	14094.73	13985.46			
Depreciation during the year	195.39	822.20	864.03			
Depreciation upto previous year	0.00	195.39	1017.59			
Cumulative depreciation (incl. of AAD)	195.39	1017.59	1881.62			
Interest on Loan						
Gross Normative Loan	10293.61	10856.24	11372.84			
Cumulative Repayment upto Previous Year	0.00	195.39	1017.59			
Net Loan-Opening	10293.61	10660.85	10355.25			
Additions	562.63	516.60	592.40			
Repayment during the year	195.39	822.20	864.03			
Net Loan-Closing	10660.85	10355.25	10083.62			
Average Loan	10477.23	10508.05	10219.44			
Weighted Average Rate of Interest on Loan (%)	9.0862	9.0762	9.0855			
Interest on Loan	237.99	953.73	928.49			
Return on Equity						
Opening Equity	4411.55	4652.68	4874.08			
Additions	241.13	221.40	253.88			
Closing Equity	4652.68	4874.08	5127.96			
Average Equity	4532.11	4763.38	5001.02			
Return on Equity (Base Rate )(%)	15.500	15.500	15.500			
MAT rate for the respective year (%)	20.008	20.008	20.961			
Rate of Return on Equity (%)	19.377	19.377	19.610			
Return on Equity	219.55	923.00	980.72			
Interest on Working Capital						
O & M expenses	8.40	8.88	9.38			
Maintenance Spares	15.11	15.98	16.89			
Receivables	461.58	477.41	491.11			
Total	485.09	502.27	517.38			
Rate of Interest(%)	11.75	11.75	11.75			
Interest on Working Capital	14.25	59.02	60.79			
Annual Transmission Charges						
Depreciation	195.39	822.20	864.03			



Asset-2						
Particulars	2011-12 (pro-rata)	2012-13	2013-14			
Interest on Loan	237.99	953.73	928.49			
Return on Equity	219.55	923.00	980.72			
Interest on Working Capital	14.25	59.02	60.79			
O & M Expenses	25.19	106.54	112.61			
Total	692.37	2864.48	2946.64			

### Asset 3:

		(₹ in lakh)
Asset-3		
Particulars	2012-13 (pro- rata)	2013-14
Depreciation		
Opening Gross Block	657.13	677.32
Additional Capitalisation	20.19	117.00
Closing Gross Block	677.32	794.32
Average Gross Block	667.22	735.82
Rate of Depreciation (%)	5.28	5.28
Depreciable Value	600.50	662.24
Balance useful life of the asset	25.00	24.00
Elapsed life	0.00	1.00
Remaining Depreciable Value	9.09	41.46
Depreciation during the year	29.36	38.85
Depreciation upto previous year	0.00	29.36
Cumulative depreciation (incl. of AAD)	29.36	68.21
Interest on Loan		
Gross Normative Loan	459.99	474.12
Cumulative Repayment upto Previous Year	0.00	29.36
Net Loan-Opening	459.99	444.77
Additions	14.13	81.90
Repayment during the year	29.36	38.85
Net Loan-Closing	444.77	487.81
Average Loan	452.38	466.29
Weighted Average Rate of Interest on Loan (%)	8.9988	9.0252
Interest on Loan	33.92	42.08
Return on Equity		
Opening Equity	197.14	203.20



Asset-3						
Particulars	2012-13 (pro- rata)	2013-14				
Additions	6.06	35.10				
Closing Equity	203.20	238.30				
Average Equity	200.17	220.75				
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	32.32	43.29				
Interest on Working Capital						
O & M expenses	0.00	0.00				
Maintenance Spares	0.00	0.00				
Receivables	19.56	21.18				
Total	19.56	21.18				
Rate of Interest (%)	13.50	13.50				
Interest on Working Capital	2.20	2.86				
Annual Transmission Charges						
Depreciation	29.36	38.85				
Interest on Loan	33.92	42.08				
Return on Equity	32.32	43.29				
Interest on Working Capital	2.20	2.86				
O & M Expenses	0.00	0.00				
Total	97.80	127.08				

### **DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD**

39. For the determination of tariff for 2014-19 tariff period, the petitioner has

combined all the assets. The tariff charges claimed for 2014-19 tariff period as under:-

					(₹ in lakł
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1405.64	1412.5	1412.5	1412.5	1412.5
Interest on Loan	1375.47	1256.24	1128.12	999.85	871.65
Return on Equity	1584.80	1592.43	1592.43	1592.43	1592.43
Interest on Working					
Capital	113.25	111.27	108.76	106.25	103.77
O & M Expenses	230.91	238.63	246.57	254.73	263.18
Total	4710.07	4611.07	4488.38	4365.76	4243.53



40. 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	19.24	19.89	20.55	21.23	21.93
Maintenance Spares	34.64	35.79	36.99	38.21	39.48
Receivables	785.01	768.51	748.06	727.63	707.26
Total	838.89	824.19	805.60	787.07	768.67
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	113.25	111.27	108.76	106.25	103.77

### **Capital Cost**

41. 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;"

42. The petitioner has all the assets for claiming tariff during 2014-19 tariff period and

accordingly the capital cost of combined assets is ₹26595.06 lakh as on 31.3.2014, as

was worked out by the Commission and the same has been considered as opening

capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of

the 2014 Tariff Regulations.



### Additional Capital Expenditure

43. 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:"

44. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines "cut-off" as

follows:-

"Cut - off Date" means 31<sup>st</sup> 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 31<sup>st</sup> March of the year closing after three years of the year of comm<sup>er</sup>cial operation:"

45. The cut-off date for all the assets works out to be 31.3.2014. The petitioner has

claimed additional capital expenditure for 2014-19 tariff period under Regulation 14(2)of

the 2014 Tariff Regulations as shown below:-



(₹	in	lakh)
·		

Name of	Apportione d approved	Capital cost as	Additional	capital ex <sub>l</sub>	Capital cost as on	
Asset	set cost	on 1.3.2014	2014-15	2015-19	Total	31.3.201 9
Asset-1	8707.54	8707.54	0.00	0.00	0.00	8707.54
Asset-2	17864.76	17093.20	112.79	0.00	112.79	17205.99
Asset-3	894.23	794.32	94.11	0.00	94.11	888.43
Total	27466.53	26595.06	206.90	0.00	206.90	26801.96

46. The petitioner has claimed the admissibility of additional capital expenditure after the cut-off date under Regulation 14(2) of 2014 Tariff Regulations. We have considered the submissions of the petitioner with regard to the estimated capital expenditure during 2014-19. The above mentioned additional capital expenditure is towards balance and retention payments and the same has been certified by the Auditor vide certificates dated 18.9.2014 for all the assets. Further, the total capital cost for all the assets as on31.3.2019 is within the approved apportioned cost of the project. Thus, the same is allowed for the purpose of revision of tariff in accordance with Regulation 14(2)of the 2014 Tariff Regulations.

### Debt: Equity

47. Clause (1) and (3) of Regulation 19 of the 2014 Tariff Regulations provideas 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."

48. The normative debt:equity ratio has been considered to work out the tariff in accordance with the 2014 Tariff Regulations as given below:-

					(₹ in I	akh)
Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.201 9	(%)
Debt	18616.52	70.00	144.83	70.00	18761.37	70.00
Equity	7978.52	30.00	62.07	30.00	8040.59	30.00
Total	26595.06	100.00	206.90	100.00	26801.96	100.00

### Return on Equity ("ROE")

49. 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."



<del>-</del> . . . . .

50. 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)

	(()	11 Iakii)			
Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	7978.52	8040.59	8040.59	8040.59	8040.59
Additions	62.07	-	-	-	-
Closing Equity	8040.59	8040.59	8040.59	8040.59	8040.59
Average Equity	8009.55	8040.59	8040.59	8040.59	8040.59
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	1570.71	1576.80	1576.80	1576.80	1576.80

#### Interest on Loan ("IoL")

51. Clause 5 and Clause 6 of Regulation 26 of the 2014 Tariff Regulations provides

that:-

"(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest."



52. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2014. The petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2014-19 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. By considering above, the IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest for 2014-19 tariff period are placed in Annexure 2. IoL has been worked out and allowed as follows:-

					(K in lakn)
Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	18616.54	18761.37	18761.37	18761.37	18761.37
Cumulative Repayment upto Previous Year	2979.81	4372.77	5771.20	7169.63	8568.05
Net Loan-Opening	15636.73	14388.60	12990.17	11591.74	10193.32
Additions	144.83	0.00	0.00	0.00	0.00
Repayment during the year	1392.96	1398.43	1398.43	1398.43	1398.43
Net Loan-Closing	14388.60	12990.17	11591.74	10193.32	8794.89
Average Loan	15012.66	13689.38	12290.96	10892.53	9494.10
Weighted Average Rate of Interest on Loan (%)	9.0774	9.0805	9.0816	9.0817	9.0825
Interest on Loan	1362.76	1243.06	1116.22	989.23	862.30

#### **Depreciation**

53. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide as

follows:-

"27. Depreciation:

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



(₹ in lakh)

"(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."

54. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2014 and accumulated depreciation up to 31.3.2014. depreciation up to 2014-19 tariff period has been calculated annually based on Straight Line Method and at rates specified in Appendix-II of the 2014 Tariff Regulations. 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	26595.05	26801.95	26801.95	26801.95	26801.95
Additional Capitalisation	206.90	0.00	0.00	0.00	0.00
Closing Gross Block	26801.95	26801.95	26801.95	26801.95	26801.95
Average Gross Block	26698.50	26801.95	26801.95	26801.95	26801.95
Rate of Depreciation (%)	5.22	5.22	5.22	5.22	5.22
Depreciable Value	24028.65	24121.76	24121.76	24121.76	24121.76
Balance useful life of the asset	28.00	27.00	26.00	25.00	24.00
Elapsed life	3.00	4.00	5.00	6.00	7.00
Remaining Depreciable Value	21048.85	19748.99	18350.56	16952.13	15553.71
Depreciation during the year	1392.96	1398.43	1398.43	1398.43	1398.43
Depreciation upto previous year	2979.81	4372.77	5771.20	7169.63	8568.05
Cumulative depreciation (incl. of	4372.77	5771.20	7169.63	8568.05	9966.48



Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
AAD)					

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

55. 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 have been worked out and allowed are as follows:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV Bays:			·	·	
No. of Bays	2	2	2	2	2
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
D/C Twin Cond	uctor Transm	ission line:			
Length(km)	10.456	10.456	10.456	10.456	10.456
Norms (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
S/C Twin Cond	uctor Transmi	ission line:			
Length(km)	105.48	105.48	105.48	105.48	105.48
Norms (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
Total O&M Expenses (₹ lakh)	163.92	169.42	175.06	180.84	186.85

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

#### Interest on Working Capital (IWC)

57. 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;"

58. 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%.

59. 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	13.66	14.12	14.59	15.07	15.57
Maintenance Spares	24.59	25.41	26.26	27.13	28.03
Receivables	766.50	749.03	728.39	707.76	687.17
Total	804.75	788.56	769.24	749.95	730.77
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	108.64	106.46	103.85	101.24	98.65



### ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

60. 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	26595.05	26801.95	26801.95	26801.95	26801.95
Additional Capitalisation	206.90	0.00	0.00	0.00	0.00
Closing Gross Block	26801.95	26801.95	26801.95	26801.95	26801.95
Average Gross Block	26698.50	26801.95	26801.95	26801.95	26801.95
Rate of Depreciation (%)	5.22	5.22	5.22	5.22	5.22
Depreciable Value	24028.65	24121.76	24121.76	24121.76	24121.76
Balance useful life of the asset	28.00	27.00	26.00	25.00	24.00
Elapsed life	3.00	4.00	5.00	6.00	7.00
Remaining Depreciable Value	21048.85	19748.99	18350.56	16952.13	15553.71
Depreciation during the year	1392.96	1398.43	1398.43	1398.43	1398.43
Depreciation upto previous year	2979.81	4372.77	5771.20	7169.63	8568.05
Cumulative depreciation (incl. of AAD)	4372.77	5771.20	7169.63	8568.05	9966.48
Interest on Loan					
Gross Normative Loan	18616.54	18761.37	18761.37	18761.37	18761.37
Cumulative Repayment upto Previous Year	2979.81	4372.77	5771.20	7169.63	8568.05
Net Loan-Opening	15636.73	14388.60	12990.17	11591.74	10193.32
Additions	144.83	0.00	0.00	0.00	0.00
Repayment during the year	1392.96	1398.43	1398.43	1398.43	1398.43
Net Loan-Closing	14388.60	12990.17	11591.74	10193.32	8794.89
Average Loan	15012.66	13689.38	12290.96	10892.53	9494.10
Weighted Average Rate of Interest on Loan (%)	9.0774	9.0805	9.0816	9.0817	9.0825
Interest on Loan	1362.76	1243.06	1116.22	989.23	862.30
Return on Equity					
Opening Equity	7978.52	8040.59	8040.59	8040.59	8040.59
Additions	62.07	0.00	0.00	0.00	0.00
Closing Equity	8040.59	8040.59	8040.59	8040.59	8040.59
Average Equity	8009.55	8040.59	8040.59	8040.59	8040.59



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
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	1570.71	1576.80	1576.80	1576.80	1576.80
Interest on Working Capital					
O & M expenses	13.66	14.12	14.59	15.07	15.57
Maintenance Spares	24.59	25.41	26.26	27.13	28.03
Receivables	766.50	749.03	728.39	707.76	687.17
Total	804.75	788.56	769.24	749.95	730.77
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	108.64	106.46	103.85	101.24	98.65
Annual Transmission Charges					
Depreciation	1392.96	1398.43	1398.43	1398.43	1398.43
Interest on Loan	1362.76	1243.06	1116.22	989.23	862.30
Return on Equity	1570.71	1576.80	1576.80	1576.80	1576.80
Interest on Working Capital	108.64	106.46	103.85	101.24	98.65
O & M Expenses	163.92	169.42	175.06	180.84	186.85
Total	4598.99	4494.16	4370.35	4246.54	4123.03

61. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when materialized. However, the COD of the asset is after 2009, hence the claim of the petitioner is not maintainable.

### Filing Fee and the Publication Expenses

62. 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

63. 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

64. 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

65. 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.

66. This order disposes of Petition No.562/TT/2014.

Sd/-

Sd/-

(Dr. M.K. lyer) Member

(A.S. Bakshi) Member



### Annexure – 1

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

(₹ in lakh)

Asset-1						
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total		
				(Rs in lakh)		
BOND XXIV-DOCO DRAWL ON 01-JAN- 2012-	9.95	12.00	0.00	12.00		
BOND XXVIII-ADDCAP FOR 2011-2012 ADD CAP-	9.33	0.00	50.00	50.00		
BOND XXVIII-DOCO DRAWL ON 01-JAN- 2012-	9.33	1600.00	0.00	1600.00		
BOND XXIX-ADDCAP FOR 2011-2012 ADD CAP-	9.20	0.00	30.91	30.91		
BOND XXIX-DOCO DRAWL ON 01-JAN- 2012-	9.20	600.00	0.00	600.00		
BOND XXX-DOCO DRAWL ON 01-JAN-2012-	8.80	1750.00	0.00	1750.00		
BOND XXXI-DOCO DRAWL ON 01-JAN- 2012-	8.90	780.00	0.00	780.00		
BOND XXXIII-DOCO DRAWL ON 01-JAN- 2012-	8.64	400.00	0.00	400.00		
BOND-XXXIV-DOCO DRAWL ON 01-JAN- 2012 DRAWL ON 01-JAN-2012-	8.84	300.11	0.00	300.11		
BOND-XXXV-DOCO DRAWL ON 01-JAN- 2012-	9.64	54.00	0.00	54.00		
BOND XXXVII-ADDCAP FOR 2012-2013 ADDCAP-	9.25	0.00	38.30	38.30		
BOND XXXVII-DOCO-	9.25	535.32	0.00	535.32		
BOND XXXVIII-ADDCAP FOR 2012-2013 ADD CAP-	9.25	0.00	10.21	10.21		
SBI (21.03.2012)-ADDCAP FOR 2013-2014 ADD CAP-	10.29	0.00	25.99	25.99		
Total		6031.43	155.41	6186.84		



Asset-2					
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total	
				(Rs in lakh)	
BOND XXIV-DOCO DRAWL ON 01-JAN- 2012-	9.95	19.00	0.00	19.00	
BOND XXVIII-DOCO DRAWL ON 01-JAN- 2012-	9.33	3600.00	0.00	3600.00	
BOND XXIX-ADDCAP FOR 2011-2012 add cap-	9.20	0.00	14.09	14.09	
BOND XXIX-DOCO DRAWL ON 01-JAN- 2012-	9.20	900.00	0.00	900.00	
BOND XXX-ADDCAP FOR 2011-2012 ADD CAP-	8.80	0.00	311.74	311.74	
BOND XXX-DOCO DRAWL ON 01-JAN-2012-	8.80	2650.00	0.00	2650.00	
BOND XXXI-ADDCAP FOR 2011-2012 add cap-	8.90	0.00	17.00	17.00	
BOND XXXI-DOCO DRAWL ON 01-JAN- 2012-	8.90	175.00	0.00	175.00	
BOND XXXIII-DOCO DRAWL ON 01-JAN- 2012-	8.64	400.00	0.00	400.00	
BOND-XXXIV-ADDCAP FOR 2011-2012 ADD CAP-	8.84	0.00	167.89	167.89	
BOND-XXXIV-DOCO DRAWL ON 01-JAN- 2012-	8.84	1048.00	0.00	1048.00	
BOND-XXXV-DOCO DRAWL ON 01-JAN 2012-	9.64	100.00	0.00	100.00	
BOND XXXVII-ADDCAP FOR 2011-2012 ADD CAP-	9.25	0.00	51.91	51.91	
BOND XXXVII-DOCO-	9.25	423.25	0.00	423.25	
BOND XXXVIII-ADDCAP FOR 2012-2013 add cap-	9.25	0.00	54.02	54.02	
BOND XXXVIII-DOCO DRAWL ON 01-JAN- 2012 DRAWL ON 01-JAN-2012-	9.25	1035.77	0.00	1035.77	
SBI (21.03.2012)-ADDCAP FOR 2012-2013 add cap-	10.61	0.00	30.58	30.58	
SBI (21.03.2012)-ADDCAP FOR 2013-2014 add cap-	10.29	0.00	429.30	429.30	
BOND XL-ADDCAP FOR 2012-2013 add cap-	9.30	0.00	80.00	80.00	
BOND - XLI-ADDCAP FOR 2012-2013 add cap-	8.85	0.00	352.00	352.00	
BOND - XLIII-ADDCAP FOR 2013-2014 add cap-	7.93	0.00	163.10	163.10	
Total		10351.02	1671.63	12022.65	



Asset-3					
Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total	
				(Rs in lakh)	
BOND XXVIII-DOCO-	9.33	50.00	0.00	50.00	
BOND XXIX-DOCO-	9.20	50.00	0.00	50.00	
BOND XXX-DOCO DRAWL-	8.80	50.00	0.00	50.00	
BOND XXXI-DOCO DRAWL ON 01-JUN- 2012-	8.90	25.00	0.00	25.00	
BOND-XXXIV-DOCO DRAWL-	8.84	234.00	0.00	234.00	
BOND XXXVII-DOCO DRAWL-	9.25	51.22	0.00	51.22	
SBI (21.03.2012)-ADDCAP FOR 2012-2013 ADD CAP-	10.29	0.00	14.13	14.13	
BOND - XLIII-ADDCAP FOR 2013-2014 ADD CAP-	7.93	0.00	21.90	21.90	
BOND - XLV-ADDCAP FOR 2013-2014 ADD CAP-	9.65	0.00	60.00	60.00	
Total		460.22	96.03	556.25	

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

(₹ in lakh)

Asset-1						
Particulars	2011-12 (pro-rata)	2012-13	2013-14			
Gross Opening Loan	6031.43	6112.34	6160.85			
Cumulative Repayments of Loans up to Previous Year	1.00	2.00	193.08			
Net Loans Opening	6030.43	6110.34	5967.77			
Add: Drawl(s) during the Year	80.91	48.51	25.99			
Less: Repayments during the year	1.00	191.08	401.91			
Net Closing Loan	6110.34	5967.77	5591.85			
Average Net Loan	6070.39	6039.06	5779.81			
Rate of Interest on Loan (%)*	9.0359%	9.0341%	9.0329%			
Interest on Loan	548.51	545.58	522.08			



Asset-2						
Particulars	2011-12 (pro-rata)	2012-13	2013-14			
Gross Opening Loan	10351.02	10913.65	11430.25			
Cumulative Repayments of Loans up to Previous Year	1.58	3.16	380.91			
Net Loans Opening	10349.44	10910.49	11049.34			
Add: Drawl(s) during the Year	562.63	516.60	592.40			
Less: Repayments during the year	1.58	377.75	640.56			
Net Closing Loan	10910.49	11049.34	11001.18			
Average Net Loan	10629.97	10979.92	11025.26			
Rate of Interest on Loan (%)*	9.0862%	9.0762%	9.0855%			
Interest on Loan	965.86	996.56	1001.71			

Asset-3						
Particulars	2011-12 (pro-rata)	2012-13				
Gross Opening Loan	460.22	474.35				
Cumulative Repayments of Loans up to Previous Year	0.00	8.34				
Net Loans Opening	460.22	466.01				
Add: Drawl(s) during the Year	14.13	81.90				
Less: Repayments during the year	8.34	14.59				
Net Closing Loan	466.01	533.32				
Average Net Loan	463.12	499.67				
Rate of Interest on Loan (%)*	8.9988%	9.0252%				
Interest on Loan	41.67	45.10				

\*Petitioner, in the tariff computation submitted with the petition, has considered rate of interest on loan upto two decimal points.



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

				(₹ in lakh)
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
				(Rs in lakh)
BOND XXIV-1.DOCO DRAWL ON 01-JAN- 2012-	9.95	19.00	0.00	19.00
BOND XXIV-22.DOCO DRAWL ON 01-JAN- 2012-	9.95	12.00	0.00	12.00
BOND XXVIII-2.DOCO DRAWL ON 01-JAN- 2012-	9.33	3600.00	0.00	3600.00
BOND XXVIII-23.DOCO DRAWL ON 01-JAN- 2012	9.33	1600.00	0.00	1600.00
BOND XXVIII-31.ADDCAP FOR 2011-2012 ADD CAP-	9.33	50.00	0.00	50.00
BOND XXVIII-38.DOCO-	9.33	50.00	0.00	50.00
BOND XXIX-10.ADDCAP FOR 2011-2012 dadd cap-	9.20	14.09	0.00	14.09
BOND XXIX-24.DOCO DRAWL ON 01-JAN- 2012-	9.20	600.00	0.00	600.00
BOND XXIX-3.DOCO DRAWL ON 01-JAN- 2012-	9.20	900.00	0.00	900.00
BOND XXIX-32.ADDCAP FOR 2011-2012 ADD CAP-	9.20	30.91	0.00	30.91
BOND XXIX-39.DOCO-	9.20	50.00	0.00	50.00
BOND XXX-19.ADDCAP FOR 2011-2012 ADD CAP-	8.80	311.74	0.00	311.74
BOND XXX-25.DOCO DRAWL ON 01-JAN- 2012-	8.80	1750.00	0.00	1750.00
BOND XXX-4.DOCO DRAWL ON 01-JAN- 2012-	8.80	2650.00	0.00	2650.00
BOND XXX-40.DOCO DRAWAL-	8.80	50.00	0.00	50.00
BOND XXXI-11.ADDCAP FOR 2011-2012 add cap-	8.90	17.00	0.00	17.00
BOND XXXI-26.DOCO DRAWL ON 01-JAN- 2012-	8.90	780.00	0.00	780.00
BOND XXXI-37.DOCO DRAWL ON 01-JUN- 2012-	8.90	25.00	0.00	25.00
BOND XXXI-5.DOCO DRAWL ON 01-JAN- 2012-	8.90	175.00	0.00	175.00
BOND XXXIII-27.DOCO DRAWL ON 01-JAN- 2012	8.64	400.00	0.00	400.00
BOND XXXIII-6.DOCO DRAWL ON 01-JAN- 2012-	8.64	400.00	0.00	400.00
BOND-XXXIV-20.ADDCAP FOR 2011-2012	8.84	167.89	0.00	167.89

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
ADD CAP-				
BOND-XXXIV-28.DOCO DRAWL ON 01-JAN- 2012 DRAWL ON 01-JAN-2012-	8.84	300.11	0.00	300.11
BOND-XXXIV-41.DOCO DRAWAL-	8.84	234.00	0.00	234.00
BOND-XXXIV-7.DOCO DRAWL ON 01-JAN- 2012-	8.84	1048.00	0.00	1048.00
BOND-XXXV-29.DOCO DRAWL ON 01-JAN- 2012-	9.64	54.00	0.00	54.00
BOND-XXXV-8.DOCO DRAWL ON 01-JAN- 2012-	9.64	100.00	0.00	100.00
BOND XXXVII-18.DOCO-	9.25	423.25	0.00	423.25
BOND XXXVII-21.ADDCAP FOR 2011-2012 ADD CAP-	9.25	51.91	0.00	51.91
BOND XXXVII-30.DOCO-	9.25	535.32	0.00	535.32
BOND XXXVII-42.DOCO DRAWAL-	9.25	51.22	0.00	51.22
BOND XXXVII-DOCO-	9.25	38.30	0.00	38.30
BOND XXXVIII-12.ADDCAP FOR 2012-2013 add cap-	9.25	54.02	0.00	54.02
BOND XXXVIII-35.ADDCAP FOR 2012-2013 ADD CAP-	9.25	10.21	0.00	10.21
BOND XXXVIII-9.DOCO DRAWL ON 01-JAN- 2012 DRAWL ON 01-JAN-2012-	9.25	1035.77	0.00	1035.77
SBI (21.03.2012)-15.ADDCAP FOR 2012- 2013 add cap-	10.25	30.58	0.00	30.58
SBI (21.03.2012)-16.ADDCAP FOR 2013- 2014 add cap-	10.25	429.30	0.00	429.30
SBI (21.03.2012)-36.ADDCAP FOR 2013- 2014 ADD CAP-	10.25	25.99	0.00	25.99
SBI (21.03.2012)-43.ADDCAP FOR 2012- 2013 ADD CAP-	10.25	14.13	0.00	14.13
BOND XL-13.ADDCAP FOR 2012-2013 add cap-	9.30	80.00	0.00	80.00
BOND - XLI-14.ADDCAP FOR 2012-2013 add cap-	8.85	352.00	0.00	352.00
BOND - XLIII-17.ADDCAP FOR 2013-2014 add cap-	7.93	163.10	0.00	163.10
BOND - XLIII-44.ADDCAP FOR 2013-2014 ADD CAP-	7.93	21.90	0.00	21.90
BOND - XLV-45.ADDCAP FOR 2013-2014 ADD CAP-	9.65	60.00	0.00	60.00
Total		18765.74	0.00	18765.74



# 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	18765.74	18765.74	18765.74	18765.74	18765.74
Cumulative Repayments of Loans up to Previous Year	1639.39	2908.94	4282.99	5738.49	7214.41
Net Loans Opening	17126.35	15856.80	14482.75	13027.25	11551.33
Add: Drawl(s) during the	0.00	0.00	0.00	0.00	0.00
Year					
Less: Repayments during	1269.55	1374.05	1455.50	1475.92	1475.92
the year					
Net Closing Loan	15856.80	14482.75	13027.25	11551.33	10075.41
Average Net Loan	16491.58	15169.78	13755.00	12289.29	10813.37
Rate of Interest on Loan	9.0774%	9.0805%	9.0816%	9.0817%	9.0825%
(%)*					
Interest on Loan	1497.01	1377.49	1249.18	1116.08	982.13

\*Petitioner, in the tariff computation submitted with the petition, has considered rate of interest on loan up to two decimal points.

