CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 22/TT/2016

Coram:

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

Date of Hearing: 13.06.2016
Date of Order: 27.06.2016

In the matter of:

Determination of transmission tariff for **Asset-I**:132/33 kV, 50 MVA, 3-Ph ICT-1 at 132 / 33 kV Nirjuli Sub-station (POWERGRID) (COD-14.2.2016), **Asset-II**: 132/33 kV, 50 MVA, 3-Ph ICT-II at 132/33 kV, Nirjuli Sub-station (POWERGRID) (COD - 29.3.2016) and **Asset-III**: 400/220kV, 315 MVA, 3-Ph ICT-II (2nd ICT) along with associated bays at 400/220 kV Balipara Sub-station (POWERGRID) (COD -28.5.2016) under "North Eastern Region Strengthening Scheme-II (NERSS-II) Part-A" in North-Eastern Region" for the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

Power Grid Corporation of India Ltd. 'SAUDAMINI', Plot No-2, Sector-29, Gurgaon -122 001 (Haryana).

.....Petitioner

Versus

- Assam Electricity Grid Corporation Ltd. (Formerly Assam State Electricity Board), Bijulee Bhawan, Paltan Bazar, Guwahai – 781001, Assam
- Meghalaya Electricity Corporation Limited (Formerly Meghalaya State Electricity Board), Short Round Road, Shillong - 793001

- Government of Arunachal Pradesh, Itanagar, Arunachal Pradesh
- 4. Power & Electricity Department Government of Mizoram, Mizoram, Aizwal
- 5. Manipur State Electricity Distribution Company Limited (Formerly Electricity Department, Govt. of Manipur), Keishampat, Imphal, Manipur
- 6. Department of Power, Government of Nagaland, Kohima, Nagaland
- 7. Tripura State Electricity Corporation Limited, Vidyut Bhawan, North Banamalipur, Agartala, Tripura 700001

.....Respondents

The following were present:-

For Petitioner: Smt. Swapna Seshadri, Advocate, PGCIL

Shri M.M. Mondal, PGCIL Shri Rakesh Prasad, PGCIL Shri S.S. Raju, PGCIL

Shri Jasbir Singh, PGCIL

For Respondent: None

ORDER

This petition has been filed by Power Grid Corporation of India Ltd. ("the petitioner") for determination of tariff for 132/33 kV, 50 MVA, 3-Ph ICT-I at 132 / 33 kV Nirjuli Sub-station (POWERGRID) (herein after referred as "**Asset-I**") 132/ 33 kV, 50 MVA, 3-Ph ICT-II at 132/33 kV, Nirjuli Sub-station (POWERGRID) (here in after referred as "**Asset-II**") and 400/220 kV, 315 MVA, 3-Ph ICT-II (2nd ICT) along with associated bays at 400/220 kV Balipara Sub-station

(POWERGRID) (hereinafter referred as "**Asset-III**") under "North Eastern Region Strengthening Scheme-II (NERSS-II) Part-A" in North-Eastern Region for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the period starting from COD to 31.3.2019.

- 2. The respondents are distribution licensees, who are procuring transmission service from the petitioner, mainly beneficiaries of the North Eastern Region.
- 3. The brief facts of the case are as follows:-
 - (a) The investment approval for the project was accorded by Board of Directors of the petitioner's company vide Memorandum No. C/CP/NERSS-II Part-A dated 26.11.2014 with an estimated cost of □2871 lakh including Interest during Construction of □180 lakh, at August, 2014 price level. The petitioner, vide its affidavit dated 14.6.2016, has submitted revised approved apportioned cost for Assets-I and II. The details for apportioned approved cost is as under:-

		(□ in lakh)
Particular	Apportioned	Revised approved apportioned
	approved cost as	cost vide affidavit dated
	per FR	14.6.2016
Asset-I	363.60	352.93
Asset-II	363.60	374.26
Asset-III	2143.84	2143.84

(b) The scope of the instant project is as under:-

Sub-station

- i. 400/220 kV, 315 MVA, 3-Ph 2nd ICT along with associated bays at Balipara Sub-station
- ii. Replacement of existing 132/33 kV, 2X10 MVA, ICT by 132/33 kV, 2X50 MVA ICT at Nirjuli Sub-station. 2X10 MVA ICTs, thus released shall be used as regional spares.
- (c) The transmission assets have been commission as under:-

Particulars	Date of Commercial Operation (COD)		
	Anticipated COD	Actual COD	
Asset-I	10.2.2016	14.2.2016	
Asset-II	31.3.2016	29.3.2016	
Asset-III	31.3.2016	28.5.2016	

(d) The petitioner has revised its claim of transmission charges through affidavit dated 9.3.2016, 10.5.2016 and 14.06.2016 for Asset-I, II and III respectively on the basis of the actual COD to 31.3.2019 as under:-

(in lakh)

Asset-I						
Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19		
Depreciation	1.78	17.87	17.97	17.97		
Interest on Loan	1.98	19.00	17.61	16.10		
Return on Equity	2.00	20.00	20.12	20.12		
Interest on Working Capital	0.13	1.31	1.28	1.25		
O&M Expenses	0.00	0.00	0.00	0.00		
Total	5.89	58.18	56.98	55.44		

(in lakh)

Asset-II					
Particulars 2015-16 (pro-rata) 2016-17 2017-18 2018					
Depreciation	0.09	16.26	19.21	19.21	

Asset-II						
Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19		
Interest on Loan	0.12	20.14	22.41	20.58		
Return on Equity	0.11	18.51	22.01	22.01		
Interest on Working Capital	0.01	1.26	1.46	1.42		
O&M Expenses	0.00	0.00	0.00	0.00		
Total	0.33	56.17	65.09	63.22		

Asset-III					
Particulars	2016-17 (pro-rata)	2017-18	2018-19		
Depreciation	71.32	97.68	97.85		
Interest on Loan	75.59	97.01	89.12		
Return on Equity	79.85	109.36	109.55		
Interest on Working Capital	9.77	12.54	12.57		
O&M Expenses	92.37	113.06	116.81		
Total	328.90	429.65	425.90		

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

(in lakh)

Asset-I						
Particulars	2015-16	2016-17	2017-18	2018-19		
Maintenance Spares	0.00	0.00	0.00	0.00		
O & M Expenses	0.00	0.00	0.00	0.00		
Receivables	7.60	9.70	9.50	9.24		
Total	7.60	9.70	9.50	9.24		
Interest	1.03	1.31	1.28	1.25		
Rate of Interest (%)	13.50	13.50	13.50	13.50		
Pro-rata Interest	0.13	1.31	1.28	1.25		

(□ in lakh)

Asset-II				
Particulars 2015-16 2016-17 2017-18 2018-19				
Maintenance Spares	0.00	0.00	0.00	0.00
O & M Expenses	0.00	0.00	0.00	0.00



Asset-II						
Particulars	2015-16 2016-17 2017-18 2018-19					
Receivables	6.77	9.36	10.85	10.54		
Total	6.77	9.36	10.85	10.54		
Interest	0.91	1.26	1.46	1.42		
Rate of Interest (%)	13.50	13.50	13.50	13.50		
Pro-rata Interest	0.01	1.26	1.46	1.42		

Asset-III					
Particulars	2016-17 2017-18 2018-1				
Maintenance Spares	9.12	16.96	17.52		
O & M Expenses	16.41	9.42	9.73		
Receivables	64.94	71.61	70.98		
Total	90.47	97.99	98.23		
Interest	11.58	12.54	12.57		
Rate of Interest (%)	12.80	12.80	12.80		
Pro-rata Interest	9.77	12.54	12.57		

- 4. The petitioner has submitted the single line diagram of the said asset vide affidavit dated 16.2.2016.
- 5. The petitioner in its original petition had submitted the tariff forms for the assets on the basis of anticipated COD. The annual transmission charges for the instant asset was allowed under clause (7) of Regulation 7 of the 2014 Tariff Regulations for inclusion in the PoC charges vide order dated 29.4.2016 based on the tariff claim in the petition. The petitioner was directed to submit Auditor's Certificate and revised tariff forms of the assets as per the actual COD, RLDC certificates in support of trial operation or commercial operation date for the assets. In response, the petitioner vide affidavit dated 9.3.2016, 10.5.2016, 17.5.2016, 9.6.2016 and 14.6.2016, has submitted actual COD, revised tariff

forms along with Auditor's Certificates for Asset-I, II and III. The petitioner has also submitted the RLDC certificates and CEA certificates for all the assets.

- 6. In the instant petition, the petitioner has replaced the existing 2X10MVA ICTs at Nirjuli substation with new 2x50 MVA ICTs. The petitioner was directed to clarify the tariff fixation claimed under the petition. The petitioner has clarified that the tariff of the existing 2x10MVA ICTs at Nirjuli substation under the project "Associated Transmission System of Kopili-Khandong (Additional transmission Gohpur-Itanagar (ATGI) in NER) was claimed in the petition 276/TT/2014. Further, the petitioner has submitted that the Operation & Maintenance for Asset-I and II has not been claimed in instant petition, as the same was covered under project ATS of Kopili-Khandong (Additional transmission Gohpur-Itanagar) in North Eastern Region.
- The Petitioner, in support of using the existing 2x10MVA ICTs at Nirjuli substation as regional spare, has submitted the approved in 13th TCC & NERPC. These ICTs are for augmentation of transformation capacity of any other substation in North East Region and not in replacement of existing ICTs which shall be used as Regional Spares. Hence, de-capitalization is not required. Further, the NERPC has agreed to bear the transmission charges of these ICTs through PoC mechanism. In this regard, the petitioner has also submitted the copy of minutes of 13th TCC and 13th NERPC meetings held at Faridabad. As per the minutes of meeting, one of the ICT has already been put to use in the Nirjuli Substation.

8. The petitioner has served the petition to the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 ("the Act"). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 13.6.2016. None of the respondents have filed their reply. As directed by the Commission, the petitioner vide affidavit dated 9.3.2016, 10.5.2016 and 14.6.2016 has submitted certain information. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

Commercial Operation Date ("COD")

- 9. The petitioner has claimed the date of the commercial operation as 14.2.2016, 29.3.2016 and 28.5.2016 for Asset-I, II and III respectively. Regulation 4(3) of the 2014 Tariff Regulations provides as follows:-
 - **"4. Date of Commercial Operation:** The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

XXX

(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end:

XXX"

10. The petitioner, vide its affidavit dated 9.3.2016, 10.5.2016 and 9.6.2016, has submitted the RLDC certificate dated 18.2.2016, 30.3.2016 and 1.6.2016 issued by North Eastern Regional Load Dispatch Centre (NERLDC) in support of the claim of commercial operation indicating completion of successful trial operation in accordance with Regulation 5(2) of the 2014 Tariff Regulations for

Asset-I, II and III, respectively. The petitioner has also submitted the certificate issued by CEA dated 11.2.2016, 23.3.2016 and 6.5.2016 and approval of energizing electrical installation (under Regulation 43) by Regional Inspectorial Organization (North East) for Asset-I, II and III respectively. The petitioner has complied with the requirement of the 2014 Tariff Regulations regarding COD of the assets. Accordingly, the COD of the transmission asset has been considered as 14.2.2016, 29.3.2016 and 28.5.2016 for Asset-I, II and III, respectively for the purpose of determination of tariff.

11. The tariff has been worked out from respective COD to 31.3.2019 in accordance with the 2014 Tariff Regulations as discussed in subsequent paragraphs.

Capital Cost

12. The details of apportioned approved cost, capital cost as on date of commercial operation and estimated additional capital expenditure incurred or projected to be incurred for the instant asset covered in the petition are as under:-

						(□ in lakh)
Particulars Approved apportioned	Approved apportioned	Capital cost as		tional ization	Total additional	Total estimated
	cost	on COD	2015-16	2016-17	capitalization	completion cost
Asset-I	352.93	190.09	150.27	0.00	150.27	340.36
Asset-II	374.26	198.98	55.3	118.06	173.36	372.34
Asset-III	2143.84	1360.77	0.00	492.41	492.41	1853.18

The petitioner has claimed capital cost of □186.09 lakh, □ 198.46 lakh, and □ 1353.8 lakh for AssetI, II and III respectively as on COD after adjusting the



accrued IDC. The capital cost as on COD also includes the cost of IDC, IEDC and initial spares.

13. Regulation 9 (2) and 10 (1) of the 2014 Tariff Regulations specify as follows:-

"9. Capital Cost:

- (2) The Capital Cost of a new project shall include the following:
 - a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
 - b) Interest during construction and financing charges, on the loans (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;
 - c) Increase in cost in contract packages as approved by the Commission;
 - d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
 - e) capitalized Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
 - f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;
 - g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
 - h) adjustment of any revenue earned by the transmission licensee by using the assets before COD."
- **"10. Prudence Check of Capital Expenditure:** The following principles shall be adopted for prudence check of capital cost of the existing or new projects:
- (1) In case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out taking into consideration the benchmark norms specified/to be specified by the Commission from time to time: Provided that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the capital expenditure, financing plan, interest during construction, incidental expenditure during construction for its reasonableness, use of efficient technology, cost over-run and time over-run, competitive bidding for procurement and such other matters as may be considered appropriate by the Commission for determination of tariff:"
- 14. The capita cost for the purpose of tariff has been considered as discussed in subsequent paragraphs.



Time over-run

15. As per the investment approval, the commissioning schedule of the project was 30 months from the date of investment approval. The investment approval was accorded on 26.11.2014 and accordingly the scheduled date of commercial operation works out to 26.5.2017. The transmission assets were commissioned on 14.2.2016, 29.3.2016, and 28.5.2016 for Asset-I, II and III respectively. The commissioning of the transmission assets is within the timeline specified in investment approval.

Cost Over-run

16. The petitioner vide its affidavit dated 14.6.2016 has revised the approved apportioned cost for the assets. The details are as given below:-

Apportioned cost as Revised apportioned Estimated

Asset	COD	Apportioned cost as per FR as submitted in original petition	Revised apportioned cost as per affidavit dated 14.6.2016	completion cost an on 31.3.2019
Asset-I	14.2.2016	363.60	352.93	340.36
Asset-II	29.3.2016	363.60	374.26	372.34
Asset-III	28.5.2016	2143.84	2143.84	1853.18

The estimated completion cost for the assets is well within the apportioned cost.

Treatment of Initial spares

17. Regulation 13(d) of the 2014 Tariff Regulations provides that initial spares shall be capitalised as a percentage of plant and machinery cost upto cut-off date, subject to following ceiling norms:-

(a) Coal-based/lignite-fired thermal generating stations4.0%(b) Gas Turbine/Combined Cycle thermal generating stations4.0%

(c) Hydro generating stations including pumped storage hydro -4.0%



(d) Transmission system

(i) Transmission line	- 1.00%
(ii) Transmission Sub-station (Green Field)	- 4.00%
(iii) Transmission Sub-station (Brown Field)	- 6.00%
(iv) Series Compensation devices and HVDC Station	- 4.00%
(v) Gas Insulated Sub-station (GIS)	- 5.00%
(vi) Communication system	- 3.5%"

18. The petitioner has claimed initial spares of □ 3.22 lakh, □ 3.81 lakh for Asset I and II respectively, brown field sub-stations and □ 74.43 lakhfor Asset-III, a Greenfield sub-station. Initial spares claimed for sub-station for Asset-I and II are within the ceiling limit specified in the 2014 Tariff Regulations. The initial spares claimed in case of Asset-III is higher. The details of the initial spares claimed and allowed are as shown below:-

(in lakh) Plant & Ceiling limit (%) Initial **Machinery Cost Spares** Initial as per Ceiling limit of as on cut-off **Excess** Allowed Description spares Regulation 13 of Initial Spares date based on initial claimed the 2014 Tariff (d)=*((a-b) *c) / Min [(b) & Auditor's Spares (b) Regulation (100-c)% (d)] Certificate (c) Transmission Sub-station 6.00% 20.33 321.72 3.22 0.00 3.22 (Greenfield) (Asset-I) Transmission Sub-station 335.49 3.81 6.00% 21.17 0.00 3.81 (Greenfield) (Asset-II) Transmission Sub-station 1786.11 74.43 4.00% 71.32 3.11 71.32 (Brownfield) (Asset-III)

IDC & IEDC

19. The petitioner, vide affidavit dated 9.3.2016, 10.5.2016 and 14.6.2016, has submitted the details of accrued IDC which is expected to be discharged during 2016-17 and 2017-18. The petitioner also submitted that entire IEDC has

been discharged as on COD for the said assets. Accordingly, the accrual IDC has been deducted from the capital cost as on COD and the same has been considered as part of additional capitalization in addition to the additional capitalization submitted as per the Auditor Certificate dated 10.3.2016, 27.4.2016, 10.6.2016 for Asset-I,II and III respectively and is as shown below:-

Particulars (Asset-I)	(□ in akh)
Capital cost as on COD as per Auditor's Certificate	190.09
Less: Accrual IDC to be discharged after COD	4.00
Less: Excess Initial spares	0.00
Capital Cost considered as on COD	186.09

Particulars (Asset-II)	(□ in bkh)
Capital cost as on COD as per Auditor's Certificate	198.98
Less: Accrual IDC to be discharged after COD	0.52
Less: Excess Initial spares	0.00
Capital Cost considered as on COD	198.46

Particulars (Asset-III)	(□ in akh)
Capital cost as on COD as per Auditor's Certificate	1360.77
Less: Accrual IDC to be discharged after COD	6.97
Less: Excess Initial spares	3.11
Capital Cost considered as on COD	1350.69

Additional Capital Expenditure

20. The petitioner has proposed additional capitalization of □150.27 lakh for Asset-I for the year 2015-16, □ 55.3 lakh and □ 118.06 lakh for AssetI for the year 2015-16 and 2016-17 respectively and □492.41 lakh for Asset-III for the year 2016-17 towards balance and retention payment under Regulation 14(1)(i) of 2014 Tariff Regulations. The petitioner has claimed additional capitalization including the accrual IDC discharged during 2015-16, 2016-17 and 2017-18. It is

observed that total estimated completion cost including additional capitalization for 2015-16, 2016-17 and 2017-18 is within the approved apportioned cost. The additional capitalization is towards the balance and retention payment for the work within the original scope of work.

21. 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:"

22. The cut-off date for the Asset-I and II works out to be 31.3.2018 and for Asset-III works out to be 31.3.2019. The additional capitalization claimed by the petitioner is within the cut-off date. The additional capitalization for 2015-16 and 2016-17 is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations. The details of additional capitalization allowed is as follows:-

(□ in lakh)

					1 1			
Cost as per Investment Approval is □ 352.9300 lakh								
Asset I	Capital cost as	capital	ional isation ected	Total additional	Total capital cost including additional			
	on COD	2015-16	2016-17	capitalization	capitalisation as on 31.3.2019			
As Claimed	186.09 (190.09- 4.00)	150.27	4.00*	154.27	340.36			
Approved in this order	186.09	150.27	4.00*	154.27	340.36			

^{*}Accrual IDC adjusted

Cost as per Investment Approval is □ 374.2600 lakh



Cost as per Investment Approval is □ 374.2600 lakh								
cost	Capital		capitalisation pjected	Total	Total capital cost including additional capitalisation as on 31.3.2019			
	cost as on COD	2015-16	2016-17*	additional capitalization				
As Claimed	198.46 (198.98- 0.52)	55.30	118.58 (118.06+0.52)	173.88	372.34			
Approved in this order	198.46	55.30	118.58	173.88	372.34			

^{*}Accrual IDC adjusted

					(III lakii)	
Cost as per In	vestment A	pproval is □ 21	43.8 <mark>400 I</mark>	akh		
Asset III	Capital	Additional capit projecte		Total additional	Total capital cost including additional capitalisation as on 31.3.2019	
	cost as on COD	2016-17	2017-18	capitalization		
As Claimed	1353.80 (1360.77- 6.97)	493.01 (492.41+0.60)	6.37*	499.38	1853.18	
Approved in this order	1350.69 (1353.80- 3.11)#	493.01	6.37*	499.38	1850.07	

^{*}Accrual IDC adjustment #Deduction of initial spares

Debt:Equity Ratio

23. Regulation 19 (1) of the 2014 Tariff Regulations specifies 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:

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio."

24. The petitioner has considered debt:equity ratio as 70:30 as on COD and for additional capitalisation post COD. We have considered debt:equity ratio of 70:30 as on COD and for additional capitalization during 2015-16, 2016-17 and 2017-18. The details of the debt:equity as on the date of COD and 31.3.2019 considered for the purpose of tariff computation for the 2014-19 tariff period is as follows:-

<i>(</i> \Box	in	akh)
\		aniii

Asset-I	As on COD		Additional of during 2014	apitalization 1-19	As on 31.3.2019		
	Amount	(%)	Amount (%)		Amount	(%)	
Debt	130.26	70.00	107.99	70.00	238.25	70.00	
Equity	55.83	30.00	46.28	30.00	102.11	30.00	
Total	186.09	100.00	154.27	100.00	340.36	100.00	

(in akh)

Asset-II	As on CC)D	Additional cap during 2014-1		As on 31.3.2019		
	Amount	(%)	Amount (%)		Amount	(%)	
Debt	138.92	70.00	121.72	70.00	260.64	70.00	
Equity	59.54	30.00	52.16	30.00	111.70	30.00	
Total	198.46	100.00	173.88	100.00	372.34	100.00	

(in akh)

Asset-III	As on COD		Additional caduring 2014-		As on 31.3.2019		
	Amount	(%)	Amount (%)		Amount	(%)	
Debt	945.48	70.00	349.57	70.00	1295.05	70.00	
Equity	405.21	30.00	149.81	30.00	555.02	30.00	
Total	1350.69	100.00	499.38	100.00	1850.07	100.00	

Interest on Loan ("IOL")

- 25. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations provides as under:-
 - "(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest."
- 26. We have considered the weighted average rate of IOL on the basis of rate prevailing as on 1.4.2015 for Asset I and II and for Asset-III we have considered the weighted average rate of IOL on the basis of rate prevailing as on 1.4.2016. Further, the petitioner has prayed to allow it to bill and adjust impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2015-19 period, if any from the respondents.
- 27. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The petitioner's prayer to bill and adjust the impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2015-19 period from the respondents will be considered at the time of truing up. The details of weighted average rate of interest are placed at **Annexure-1** for the assets covered in the instant petition and the IOL has been worked out as follows:-

(□ in bkh)
Asset-I

	2015-16			
Particulars		2016-17	2017-18	2018-19
	(pro-rata)			
Gross loan opening	130.26	235.45	238.25	238.25
Cumulative Repayment up	0.00	4 77	10.04	27.04
to previous year	0.00	1.77	19.64	37.61
Net Loan-Opening	130.26	233.68	218.62	200.65
Additions during the year	105.19	2.80	0.00	0.00
Repayment during the year	1.77	17.87	17.97	17.97
Net Loan-Closing	233.68	218.62	200.65	182.67
Average Loan	181.97	226.15	209.63	191.66
Rate of Interest (%)	8.4000	8.4000	8.4000	8.4000
Interest	1.96	19.00	17.61	16.10

Asset-II					
Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19	
Gross loan opening	138.92	177.63	260.64	260.64	
Cumulative Repayment up	0.00	0.10	16.36	35.57	
to previous year					
Net Loan-Opening	138.92	177.53	244.28	225.07	
Additions during the year	38.71	83.01	0.00	0.00	
Repayment during the year	0.10	16.26	19.21	19.21	
Net Loan-Closing	177.53	244.28	225.07	205.86	
Average Loan	158.23	210.91	234.67	215.46	
Rate of Interest (%)	9.5500	9.5500	9.5500	9.5500	
Interest	0.12	20.14	22.41	20.58	

(in lakh)

Asset-III					
Particulars	2016-17 (pro-rata)	2017-18	2018-19		
Gross loan opening	945.48	1290.59	1295.05		
Cumulative Repayment up to previous year	0.00	71.16	168.68		
Net Loan-Opening	945.48	1219.43	1126.37		
Additions during the year	345.11	4.46	0.00		
Repayment during the year	71.16	97.52	97.68		
Net Loan-Closing	1219.43	1126.37	1028.69		
Average Loan	1082.46	1172.90	1077.53		
Rate of Interest (%)	8.2574	8.2574	8.2574		



Asset-III				
Particulars	2016-17 (pro-rata)	2017-18	2018-19	
Interest	75.42	96.85	88.98	

Return on Equity("ROE")

- 28. Clause (1)& (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:-
 - **"24. Return on Equity**: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.
 - (2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

i. in case of projects commissioned on or after 1st April, 2014, an additional return of **0.50** % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I**:"

"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."

29. The petitioner has submitted grossed up ROE at the rate of 19.705% after grossing up the ROE of 15.50% with MAT rate as 21.34%. The petitioner has

further submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2015-19 on actual gross income of any financial year. Any underrecovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

- 30. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.
- 31. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. The grossed up ROE considered for computation of tariff is 19.610%. Hence, the ROE allowed for the instant transmission asset is given below:-

(in bkh)

Asset-I						
Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19		
Opening Equity	55.83	100.91	102.11	102.11		
Additional Capitalization	45.08	1.20	0.00	0.00		
Closing Equity	100.91	102.11	102.11	102.11		
Average Equity	78.37	101.51	102.11	102.11		
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50%		
Tax rate for the year (%)	20.961%	20.961%	20.961%	20.961%		
Rate of Return on Equity (Pre Tax) (%)	19.610%	19.610%	19.610%	19.610%		
Return on Equity (Pre Tax)	1.97	19.91	20.02	20.02		

(in lakh)

				(III lakii	
Asset-II					
Particulars	2015-16	2016-17	2017-18	2018-19	
	(pro-rata)				
Opening Equity	59.54	76.13	111.70	111.70	
Additional Capitalization	16.59	35.57	0.00	0.00	
Closing Equity	76.13	111.70	111.70	111.70	
Average Equity	67.83	93.92	111.70	111.70	
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50%	
Tax rate for the year (%)	20.961%	20.961%	20.961%	20.961%	
Rate of Return on Equity (Pre Tax) (%)	19.610%	19.610%	19.610%	19.610%	
Return on Equity (Pre Tax)	0.11	18.42	21.90	21.90	

(□ in lakh)

Asset-III				
Particulars	2016-17	2017-18	2018-19	
	(Pro-Rata)			
Opening Equity	405.21	553.11	555.02	
Additional Capitalization	147.90	1.91	0.00	
Closing Equity	553.11	555.02	555.02	
Average Equity	479.16	554.07	555.02	
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	
Tax rate for the year (%)	20.961%	20.961%	20.961%	
Rate of Return on Equity (Pre Tax) (%)	19.610%	19.610%	19.610%	
Return on Equity (Pre Tax)	79.29	108.65	108.84	

Depreciation



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

"27. Depreciation:

- (2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis"
- "(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** to these regulations for the assets of the generating station and transmission system:

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

- (6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets."
- 33. Clause (67) of Regulation 3 of the 2014 Tariff Regulations defines useful life as follows:-
 - "(67) '**Useful life**' in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:
 - (a) Coal/Lignite based thermal generating station 25 years
 - (b) Gas/Liquid fuel based thermal generating station 25 years
 - (c) AC and DC sub-station 25 years
 - (d) Gas Insulated Substation (GIS) 25 years
 - (d) Hydro generating station including pumped Storage hydro generating stations 35 years
 - (e) Transmission line (including HVAC & HVDC) 35 years
 - (f) Communication system 15 years"

A	20 L : 0 N 22/TT/2046	_		·
respe	ctively and additional capitalization of \Box 150.27 lakh and \Box 4	lakh	acc	rual
□186.	09 lakh, \square 198.46lakh, and \square 1353.80 lakhas on COD for Ass	set-I,I	l an	d III
34.	The petitioner has claimed depreciation considering capital e	xpend	ditur	e of

IDC) for 2015-16 and 2016-17 respectively for Asset-I, additional capitalization of □ 55.3 lakhand 118.58(including accrual IDC) for the year 2015-16 and 2016-17 respectively for Asset-II and additional capitalization of □ 493.01(including accrual IDC) and □ 6.37 lakh (accrual IDC) for the year 2016-17 and 2017-18 respectively for Asset-III.

35. We have considered the submissions of the petitioner and have computed depreciation considering capital expenditure as on COD and additional capitalization approved for 2015-16, 2016-17 and 2017-18. The weighted average useful life of the asset has been considered as 25 years for all the assets in accordance with the above regulation. The details of the depreciation allowed for the asset is given hereunder:-

(□ in akh)

	Asset-I			
De Carlos	2015-16	0040.47	0047.40	0040.40
Particulars	(nro roto)	2016-17	2017-18	2018-19
	(pro-rata)			
Opening Gross block	186.09	336.36	340.36	340.36
Additional Capitalization	150.27	4.00	0.00	0.00
Closing Gross block	336.36	340.36	340.36	340.36
Average Gross block	261.23	338.36	340.36	340.36
Rate of Depreciation (%)	5.280	5.280	5.280	5.280
Depreciable Value	235.10	304.52	306.32	306.32
Elapsed Life of the assets at	0	1	2	3
beginning of the year				
Weighted Balance Useful life of	25	24	23	22
the assets				
Remaining Depreciable Value	235.10	302.75	286.69	268.72
Depreciation	1.77	17.87	17.97	17.97

(in lakh)

	Asset-II			
	2015-16			
Particulars		2016-17	2017-18	2018-19
	(pro-rata)			

Asset-II				
Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Gross block	198.46	253.76	372.34	372.34
Additional Capitalization	55.30	118.58	0.00	0.00
Closing Gross block	253.76	372.34	372.34	372.34
Average Gross block	226.11	313.05	372.34	372.34
Rate of Depreciation (%)	5.242	5.195	5.159	5.159
Depreciable Value	203.50	281.75	335.11	335.11
Elapsed Life of the assets at beginning of the year	0	1	2	3
Weighted Balance Useful life of the assets	25	24	23	22
Remaining Depreciable Value	203.50	281.65	318.75	299.54
Depreciation	0.10	16.26	19.21	19.21

Asset-III					
Particulars	2016-17	2017-18	2018-19		
Particulars	(Pro-Rata)	2017-10	2010-19		
Opening Gross block	1350.69	1843.70	1850.07		
Additional Capitalization	493.01	6.37	0.00		
Closing Gross block	1843.70	1850.07	1850.07		
Average Gross block	1597.20	1846.89	1850.07		
Rate of Depreciation (%)	5.280	5.280	5.280		
Depreciable Value	1437.48	1662.20	1665.06		
Elapsed Life of the assets at	0	1	2		
beginning of the year					
Weighted Balance Useful life of the	25	24	23		
assets					
Remaining Depreciable Value	1437.48	1591.03	1496.39		
Depreciation	71.16	97.52	97.68		

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

The petitioner has not claimed any O&M expenses for Asset-I and II as 36. the same was covered under project ATS of Kopili-Khandong (additional transmission Gohpur-Itanagar) in North Eastern Region. The replaced 2x10 MVA



ICT shall be used as regional spares as discussed in NERPC. The petitioner for Asset-III has computed normative O&M Expenses as per Regulation 29(4)(a) of the 2014 Tariff Regulations. Accordingly, the petitioner's entitlement to O&M expenses have been worked out as given hereunder:-

Particulars	2016-17 (Pro-Rata)	2017-18	2018-19
Norm (□ lakh/bay)			
400 kV Bay	64.37	66.51	68.71
220 kV Bay	43.61	45.06	46.55
Number of bay			
400 kV bay	1	1	1
220 kV bay	1	1	1
Total O&M Expense (line & bay) (☐ in lakh)	92.34	113.06	116.81

- 37. The petitioner has submitted that norms for O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner is due during the 2014-19 tariff period and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.
- 38. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, any application filed by the petitioner in this regard will be dealt in accordance with the appropriate provisions of the 2014 Tariff Regulations.

Interest on Working Capital ("IWC")

39. As per 2014 Tariff Regulations the components of the working capital and the interest thereon are discussed hereinafter:-

(i) Receivables

As per Regulation 28(1) (c)(i) of the 2014 Tariff Regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of 2 months transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

(ii) Maintenance Spares

Regulation 28(1)(c)(ii) of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses from 1.4.2014. The petitioner has claimed maintenance spares for the instant asset and value of maintenance spares has accordingly been worked out as 15% of O&M Expenses.

(iii) O & M Expenses

Regulation 28(1)(c)(iii) of the 2014 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O & M Expenses for the instant asset and value of O & M Expenses has accordingly been worked out by considering 1 month O&M Expenses.

(iv) Rate of interest on working capital

Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the transmission system including sub-station, communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later. Further, the Bank Rate' means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points) for Asset I and II and the rate of interest on working capital considered for Asset-III is12.80% (SBI Base Rate of 9.30% plus 350 basis points).

40. The interest on working capital allowed for the asset is shown in the table below:-

(in bkh)

Asset-I				,
Particulars	2015-16	2016-17	2017-18	2018-19
1 articulars	(pro-rata)	2010-17	2017-10	2010-13
Maintenance Spares	0.00	0.00	0.00	0.00
O & M expenses	0.00	0.00	0.00	0.00
Receivables	0.97	9.68	9.48	9.22
Total	0.97	9.68	9.48	9.22
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest	0.13	1.31	1.28	1.25

(in lakh)

Asset-II



Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Maintenance Spares	0.00	0.00	0.00	0.00
O & M expenses	0.00	0.00	0.00	0.00
Receivables	0.06	9.35	10.83	10.52
Total	0.06	9.35	10.83	10.52
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest	0.01	1.26	1.46	1.42

Asset-III				
Particulars	2016-17 2017-18 20		2018-19	
Faiticulais	(pro-rata)	2017-10	2010-19	
Maintenance Spares	13.85	16.96	17.52	
O & M expenses	7.70	9.42	9.73	
Receivables	54.66	71.43	70.81	
Total	76.21	97.81	98.07	
Rate of Interest (%)	9.75	12.52	12.55	
Interest	12.80%	12.80%	12.80%	

Annual Transmission Charges

41. The detailed computation of the various components of the annual fixed charges for the asset for the tariff period 2015-19 is summarised below:-

(in lakh)

	Asset-I			
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Gross Block				
Opening Gross Block	186.09	336.36	340.36	340.36
Additional Capitalisation	150.27	4.00	0.00	0.00
Closing Gross Block	336.36	340.36	340.36	340.36
Average Gross Block	261.23	338.36	340.36	340.36
Rate of Depreciation	5.280	5.280	5.280	5.280
Depreciable Value	235.10	304.52	306.32	306.32
Elapsed Life of the assets at beginning of the year	0	1	2	3
Weighted Balance Useful life of the assets	25	24	23	22
Remaining Depreciable Value	235.10	302.75	286.69	268.72
Depreciation	1.77	17.87	17.97	17.97



	Asset-I			
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Interest on Loan				
Gross Normative Loan	130.26	235.45	238.25	238.25
Cumulative Repayment upto Previous Year	0.00	1.77	19.64	37.61
Net Loan-Opening	130.26	233.68	218.62	200.65
Additions	105.19	2.80	0.00	0.00
Repayment during the year	1.77	17.87	17.97	17.97
Net Loan-Closing	233.68	218.62	200.65	182.67
Average Loan	181.97	226.15	209.63	191.66
Weighted Average Rate of Interest on Loan (%)	8.4000	8.4000	8.4000	8.4000
Interest	1.96	19.00	17.61	16.10
Return on Equity				
Opening Equity	55.83	100.91	102.11	102.11
Additions	45.08	1.20	0.00	0.00
Closing Equity	100.91	102.11	102.11	102.11
Average Equity	78.37	101.51	102.11	102.11
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	1.97	19.91	20.02	20.02
Interest on Working Capital				
Maintenance Spares	0.00	0.00	0.00	0.00
O & M expenses	0.00	0.00	0.00	0.00
Receivables	0.97	9.68	9.48	9.22
Total	0.97	9.68	9.48	9.22
Interest	0.13	1.31	1.28	1.25
A				
Annual Transmission Charges		47.0-	47.00	47.05
Depreciation	1.77	17.87	17.97	17.97
Interest on Loan	1.96	19.00	17.61	16.10
Return on Equity	1.97	19.91	20.02	20.02
Interest on Working Capital	0.13	1.31	1.28	1.25
O & M Expenses	0.00	0.00	0.00	0.00
Total	5.84	58.07	56.88	55.34

Asset-II



Asset-2	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Gross Block	(* * * * * * * * * * * * * * * * * * *			
Opening Gross Block	198.46	253.76	372.34	372.34
Additional Capitalisation	55.30	118.58	0.00	0.00
Closing Gross Block	253.76	372.34	372.34	372.34
Average Gross Block	226.11	313.05	372.34	372.34
Rate of Depreciation	5.242	5.195	5.159	5.159
Depreciable Value	203.50	281.75	335.11	335.11
Elapsed Life of the assets at beginning	0	1	2	3
of the year	0	I	2	3
Weighted Balance Useful life of the assets	25	24	23	22
Remaining Depreciable Value	203.50	281.65	318.75	299.54
Depreciation	0.10	16.26	19.21	19.21
Interest on Loan Gross Normative Loan	138.92	177.63	260.64	260.64
Cumulative Repayment upto Previous	130.92	177.03	200.04	200.04
Year	0.00	0.10	16.36	35.57
Net Loan-Opening	138.92	177.53	244.28	225.07
Additions	38.71	83.01	0.00	0.00
Repayment during the year	0.10	16.26	19.21	19.21
Net Loan-Closing	177.53	244.28	225.07	205.86
Average Loan	158.23	210.91	234.67	215.46
Weighted Average Rate of Interest on Loan (%)	9.5500	9.5500	9.5500	9.5500
Interest	0.12	20.14	22.41	20.58
Return on Equity		- 0.40		
Opening Equity	59.54	76.13	111.70	111.70
Additions	16.59	35.57	0.00	0.00
Closing Equity	76.13	111.70	111.70	111.70
Average Equity	67.83	93.92	111.70	111.70 15.500
Return on Equity (Base Rate) (%) MAT Rate for the year 2013-14 (%)	15.500 20.961	15.500 20.961	15.500	
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	20.961 19.610	20.961 19.610
Return on Equity (Pre Tax)	0.11	18.42	21.90	21.90
Notalli on Equity (1 to Tax)	0.11	10.42	21.50	21.50
Interest on Working Capital				
Maintenance Spares	0.00	0.00	0.00	0.00
O & M expenses	0.00	0.00	0.00	0.00
Receivables	0.06	9.35	10.83	10.52
Total	0.06	9.35	10.83	10.52
Interest	0.01	1.26	1.46	1.42
Annual Transmission Charges				
Annual Transmission Charges				



Asset-II				
Asset-2	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Depreciation	0.10	16.26	19.21	19.21
Interest on Loan	0.12	20.14	22.41	20.58
Return on Equity	0.11	18.42	21.90	21.90
Interest on Working Capital	0.01	1.26	1.46	1.42
O & M Expenses	0.00	0.00	0.00	0.00
Total	0.34	56.08	64.99	63.11

Asset-III			
Asset-3	2016-17 (Pro-rata)	2017-18	2018-19
Gross Block			
Opening Gross Block	1350.69	1843.70	1850.07
Additional Capitalisation	493.01	6.37	0.00
Closing Gross Block	1843.70	1850.07	1850.07
Average Gross Block	1597.20	1846.89	1850.07
Rate of Depreciation	5.280	5.280	5.280
Depreciable Value	1437.48	1662.20	1665.06
Elapsed Life of the assets at beginning of the year	0	1	2
Weighted Balance Useful life of the assets	25	24	23
Remaining Depreciable Value	1437.48	1591.03	1496.39
Depreciation	71.16	97.52	97.68
Interest on Loan			
Gross Normative Loan	945.48	1290.59	1295.05
Cumulative Repayment upto Previous Year	0.00	71.16	168.68
Net Loan-Opening	945.48	1219.43	1126.37
Additions	345.11	4.46	0.00
Repayment during the year	71.16	97.52	97.68
Net Loan-Closing	1219.43	1126.37	1028.69
Average Loan	1082.46	1172.90	1077.53
Weighted Average Rate of Interest on Loan (%)	8.2574	8.2574	8.2574
Interest	75.42	96.85	88.98
Return on Equity			
Opening Equity	405.21	553.11	555.02
Additions	147.90	1.91	0.00
Closing Equity	553.11	555.02	555.02
Average Equity	479.16	554.07	555.02
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961



Asset-III			
Asset-3	2016-17 (Pro-rata)	2017-18	2018-19
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610
Return on Equity (Pre Tax)	79.29	108.65	108.84
Interest on Working Capital			
Maintenance Spares	13.85	16.96	17.52
O & M expenses	7.70	9.42	9.73
Receivables	54.66	71.43	70.81
Total	76.21	97.81	98.07
Interest	9.75	12.52	12.55
Annual Transmission Charges			
Depreciation	71.16	97.52	97.68
Interest on Loan	75.42	96.85	88.98
Return on Equity	79.29	108.65	108.84
Interest on Working Capital	9.75	12.52	12.55
O & M Expenses	92.34	113.06	116.81
Total	327.97	428.60	424.86

Filing Fee and Publication Expenses

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

Licence Fee and RLDC Fees and Charges

43. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and

charges in accordance with Clause (2)(b) and (2)(a), respectively of Regulation 52 of the 2014 Tariff Regulations.

Service Tax

44. The petitioner has sought to recover service tax on transmission charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list in future. We are of the view that the petitioner's prayer of service tax is premature.

Sharing of Transmission Charges

- 45. 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.
- 46. This order disposes of Petition No. 22/TT/2016.

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

Sd/-(A.S. Bakshi) Member

ANNEXURE-1

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2015-19

Asset-I	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
Proposed Loan 2015-2016 (8.40%)- DOCO Funding-	8.40	130.26	0.00	130.26
Total		130.26	0.00	130.26

Asset-II	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
SBI (2014-15)-ADDCAP FOR 2015-2016 Add Cap Funding-	9.55	0.00	38.71	38.71
SBI (2014-15)-DOCO Funding-	9.55	138.92	0.00	138.92
Total		138.92	38.71	177.63

Asset-III	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
SBI (2014-15)-Loan 1-	9.55	85.01	0.00	85.01
Proposed Loan 2016-17 (BOND LIII)- Loan 2-	8.13	862.65	0.00	862.65
Total		947.66	0.00	947.66

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2015-19

(□ in lakh)

Asset-I				
Particulars	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	130.26	130.26	130.26	130.26
Cumulative Repayment of loan upto previous year	0.00	0.00	0.00	0.00

Asset-I					
Particulars	2015-16	2016-17	2017-18	2018-19	
Net Loan Opening	130.26	130.26	130.26	130.26	
Additions during the year	0.00	0.00	0.00	0.00	
Repayment during the year	0.00	0.00	0.00	0.00	
Net Loan Closing	130.26	130.26	130.26	130.26	
Average Loan	130.26	130.26	130.26	130.26	
Rate of Interest (%)	8.4000	8.4000	8.4000	8.4000	
Interest	10.94	10.94	10.94	10.94	

(□ in

lakh)

- Idin'i				
Asset-II				
Particulars	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	138.92	177.63	177.63	177.63
Cumulative Repayment of loan	0.00	0.00	0.00	0.00
upto previous year	0.00	0.00	0.00	
Net Loan Opening	138.92	177.63	177.63	177.63
Additions during the year	38.71	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00	0.00
Net Loan Closing	177.63	177.63	177.63	177.63
Average Loan	158.28	177.63	177.63	177.63
Rate of Interest (%)	9.5500	9.5500	9.5500	9.5500
Interest	15.12	16.96	16.96	16.96

(□ in lakh)

Asset-III				
Particulars (Asset-III)	2016-17	2017-18	2018-19	
Gross Opening Loan	947.66	947.66	947.66	
Cumulative Repayment of loan upto	0.00	0.00	0.00	
previous year				
Net Loan Opening	947.66	947.66	947.66	
Additions during the year	0.00	0.00	0.00	
Repayment during the year	0.00	0.00	0.00	
Net Loan Closing	947.66	947.66	947.66	
Average Loan	947.66	947.66	947.66	
Rate of Interest (%)	8.2574	8.2574	8.2574	
Interest	78.25	78.25	78.25	