

**CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

**Petition No. 19/TT/2020**

**Coram:**

**Shri P.K. Pujari, Chairperson  
Shri I. S. Jha, Member**

**Date of Order : 09.05.2020**

**In the Matter of:**

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff for 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2019 of combined assets associated with Northern Region System Strengthening Scheme-VI in Northern Region consisting of Asset-1: LILO of 400 kV S/C Ballabgarh-Bhiwadi Transmission Line at Gurgaon along with associated bays, Asset-2: 315 MVA, 400/220 kV ICT-I alongwith associated bays at GIS Sub-station at Gurgaon and Asset-3: 315 MVA, 400/220 kV ICT-II alongwith associated bays at GIS Sub-station at Gurgaon.

**And in the Matter of:**

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

**.....Petitioner**

**Versus**

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



4. Jodhpur Vidyut Vitran Nigam Ltd.  
400 kV GSS Building (Ground Floor), Ajmer Road,  
Heerapura, Jaipur.
5. Himachal Pradesh State Electricity Board  
Vidyut Bhawan  
Kumar House Complex Building II  
Shimla-171 004
6. Punjab State Electricity Board  
Thermal Shed Tia  
Near 22 phatak, Patiala-147001
7. Haryana Power Purchase Centre  
Shakti Bhawan, Sector-6  
Panchkula (Haryana) 134 109
8. Power Development Department  
Government of Jammu & Kashmir  
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Ltd.,  
(Formerly Uttar Pradesh State Electricity Board)  
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.,  
BSES Bhawan, Nehru Place,  
New Delhi.
12. BSES Rajdhani Power Ltd.,  
BSES Bhawan, Nehru Place,  
New Delhi.
13. North Delhi Power Ltd.,  
Power Trading & Load Dispatch Group  
Cennet Building,  
Adjacent To 66/11 kV Pitampura-3  
Grid Building, Near PP Jewellers  
Pitampura, New Delhi - 110034
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-110002

...Respondent(s)

**Parties present:**

**For Petitioner:** Shri Ved Prakash Rastogi, PGCIL  
Shri A.K. Verma, PGCIL  
Shri Vipin J. Joseph, PGCIL

**For Respondent:** Shri R.B. Sharma, Advocate, BRPL and BYPL  
Shri Mohit Mudgal, Advocate, BRPL and BYPL

**ORDER**

The present petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the Petitioner”), a deemed transmission licensee, for truing up of tariff for the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff for the period from 1.4.2019 to 31.3.2024 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect Asset-1: LILO of 400 kV S/C Ballabgarh-Bhiwadi Transmission Line at Gurgaon along with associated bays, Asset-2: 315 MVA, 400/220 kV ICT-I alongwith associated bays at GIS Sub-station at Gurgaon and Asset-3: 315 MVA, 400/220 kV ICT-II alongwith associated bays at GIS Sub-station at Gurgaon (hereinafter collectively referred to as “the transmission assets/Combined Asset”) under the “Northern Region System Strengthening Scheme-VI” (hereinafter referred to as the “transmission project”).

2. The Petitioner has made the following prayers:



*“i. Approve the Additional Capitalisation expenditure incurred during 2014-19 and allow balance initial spares of ₹106.56 lakh.*

*ii. Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition.*

*iii. Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, 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 as provided in Tariff Regulation 2014 and Tariff regulations 2019.*

*iv. Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure ( if any) in relation to the filing of petition.*

*v. Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the beneficiaries in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*

*vi. Allow the Petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.*

*vii. Allow the Petitioner to file a separate petition before the Commission for claiming the overall security expenses and consequential IOWC on that security expenses.*

*viii. Allow the Petitioner to claim the capital spares at the end of tariff block as per actual.*

*ix. Allow the Petitioner to bill and recover GST on Transmission Charges separately from the beneficiaries, if GST on transmission is withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*

*and pass such other relief as the Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.”*



## **Background**

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

- a. The investment approval for the said system and expenditure sanction to the transmission project was accorded by the Board of Directors of PGCIL on 22.1.2007 at an estimated cost of ₹24934.4 lakh. The Revised Cost Estimate (RCE) was approved vide memorandum C/CP/NRSSS-VI dated 22.1.2007 of ₹18695 lakh including an IDC of ₹1236 lakh based on 2<sup>nd</sup> Quarter, 2006 price level. The Revised Cost Estimate-II (RCE-II) was approved vide memorandum C/CP/PA1617-07-0G-RCE001 dated 22.7.2016 of ₹25597 lakh including an IDC of ₹1682 lakh based on February 2016 price level. The instant assets were scheduled to be put into commercial operation on 1.8.2009. The scope of work covered under “Northern Region System Strengthening Scheme-VI” is as follows: -

### **Transmission line:**

- i. LILO of Ballabgarh-Bhiwadi 400 kV S/C line at Gurgaon (including multi circuit)

### **Sub-station:**

- ii. 2 X 315 MVA 400/220 kV Gurgaon (GIS) Sub-station
- b. The details of commercial operation of the assets covered in the instant petition are as follows:

<b>Assets</b>	<b>Asset nomenclature in order dated 25.2.2016 in P. No. 10/TT/2015</b>	<b>COD</b>	<b>Time over-run</b>	<b>Time over-run condoned</b>
<b>Asset 1</b>	Asset-I	1.7.2010	11 Months	11 Months
<b>Asset 2</b>	Asset-II	1.7.2010	11 Months	11 Months
<b>Asset 3</b>	Asset-III	1.2.2012	30 Months	None
<b>Combined Asset</b>				
<b>Combined Asset</b>		1.2.2011	-	-



- c. The transmission tariff from COD to 31.3.2014 for Assets 1 and 2 was allowed vide order dated 30.8.2012 in Petition No.343/2010 and in case of Asset 3, it was allowed vide order dated 9.5.2013 in Petition No.147/TT/2011.
- d. There was time over-run of 11 months in case of Assets 1 and 2 and the same was condoned in order dated 30.8.2012. Further, the cost over-run in case of the Assets 1 and 2 was allowed. There was time over-run of 30 months in case of Asset 3 and it was not condoned and accordingly IDC and IEDC for the said period was disallowed vide order dated 9.5.2013 in Petition No.147/TT/2011.
- e. The transmission tariff allowed for the instant assets for 2014-19 period vide order dated 25.2.2016 in Petition No. 10/TT/2015 and revised transmission tariff based on truing up claimed by the Petitioner is given as:

(₹ in lakh)						
Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Combined Asset</b>	AFC approved vide order dated 25.2.2016	4324.07	4296.93	4210.76	4125.15	4040.22
	Revised AFC claimed based on truing up	4280.36	4203.58	4117.36	4040.44	3968.28

4. As per Regulation 8(1) of the 2014 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 31.3.2019, as admitted by the Commission after prudence check at the time of truing up.

5. The instant petition is filed for truing up of transmission tariff of the 2014-19 period under Regulation 8 of the 2014 Tariff Regulations and determination of transmission tariff of 2019-24 period under Regulation 8 the 2019 Tariff Regulations.



6. The respondents are distribution licensees and power departments, who are procuring transmission service from the Petitioner, mainly beneficiaries of Northern Region.

7. The Petitioner has served the petition on 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. Reply to the petition has been filed by BSES Rajdhani Private Limited (BRPL), Respondent No.12, vide affidavits dated 7.2.2020 and 25.2.2020 and it has raised issues like grossing up of RoE, capital spares, security expense, application filing fees and expenses incurred for publication of notices, and the effect of CGST. The Petitioner, vide its affidavit dated 25.2.2020, filed its rejoinder to the reply of BRPL.

8. The hearing in this matter was held on 26.2.2020 and the order was reserved. The Petitioner was directed to submit certain information and the same was filed by the Petitioner vide affidavit dated 13.3.2020.

9. This order is issued considering the submissions made by the Petitioner in the petition dated 18.11.2019 and Petitioner's affidavits dated 25.2.2020, 13.3.2020 and BRPL reply filed vide affidavits dated 7.2.2020 and 25.2.2020.

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



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

11. The Petitioner has submitted the information as required under the 2014 Tariff Regulations for truing up of annual fixed charges for 2014-19 period. The tariff for 2014-19 period has been trued up as discussed in the subsequent paragraphs.

### **Capital Cost as on 1.4.2014**

12. The Capital Cost of the instant assets has been calculated in accordance with the Regulation 9(3) and Regulation 9(6) of the 2014 Tariff Regulations. The Commission vide order dated 25.2.2016 in Petition No. 10/TT/2015 had approved the transmission tariff for the instant assets for the 2014-19 period based on admitted capital cost of ₹23828.69 lakh as on 31.3.2014 and projected additional capital expenditure of ₹921.59 lakh during 2014-19 for the Combined Asset.

(₹ in lakh)

Assets	Admitted Capital Cost as on 1.4.2014	Additional Capitalisation Expenditure	Total Capital Cost as on 31.3.2019
		2014-15	
Asset 1	10981.27	217.77	11199.04
Asset 2	7141.99	86.73*	7228.72
Asset 3	5705.43	351.91	6057.34
<b>Combined Asset</b>	<b>23828.69</b>	<b>656.41</b>	<b>24485.10</b>

\*Capital cost of ₹265.18 lakh pertaining to Asset 2 was restricted in the absence of Revised Cost Estimate-II.

### **Initial Spares**

13. The Petitioner has claimed the following Initial Spares with respect to the instant assets for sub-stations and has further requested to revise the Initial Spares allowed earlier for the instant assets in order dated 25.2.2016 in Petition No.10/TT/2015 taking into consideration the judgement of the Appellate Tribunal for





Electricity (hereinafter referred to as “APTEL”) dated 14.9.2019 in Appeal No.74 of 2017:

Initial Spares claimed by the Petitioner							
Asset	Asset type	Capital Cost (₹ in lakh)	Spares claimed (₹ in lakh)	Limit (in %)	Allowable (₹ in lakh)	Allowed in Petition No. 10/TT/2015 (₹ in lakh)	Balance Spares (₹ in lakh)
Asset 1	GIS Sub-station	3953.49	321.86	3.50	131.72	130.38	<b>106.56</b>
Asset 2	GIS Sub-station	7567.55	221.23	3.50	266.45	221.23	
Asset 3	GIS Sub-station	6130.99	156.68	3.50	216.68	156.68	
<b>Total</b>		<b>17652.03</b>	<b>699.77</b>		<b>614.85</b>	<b>508.29</b>	

14. BRPL has submitted that the Petitioner’s request for application of APTEL’s judgment in Appeal No. 74 of 2017 against order in Petition No. 53/TT/2015 in the instant case of 2014-19 truing up is not applicable since the subject judgment pertains to true up of 2009-14. In response, the Petitioner, vide affidavit dated 25.2.2020, has submitted that the said judgment has allowed the appeal of the Petitioner and has held that Initial Spares have to be seen as a percentage of total project cost and not individual asset costs. The Petitioner has submitted that initial spares were deducted during 2009-14 and hence the initial spares disallowed during 2009-14 are added in the opening capital cost as on 1.4.2014.

15. We have considered the submissions of the Petitioner and BRPL. Initial Spares are allowed for the instant assets as per the APTEL’s directions in judgement dated 14.9.2019. As per APTEL’s judgement dated 14.9.2019 in Appeal No. 74 of 2017, the Initial Spares are to be allowed as a percentage of the project cost as a whole as on the cut-off date. Regulation 3(29) of the Central Electricity Regulatory Commission



(Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as the “2009 Tariff Regulations”) defines “project cost” as under:

*“3 (29) `original project cost' means the capital expenditure incurred by the generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cut-off date as admitted by the Commission;”*

16. The instant assets were put into commercial operation in the 2009-14 period. Accordingly, the 2009 Tariff Regulations are applicable for the instant assets. The Regulation 8(iv) of the 2009 Tariff Regulations specifies the norms for the Initial Spares for the transmission systems as under:

*“(iv) Transmission system*

*(a) Transmission line - 0.75%*

*(b) Transmission Sub-station - 2.5%*

*(c) Series Compensation devices and HVDC Station - 3.5%*

*(d) Gas Insulated Sub-station (GIS) - 3.5%”*

17. It is observed that the Petitioner has claimed the Initial Spares for the instant assets, which were put into commercial operation during the 2009-14 tariff period, at capital costs as on 31.3.2019 as provided in the Auditor certificates. The Petitioner has not claimed any initial spares for transmission line (TL). The Initial Spares are allowed for the instant assets as a percentage, specified in the 2009 Tariff Regulations, of the capital expenditure as on the cut-off date as specified in Regulation 3(29) of the 2009 Tariff Regulations and it is as follows:-



Asset	Total Cost admitted as on 31.3.2014 (₹ in lakh)	Capital Cost considered upto cut-off date of respective asset for computing initial spares (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2009 Tariff Regulations (in %)	Initial Spares allowable as per APTEL judgement dated 14.9.2019 (₹ in lakh)	Allowed in Petition No. 10/TT/2015 (₹ in lakh)	Balance Initial Spares (₹ in lakh)
		A	B	C	D=(A-B)*C/(100-C)	E	D-E
		GIS Sub-station					
<b>Asset 1</b>	10981.27	3916.67 <sup>#</sup>	321.86	3.50%	130.38	130.38	75.22
<b>Asset 2</b>	7141.99	7141.99 <sup>#</sup>	221.23	3.50%	251.01	221.23	
<b>Asset 3</b>	5705.43	5719.02 <sup>*</sup>	146.36 <sup>^</sup>	3.50%	202.12	156.68	
	<b>23828.69</b>	<b>16777.68</b>	<b>689.45</b>		<b>583.51</b>	<b>508.29</b>	<b>75.22</b>

# Considered for computation of initial spares in order dated 25.2.2016 in Petition No. 10/TT/2015

\*Cost as per Auditor certificate upto cut-off date i.e. 31.3.2015

<sup>^</sup>Proportionate Initial Spares claimed after deducting IDC as per order dated 25.2.2016 in Petition No. 10/TT/2015

The balance of ₹75.22 lakh is added to the Combined Asset. The capital cost considered as on 1.4.2014 is as below:

Assets	Admitted Cost as on 31.3.2014 in order dated 25.2.2016	Balance Initial Spares allowable as per APTEL judgment dated 14.9.2019	Cost considered after allowing balance initial spares as on 1.4.2014
<b>Combined Asset</b>	<b>23828.69</b>	<b>75.22</b>	<b>23903.91</b>

### Additional Capital Expenditure

18. The Commission had allowed additional capital expenditure of ₹656.41 lakh for Combined Asset in 2014-19 towards undischarged liabilities vide order dated 25.2.2016. The total capital cost of Asset 2 after taking into account the estimated additional capital expenditure of ₹351.91 lakh during 2014-15, exceeded the apportioned approved cost of ₹7228.72 lakh, and pending submission of RCE-II the



additional capital expenditure for Asset 2 was restricted to ₹86.73 lakh (₹351.91 lakh less ₹265.18 lakh), subject to true-up on actual basis. The Petitioner has submitted the RCE-II along with the instant petition.

19. BRPL has submitted that the Petitioner has claimed cost over-run by filing RCE-II, whereas the same does not contain any justification for increase in earlier approved cost and that the additional capital expenditure claimed by the Petitioner should also be allowable only if there is no cost over-run with respect to the Investment Approval. BRPL has further submitted that additional capital expenditure of ₹184.07 lakh pertaining to allotment of land by Haryana Urban Development Authority (HUDA) should not be allowed since it is in compliance of existing law and not a change in law. In response, the Petitioner vide affidavit dated 25.2.2020 submitted that the cost of Asset-II was restricted in absence of RCE-II. Further, there is net decrease from RCE-I (₹26587 lakh) to RCE-II (₹25595 lakh). The additional capital expenditure of ₹184.07 lakh during 2017-18 is paid against conveyance deed of Gurgaon Sub-station land to HUDA subsequent to allotment, which is claimed under Regulation 14(3)(ii)-Change in law or compliance of existing law.

20. We have considered the submissions of the Petitioner and BRPL. The Petitioner has claimed additional capital expenditure beyond cut-off date under Regulation 14(3)(v) and additional capital expenditure ₹184.07 lakh during 2017-18 under Regulation 14(3)(ii). The Petitioner has claimed following additional capital expenditure based on actual expenditure vide Auditor Certificates dated 2.8.2019 for Assets 1, 2 and 3:-

**(₹ in lakh)**



Asset	Apportioned Approved Capital Cost as per RCE-II	Capital cost as on 31.3.2014	Actual Additional Capital Expenditure for					Total Cost
			2014-15	2015-16	2016-17	2017-18	2018-19	
Asset 1	11373	10981.28+106.56*	0	26.95	0	36.81	0	11151.6
Asset 2	7836	7142	13.58	0	0	73.63	0	7229.21
Asset 3	6388	5705.44	13.58	0	0	73.63	0	5792.65
<b>Total</b>	<b>25597</b>	<b>23935.28</b>	<b>27.16</b>	<b>26.95</b>	<b>0</b>	<b>184.07</b>	<b>0</b>	<b>24173.46</b>

\* in compliance of APTEL judgment in Appeal 74 of 2017, initial spares have been calculated on total project cost instead of individual asset cost and balance allowable spares of ₹106.56 lakh has been added in capital cost of Asset 1.

21. The Petitioner has claimed the additional capital expenditure of ₹27.16 lakh and ₹26.95 lakh as undischarged liabilities for works executed within the cut-off date for Assets 1, 2, and 3 under Regulation 14(3)(v) of the 2014 Tariff Regulations. In addition, the Petitioner has claimed ₹184.07 lakh under Regulation 14(3)(ii) as payment of stamp duty to Haryana Urban Development Authority (HUDA) for allotment of land. In its reply vide affidavit dated 25.2.2020 to the letter dated 18.2.2020, the Petitioner has submitted that payment of such nature was envisaged at the time of Investment Approval and it has also furnished the proof of payment along with its reply. Further, in its reply vide affidavit dated 13.3.2020 to the RoP of the hearing dated 26.2.2020, the Petitioner has submitted the supporting documents regarding the communication with HUDA in this regard. It is observed that the payment made by the Petitioner to HUDA is mandatory in nature. Therefore, the same is allowed as additional capital expenditure. Accordingly, the capital cost considered for the tariff period 2014-19 is as follows:-

Asset	Revised admitted capital cost as on 1.4.2014	Additional Capital Expenditure					Total Capital Cost as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19	
<b>Combined Asset</b>	<b>23903.91</b>	<b>27.16</b>	<b>26.95</b>	<b>0</b>	<b>184.07</b>	<b>0</b>	<b>24142.09</b>



### **Debt-Equity ratio**

22. The debt-equity ratio has been considered in accordance with Regulation 19(1), (3) and (5) of 2014 Tariff Regulations. The debt and equity allowed for individual assets for determination of tariff for the period ending 31.3.2014 has been combined and considered for deciding opening debt and equity of the project as on 1.4.2014. The debt-equity ratio of 70:30 has been considered for the additional capital expenditure allowed during 2014-19 in accordance to Regulation 19(3) of 2014 Tariff Regulations.

23. The details of the debt and equity as on 1.4.2014 and 31.3.2019 for Combined Asset considered for the 2014-19 tariff period is as follows:

<b>Funding</b>	<b>Capital cost as on 1.4.2014 (₹ in lakh)</b>	<b>(%)</b>	<b>Additional capital expenditure during 2014-19 (₹ in lakh)</b>	<b>(%)</b>	<b>Total capital cost as on 31.3.2019 (₹ in lakh)</b>	<b>(%)</b>
Debt	16732.74	70.00	166.73	70.00	16899.46	70.00
Equity	7171.17	30.00	71.45	30.00	7242.63	30.00
<b>Total</b>	<b>23903.91</b>	<b>100.00</b>	<b>238.18</b>	<b>100.00</b>	<b>24142.09</b>	<b>100.00</b>

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

24. The Petitioner has claimed 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 Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest are placed in Annexure-1. The IoL allowed out is as follows:-



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Interest on Loan</b>					
Gross Normative Loan	16732.74	16751.75	16770.61	16770.61	16899.46
Cumulative Repayments up to Previous Year	3603.57	4703.57	5805.00	6907.15	8009.29
Net Loan-Opening	13129.17	12048.18	10965.61	9863.47	8890.18
Additions	19.01	18.87	0.00	128.85	0.00
Repayment during the year	1100.00	1101.43	1102.14	1102.14	1102.14
Net Loan-Closing	12048.18	10965.61	9863.47	8890.18	7788.03
Average Loan	12588.67	11506.89	10414.54	9376.82	8339.10
Weighted Average Rate of Interest on Loan (%)	9.0746	9.0754	9.0751	9.0639	9.0513
<b>Interest on Loan</b>	<b>1142.38</b>	<b>1044.29</b>	<b>945.13</b>	<b>849.90</b>	<b>754.80</b>

(₹ in lakh)

Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 25.2.2016	1156.87	1075.96	973.39	870.81	768.22
Claimed by the Petitioner	1142.87	1041.79	939.62	841.40	743.31
Allowed after true-up in this order	1142.38	1044.29	945.13	849.90	754.80

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

### **Return on Equity (“ROE”)**

25. The Petitioner is entitled for Return on Equity for the instant assets in terms of Regulation 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that they are liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax rate (in %)	Grossed up ROE (Base Rate/1-t) (in %)
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757



26. BRPL has submitted that the Petitioner has claimed effective tax rate based on the consolidated income of the company, whereas the income from other business activities of the Petitioner like consulting, communication, planning and design of projects etc. are required to be excluded from the computation of effective rate. BRPL has further submitted that the deferred tax liability (DTL) relevant to the aforesaid other business shall also not be considered in the computation of effective tax rate. In response, the Petitioner vide affidavit dated 25.2.2020 has submitted that it has claimed deferred tax liability during the period 2009-14 only for the deferred tax liability upto 31.3.2009 and materialised. Further, the DTL amount billed/ materialised is not considered while grossing up the RoE.

27. We have considered the submissions of the Petitioner and BRPL. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates for the Petitioner and the same is given in the table below. The same MAT rates are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations.

<b>Year</b>	<b>Notified MAT rates (inclusive of surcharge &amp; cess) (in %)</b>	<b>Base rate of RoE (in %)</b>	<b>Grossed up ROE (Base Rate/1-t) (in %)</b>
2014-15	20.9605	15.50	19.611
2015-16	21.3416	15.50	19.705
2016-17	21.3416	15.50	19.705
2017-18	21.3416	15.50	19.705
2018-19	21.5488	15.50	19.758

28. The Petitioner has claimed ROE for the 2014-19 period after grossing up the ROE of 15.50% with Effective Tax rates (based on MAT rates) each year as per the





above said Regulation. The ROE is trued up on the basis of the MAT rate applicable in the respective years and is allowed as follows:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Return on Equity</b>					
Opening Equity	7171.17	7179.32	7187.41	7187.41	7242.63
Additions	8.15	8.09	0.00	55.22	0.00
Closing Equity	7179.32	7187.41	7187.41	7242.63	7242.63
Average Equity	7175.25	7183.36	7187.41	7215.02	7242.63
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity</b>	<b>1407.10</b>	<b>1415.51</b>	<b>1416.31</b>	<b>1421.75</b>	<b>1430.96</b>

(₹ in lakh)					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 25.2.2016	1421.18	1440.49	1440.49	1440.49	1440.49
Claimed by Petitioner	1409.99	1418.05	1418.13	1423.57	1432.85
Allowed after true-up in this Order	1407.10	1415.51	1416.31	1421.75	1430.96

The return on equity allowed in the instant order is less than the return on equity allowed vide order dated 25.2.2016 due to decrease in equity on account of lower additional capitalisation and change in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.

### **Depreciation**

29. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed for the instant assets in order dated 25.2.2016 in Petition No. 10/TT/2015. The Petitioner has neither given any justification for claiming higher depreciation than that was allowed earlier in order dated 25.2.2016 nor made any specific prayer for allowing higher depreciation in this petition. Therefore, the Petitioner was directed as follows:-



*“Submit the working of depreciation considered for IT Equipment & Software. Also clarify the useful life considered by the Petitioner for the same”.*

30. In response, the Petitioner vide affidavit dated 25.2.2020 submitted as follows:-

*“....., it is submitted that the depreciation @ 15% on account of IT equipment has been provided under Appendix-II of the Tariff Regulations, 2014. Further, clause 3 of the Regulation 27 of Tariff Regulations 2014 provides NIL salvage value for IT equipment. Similar provisions have been provided in Tariff Regulations, 2019.*

*It is submitted that during the truing up for 2009-14 block in petition 529/TT/2014, capital cost of IT equipment was included in the substation cost inadvertently and therefore depreciation for IT equipment was allowed based on substation cost inadvertently and therefore depreciation for IT equipment upto 31.3.2014 has been considered @ 5.28% of corresponding capital cost in line with earlier approved order. Thus, calculation of depreciation of IT equipment upto 31.3.2014 is as given below;*

Asset	COD	IT equipment cost (₹ in lakh)	Depreciation upto 31.3.2014 @5.28% (₹ in lakh)
Asset-1	1.7.2010	63.26	12.54
Asset-2	1.7.2010	128.97	25.56
Asset-3	1.2.2012	131.25	15.00
	Total	323.48	53.10

The Petitioner has submitted that during the truing up of the tariff of the 2009-14 period, the capital cost of the IT equipment was considered as part of the sub-station cost inadvertently and to avoid revision of tariff of the 2009-14 block, it requested to consider depreciation of IT Equipment upto 31.3.2014 as 5.28%. The Petitioner has further submitted that the depreciation rate for IT Equipment in the 2014 Tariff Regulations and the 2019 Tariff Regulations is 15% and the salvage value for IT Equipment is NIL.

31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012 and 9.5.2013 in Petition No. 343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any



capital expenditure towards “IT Equipment” in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014-19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations (the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to “IT Equipment”. The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head “IT Equipment” @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner’s prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable



value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations.

32. The depreciation for 2014-19 period is trued up for the instant assets as per the methodology provided in the Regulation 27 of the 2014 Tariff Regulations and it is as follows:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Depreciation</b>					
Opening Gross Block	23903.91	23931.07	23958.02	23958.02	24142.09
Additional Capitalisation	27.16	26.95	0.00	184.07	0.00
Closing Gross Block	23931.07	23958.02	23958.02	24142.09	24142.09
Average Gross Block	23917.49	23944.55	23958.02	24050.06	24142.09
Average Gross Block (90% depreciable assets)	23594.01	23621.07	23634.54	23726.58	23818.61
Average Gross Block (100% depreciable assets)	323.48	323.48	323.48	323.48	323.48
Freehold Land	2629.50	2629.50	2629.50	2721.54	2813.57
Rate of Depreciation	4.60%	4.60%	4.60%	4.58%	4.57%
Balance useful life of the asset	25	24	23	22	21
Elapsed life	3	4	5	6	7
Depreciable Value (excluding IT equipment and software) - 90%	18868.06	18892.41	18904.54	18904.54	18904.54
Depreciable value of IT equipment and software - 100%	323.48	323.48	323.48	323.48	323.48
<b>Depreciation during the year</b>	<b>1100.00</b>	<b>1101.43</b>	<b>1102.14</b>	<b>1102.14</b>	<b>1102.14</b>
Cumulative Depreciation upto PY	3603.57	4703.57	5805.00	6907.15	8009.29
Total Cumulative Depreciation	4703.57	5805.00	6907.15	8009.29	9111.43
Remaining Depreciable Value Total	14487.97	13410.89	12320.87	11218.73	10116.59

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 25.2.2016	1114.49	1131.82	1131.82	1131.82	1131.82
Claimed by the Petitioner	1133.09	1134.52	1135.23	1135.23	1135.23
Allowed after true-up in this order	1100.00	1101.43	1102.14	1102.14	1102.14

The depreciation allowed in the instant order is at variance with the depreciation allowed vide order dated 25.2.2016 due to lower additional capital expenditure.



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

33. The Petitioner submitted that it had inadvertently claimed the O&M rates of conventional bays instead of GIS bays in Petition No. 10/TT/2015. However, while working out the tariff for 2014-19 period in the instant petition, the Petitioner has considered the bays type at Gurgaon Sub-station as GIS. In its reply, vide affidavit dated 13.3.2020, to the RoP of the hearing dated 26.2.2020, the Petitioner submitted the LoA and work orders confirming the type of sub-stations of being of GIS nature.

34. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total O&M Expenses for the instant assets claimed by the Petitioner are as follows:-

<b>O&amp;M Expenses</b>					
400 kV GIS					
No. of bays	4	4	4	4	4
Norms (₹ lakh/Bay)	51.54	53.25	55.02	56.84	58.73
220 kV GIS					
No. of bays	6	6	6	6	6
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
<b>Transmission line</b>					
D/C Twin/Triple Conductor	33.192	33.192	33.192	33.192	33.192
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>482.89</b>	<b>498.92</b>	<b>515.50</b>	<b>532.55</b>	<b>550.27</b>

The O&M Expenses claimed by the Petitioner are as per the norms specified in the 2014 Tariff Regulations and hence, they are allowed as claimed.

<b>Particulars</b>	<b>(₹ in lakh)</b>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Approved vide order dated 25.2.2016	517.93	535.12	552.90	571.23	590.19
Claimed by the Petitioner	482.89	498.92	515.50	532.55	550.27
Allowed after true-up in this order	482.89	498.92	515.50	532.55	550.27



The O&M Expenses allowed in the instant order are at variance with the O&M Expenses allowed vide order dated 25.2.2016 due to the fact that Petitioner, in Petition No. 10/TT/2015, had inadvertently claimed the O&M rates of conventional bays instead of GIS bays. Since, the assets in the instant petition are GIS type, as confirmed by the Commission from LOAs and work orders, the same are allowed accordingly.

**Interest on Working Capital (IWC)**

35. The IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and allowed as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Interest on Working Capital</b>					
O&M Expenses	40.24	41.58	42.96	44.38	45.86
Maintenance Spares	72.43	74.84	77.32	79.88	82.54
Receivables	707.17	694.95	681.21	668.90	657.38
Total Working Capital	819.85	811.37	801.50	793.17	785.77
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest of working capital</b>	<b>110.68</b>	<b>109.53</b>	<b>108.20</b>	<b>107.08</b>	<b>106.08</b>

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 25.2.2016	113.61	113.54	112.16	110.81	109.50
Claimed by the Petitioner	111.52	110.30	108.88	107.69	106.62
Allowed after true-up in this order	110.68	109.53	108.20	107.08	106.08

The IWC has decreased on account of decrease in receivables due to decrease in RoE and Depreciation on account of lower additional capital expenditure and variation in ROE on account of applicable MAT rate during the 2009-14 tariff period.



## **APPROVED ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD**

36. The trued up annual fixed charges for the instant transmission assets for the tariff period 2014-19 are summarised below:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1100.00	1101.43	1102.14	1102.14	1102.14
Interest on Loan	1142.38	1044.29	945.13	849.90	754.80
Return on Equity	1407.10	1415.51	1416.31	1421.75	1430.96
Interest on Working Capital	110.68	109.53	108.20	107.08	106.08
O & M Expenses	482.89	498.92	515.50	532.55	550.27
<b>Total</b>	<b>4243.04</b>	<b>4169.70</b>	<b>4087.28</b>	<b>4013.43</b>	<b>3944.25</b>

## **DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD**

37. The Petitioner has claimed the following transmission charges for 2019-24 tariff period:-

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1125.94	1121.07	1132.52	1132.52	390.50
Interest on Loan	654.62	580.27	491.87	389.21	320.03
Return on Equity	1374.29	1398.73	1410.95	1410.95	1410.95
Interest on Working Capital	66.71	66.72	66.44	65.63	54.01
O&M Expenses	442.19	457.87	473.82	490.64	507.20
<b>Total</b>	<b>3663.75</b>	<b>3624.66</b>	<b>3575.60</b>	<b>3488.95</b>	<b>2682.69</b>

The tariff for 2019-24 period is allowed as discussed in the subsequent paragraphs.

### **Capital Cost**

38. Regulation 19 of 2019 Tariff Regulations provides as under:-

*“19 (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.*

*(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) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) Expenditure on account of change in law and force majeure events; and*
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*





*(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

*(4) The capital cost in case of existing or new hydro generating station shall also include:*

*(a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*

*(b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*

*(5) The following shall be excluded from the capital cost of the existing and new projects:*

*(a) The assets forming part of the project, but not in use, as declared in the tariff petition;*

*(b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*

*Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be decapitalised only after its redeployment;*

*Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.*

*(c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*

*(d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*

*(e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."*

39. The Petitioner has revised the capital cost computations pursuant to APTEL's judgment in Appeal No. 74 of 2017 and has claimed capital cost of ₹24173.46 lakh as on 31.3.2019 for Combined Asset vide Auditor Certificate dated 2.8.2019. Capital cost of ₹24142.09 lakh as on 31.3.2019 for Combined Asset has been worked out by the Commission and the same has been considered as opening capital cost as on



1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

### **Additional Capital Expenditure**

40. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as under:-

*“24. Additional Capitalisation within the original scope and upto the cut-off date*

*(1) The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

- (a) Undischarged liabilities recognized to be payable at a future date;*
- (b) Works deferred for execution;*
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) Change in law or compliance of any existing law; and*
- (f) Force Majeure events:*

*Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.*

*(2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.*

*25. Additional Capitalisation within the original scope and after the cut-off date:*

*(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:*

- a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- b) Change in law or compliance of any existing law;*
- c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- d) Liability for works executed prior to the cut-off date;*
- e) Force Majeure events;*
- f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and*
- g) Raising of ash dyke as a part of ash disposal system.*



(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;

(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;

(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission.

41. The Petitioner vide affidavit dated 18.11.2019 has claimed additional capital expenditure of ₹867.5 lakh for 2019-24 for Combined Asset under Regulation 25(1)(d) of the 2019 Tariff Regulations. The Petitioner has claimed additional capital expenditure on account of undischarged liability towards final payment for works executed within cut-off date as follows:

Asset	Apportioned Approved Capital Cost as per RCE-II	Capital Cost as on 1.4.2019	Additional Capital Expenditure for		Total Capital Cost as on 31.3.2024
			2019-20	2020-21	
Asset 1	11373	11151.6	95.41	95.41	11342.42
Asset 2	7836	7229.21	169.17	169.17	7567.55
Asset 3	6388	5792.65	169.17	169.17	6130.99
<b>Total</b>	<b>25597</b>	<b>24173.46</b>	<b>433.75</b>	<b>433.75</b>	<b>25040.96</b>

42. The Petitioner has claimed the additional capital expenditure as undischarged liabilities for works executed within the cut-off date for Assets 1, 2, and 3 under Regulation 25(1)(d) of the 2019 Tariff Regulations. The additional capital expenditure claimed is balance undischarged liability out of the additional capital expenditure approved for the 2014-19 period. The total capital expenditure as on 31.3.2024 is within the apportioned approved capital cost of ₹25597 lakh. Therefore, additional



capital expenditure claimed by the Petitioner is allowed and considered for the purpose of determination of transmission tariff for 2019-24 period.

43. The capital cost considered as on 31.3.2024 is as follows:

(₹ in lakh)

Asset	Capital cost as on 1.4.2019	Additional Capital Expenditure for		Total cost as on 31.3.2024
		2019-20	2020-21	
Combined Asset	24142.09	433.75	433.75	25009.59

**Debt-Equity ratio**

44. Regulation 18 of the 2019 Tariff Regulations provides as under:-

*“18. Debt-Equity Ratio: (1) For new projects, the debt:equity ratio of 70:30 as on date of commercial operation shall be considered. 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.*

*(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.*

*(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:*

*Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;*



Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 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.”

45. The details of the debt and equity considered for the purpose of tariff for 2019-24 tariff period is as follows:-

(₹ in lakh)						
Particulars	Capital cost as on 1.4.2019 (₹ in lakh)	%	Additional Capital Expenditure for 2019-24 (₹ in lakh)	%	Capital cost as on 31.3.2024 (₹ in lakh)	%
Debt	16899.46	70.00	607.25	70.00	17506.71	70.00
Equity	7242.63	30.00	260.25	30.00	7502.88	30.00
<b>Total</b>	<b>24142.09</b>	<b>100.00</b>	<b>867.50</b>	<b>100.00</b>	<b>25009.59</b>	<b>100.00</b>

### **Return on Equity (ROE)**

46. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as under:-

“30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of 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 return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;



*Provided further that:*

*i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;*

*ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;*

*iii. in case of a thermal generating station, with effect from 1.4.2020:*

*a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*

*b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:*

*Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.*

*31. Tax on Return on Equity: (1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.*

*(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.*

*(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including*



*interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”*

47. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The ROE allowed for the Combined Asset is as follows:-

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	7242.63	7372.75	7502.88	7502.88	7502.88
Additions	130.13	130.13	0.00	0.00	0.00
Closing Equity	7372.75	7502.88	7502.88	7502.88	7502.88
Average Equity	7307.69	7437.81	7502.88	7502.88	7502.88
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity</b>	<b>1372.49</b>	<b>1396.93</b>	<b>1409.15</b>	<b>1409.15</b>	<b>1409.15</b>

### **Interest on Loan (“IoL”)**

48. Regulation 32 of the 2019 Tariff Regulations provides as under:-

*“32. Interest on loan capital: (1) The loans arrived at in the manner indicated in regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*

*(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.*

*(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.*

*(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall*



*be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*

*(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.*

*(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.”*

49. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, the IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. The details of weighted average rate of interest for 2019-24 tariff period are placed in Annexure-2 and the IoL allowed for the Combined Asset is as follows:-

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	16899.46	17203.09	17506.71	17506.71	17506.71
Cumulative Repayments upto Previous Year	9111.43	10256.47	11424.40	12603.79	13783.18
Net Loan-Opening	7788.03	6946.62	6082.31	4902.92	3723.53
Additions	303.63	303.63	0.00	0.00	0.00
Repayment during the year	1145.04	1167.94	1179.39	1179.39	389.10
Net Loan-Closing	6946.62	6082.31	4902.92	3723.53	3334.43
Average Loan	7367.33	6514.47	5492.62	4313.23	3528.98
Weighted Average Rate of	9.0499	9.0475	9.0441	9.0387	9.0287





Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Interest on Loan (%)					
<b>Interest on Loan</b>	<b>666.73</b>	<b>589.40</b>	<b>496.76</b>	<b>389.86</b>	<b>318.62</b>

### **Depreciation**

50. Regulation 33 of the 2019 Tariff Regulations provides as under:-

*"33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element there of including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:*

*Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.*

*(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 a 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.*

*(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:*

*Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;*

*Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:*

*Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:*

*Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as*



*the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.*

*(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.*

*(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I 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 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.*

*(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.*

*(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services.”*

51. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 percent depreciable. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation worked out for the Combined Asset is as follows:-

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Depreciation</b>					
Opening Gross Block	24142.09	24575.84	25009.59	25009.59	25009.59
Additional Capitalisation	433.75	433.75	0.00	0.00	0.00



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Depreciation</b>					
Closing Gross Block	24575.84	25009.59	25009.59	25009.59	25009.59
Average Gross Block	24358.97	24792.72	25009.59	25009.59	25009.59
Average Gross Block (90% depreciable assets)	24035.49	24469.24	24686.11	24686.11	24686.11
Average Gross Block (100% depreciable assets)	323.48	323.48	323.48	323.48	323.48
Freehold Land	2813.57	2813.57	2813.57	2813.57	2813.57
Rate of Depreciation (%)	4.70%	4.71%	4.72%	4.72%	spreading
Balance useful life of the asset	20	19	18	17	16
Elapsed life	8	9	10	11	12
Depreciable Value (excluding IT equipment and software) – 90%	19099.72	19490.10	19685.29	19685.29	19685.29
Depreciable value of IT equipment and software – 100%	323.48	323.48	323.48	323.48	323.48
Depreciation during the year	1145.04	1167.94	1179.39	1179.39	389.10
Cumulative Depreciation upto PY	9111.43	10256.47	11424.40	12603.79	13783.18
Total Cumulative Depreciation	10256.47	11424.40	12603.79	13783.18	14172.28
Remaining Depreciable Value Other Assets	8980.55	8218.22	7249.28	6085.14	5836.49
Remaining Depreciable Value IT Assets	186.19	170.95	155.70	140.44	Included above
Remaining Depreciable Value Total	9166.74	8389.18	7404.97	6225.59	5836.49

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

52. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as under:

*“35 (3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:*

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282



<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
132 kV and below	0.245	0.254	0.263	0.272	0.282
<b>Norms for AC and HVDC lines (₹ Lakh per km)</b>					
Single Circuit (Bundled Conductor with six or more	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple	1.544	1.598	1.654	1.713	1.773
<b>Norms for HVDC stations</b>					
HVDC Back-to-Back stations (Rs Lakh per 500	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole	2,563	2,653	2,746	2,842	2,942

*Provided that the O&M expenses for the GIS bays shall be allowed as worked out by multiplying 0.70 of the O&M expenses of the normative O&M expenses for bays;*

*Provided further that:*

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*



- iv. the O&M expenses of  $\pm 800$  kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of  $\pm 800$  kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

*Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.*

(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”

53. The total O&M Expenses for the instant assets claimed by the Petitioner are as follows:-

<b>O&amp;M Expenses</b>					
<b>400 kV GIS</b>					
No. of bays	4	4	4	4	4
Norms (₹ lakh/Bay)	22.505	23.296	24.115	24.962	25.837
<b>220 kV GIS</b>					
No. of bays	6	6	6	6	6
Norms (₹ lakh/Bay)	15.757	16.31	16.884	17.472	18.088
<b>Transformers</b>					
<b>400 kV</b>					
MVA	630	630	630	630	630
Norms (₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411
<b>Transmission line</b>					
D/C Twin/Triple Conductor (kms)	33.192	33.192	33.192	33.192	33.192



<b>O&amp;M Expenses</b>					
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
PLCC					
Original Capital Cost	140.34	140.34	140.34	140.34	140.34
Norms (₹ lakh)	2% on Original Capital Cost				
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>442.19</b>	<b>457.87</b>	<b>473.82</b>	<b>490.64</b>	<b>507.20</b>

The O&M Expenses claimed by the Petitioner slightly vary from the norms specified in the 2019 Tariff Regulations and hence, they are allowed as follows:

(₹ in lakh)

<b>O&amp;M Expenses</b>					
400 kV GIS					
No. of bays	4	4	4	4	4
Norms (₹ lakh/Bay)	22.505	23.296	24.115	24.962	25.837
220 kV GIS					
No. of bays	6	6	6	6	6
Norms (₹ lakh/Bay)	15.757	16.31	16.884	17.472	18.088
<b>Transformers</b>					
400 kV					
MVA	630	630	630	630	630
Norms (₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411
<b>Transmission line</b>					
D/C Twin/Triple Conductor (kms)	33.192	33.192	33.192	33.192	33.192
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
PLCC					
Original Capital Cost	140.34	140.34	140.34	140.34	140.34
Norms (₹ lakh)	2% on Original Capital Cost				
<b>Total O&amp;M expense (₹ in lakh)</b>	<b>442.15</b>	<b>457.85</b>	<b>473.82</b>	<b>490.66</b>	<b>507.17</b>

### **Interest on Working Capital (“IWC”)**

54. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations provide as under:

*“34. Interest on Working Capital*

*(1) ...*

*(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:*

*i. Receivables equivalent to 45 days of fixed cost;*



- ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- iii. Operation and maintenance expenses, including security expenses for one month”

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

*Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.*

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.”

“3. Definitions ...

(7) ‘Bank Rate’ means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

55. The Petitioner has submitted that it has computed interest on working capital for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of interest on working capital as 12.05%. The interest on working capital is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of interest on working capital considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points). The components of the working capital and interest thereon allowed is as follows:-

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	36.85	38.15	39.49	40.89	42.26
Maintenance Spares	66.32	68.68	71.07	73.60	76.08
Receivables	454.13	453.66	447.08	435.87	329.26
Total Working Capital	557.30	560.49	557.64	550.35	447.60
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>67.15</b>	<b>67.54</b>	<b>67.20</b>	<b>66.32</b>	<b>53.94</b>



## **ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD**

56. The transmission charges allowed for the instant transmission assets for the 2019-24 period are summarised below:-

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1145.04	1167.94	1179.39	1179.39	389.10
Interest on Loan	666.73	589.40	496.76	389.86	318.62
Return on Equity	1372.49	1396.93	1409.15	1409.15	1409.15
Interest on Working Capital	67.15	67.54	67.20	66.32	53.94
O & M Expenses	442.15	457.85	473.82	490.66	507.17
<b>Total</b>	<b>3693.57</b>	<b>3679.66</b>	<b>3626.32</b>	<b>3535.37</b>	<b>2677.98</b>

### **Filing Fee and the Publication Expenses**

57. BRPL has submitted that though the Commission can allow filing fee and publication expenses at its discretion under Regulation 70(1) of the 2019 Tariff Regulations, but the exercise of such discretion is a judicial discretion in the adjudication of tariff for which no justification has been filed by the Petitioner. BRPL also referred to the Commission's order dated 11.9.2008 in Petition No. 129 of 2005 where it declined the claim of Central Power Sector undertakings for allowing the reimbursement of the application filing fee. The Petitioner, in response has submitted that it has requested for reimbursement of expenditure by the beneficiaries towards petition filing fee and publication expense, in terms of Regulation 70(1) of the 2019 Tariff Regulations. Further, the Petitioner also referred to the Commission's order dated 28.3.2016 in Petition No. 137/TT/2015 where it allowed the recovery of petition filing fee and expenditure for publication of notices from beneficiaries on pro-rata basis.

58. We have considered the submissions of the BRPL and the Petitioner. 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 70(1) of the 2019 Tariff Regulations.

### **Licence Fee & RLDC Fees and Charges**

59. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 2019-24 period. The Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for 2019-24 period.

### **Goods and Services Tax**

60. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on Charges of Transmission of Electricity, the same shall be borne and additionally paid by the respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further, additional taxes, if any, are to be paid by the Petitioner on account of demand from Govt. / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

61. BRPL has submitted that the demand of the Petitioner is premature and need not be considered at this juncture. In response, the Petitioner submitted that currently transmission of electricity by an electric transmission utility is exempt from GST. Hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately.



62. We have considered the submissions of the Petitioner and BRPL. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature.

### **Security Expenses**

63. The Petitioner has submitted that security expenses for the instant assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential Interest on Working Capital. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

64. BRPL has submitted that the approach adopted by the Petitioner towards claim of security expenses does not warrant the need for interest on working capital as the same is claimed in advance. The Petitioner, in response has submitted that the expenses are not claimed in the instant petition and shall be claimed separately in a separate petition along with other assets.

65. We have considered the submissions of the Petitioner and BRPL. Any application filed by the Petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2019 Tariff Regulations.



### **Capital Spares**

66. The Petitioner has sought reimbursement of capital spares at the end of tariff block. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

### **Sharing of Transmission Charges**

67. 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 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

68. This order disposes of Petition No. 19/TT/2020

sd/-

**(I. S. Jha)**  
**Member**

sd/-

**(P. K. Pujari)**  
**Chairperson**



**ANNEXURE-1****DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2014-19****(₹ in lakh)**

S. No.	Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Repayment	Total
1	BOND XXVIII - 1.DOCO	9.33%	1235.00	0.00	514.58	1235.00
2	BOND XXVIII - 10.DOCO DRAWL ON 01	9.33%	850.00	0.00	354.17	850.00
3	BOND XXVIII - 19.DOCO DRAWL ON 01-	9.33%	715.00	0.00	297.92	715.00
4	BOND XXIX - 11.DOCO DRAWL ON 01-	9.20%	1515.00	0.00	631.25	1515.00
5	BOND XXIX -2.DOCO	9.20%	2894.00	0.00	1205.83	2894.00
6	BOND XXIX - 20.DOCO DRAWL ON 01-	9.20%	869.00	0.00	362.08	869.00
7	BOND XXX -12.DOCO DRAWL ON 01-	8.80%	580.00	0.00	241.67	580.00
8	BOND XXX -22.DOCO	8.80%	261.18	0.00	108.83	261.18
9	BOND XXX -3.DOCO	8.80%	1812.00	0.00	755.00	1812.00
10	BOND XXXI - 13.DOCO	8.90%	897.00	0.00	373.75	897.00
11	BOND XXXI - 24.DOCO	8.90%	898.93	0.00	374.55	898.93
12	BOND XXXI -7.DOCO	8.90%	1361.33	0.00	567.22	1361.33
13	BOND XXXIII - 21.DOCO DRAWL ON 01	8.64%	205.00	0.00	85.42	205.00
14	BOND XXXIII - 9.ADDCAP FOR 2010-20	8.64%	116.15	0.00	48.40	116.15
15	BOND-XXXIV - 14.ADDCAP FOR 20102	8.84%	165.87	0.00	69.11	165.87
16	BOND-XXXIV - 25.DOCO	8.84%	587.47	0.00	244.78	587.47
17	BOND-XXXIV - 8.ADDCAP FOR 2010-20	8.84%	80.53	0.00	33.55	80.53
18	BOND-XXXV - 15.ADDCAP FOR 2011-2	9.64%	54.00	0.00	18.00	54.00
19	BOND XXXVI - 16.ADDCAP FOR	9.35%	190.00	0.00	38.00	190.00



S. No.	Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Repayment	Total
	2011-2					
20	BOND XXXVIII - 17.ADDCAP FOR 2011-2	9.25%	696.60	0.00	0.00	696.60
21	BOND XXXV01- 18.ADDCAP FOR 2012-2	9.25%	50.85	0.00	0.00	50.85
22	BOND XXXVIII - 23.ADDCAP FOR 2012-2	9.25%	50.85	0.00	0.00	50.85
23	BOND XXXVIII - 26.ADDCAP FOR 2011-2	9.25%	406.38	0.00	0.00	406.38
24	BOND XXXVIII - 4.ADDCAP FOR 2011-20	9.25%	220.55	0.00	0.00	220.55
25	BOND XXXVIII - 5.ADDCAP FOR 2012-20	9.25%	14.67	0.00	0.00	14.67
26	BOND XXXVIII - 6.ADDCAP FOR 2013-20	9.25%	27.31	0.00	0.00	27.31
27	SBI (2014-15) -ADD CAP 2014-15	10.25%	0.00	19.01	0.00	19.01
28	BOND 58 -ADD CAP 2015-16	7.89%	0.00	18.87	0.00	18.87
29	BOND 59 -ADD CAP 2017-18	7.30%	0.00	128.85	0.00	128.85
	<b>TOTAL</b>		<b>16754.67</b>	<b>166.73</b>	<b>6324.11</b>	<b>16921.40</b>

**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	16754.67	16773.68	16792.55	16792.55	16921.40
Cumulative repayments of loans up to previous year	1830.53	3084.15	4342.27	5613.06	6883.85
Net loans opening	14924.14	13689.53	12450.28	11179.49	10037.55
Add: drawl(s) during the year	19.01	18.87	0.00	128.85	0.00
Less: repayment(s) of loan during the year	1253.62	1258.12	1270.79	1270.79	1270.79
Net closing loan	13689.53	12450.28	11179.49	10037.55	8766.76
Average net loan	14306.83	13069.90	11814.88	10608.52	9402.16
<b>Rate of interest on loan</b>	<b>9.0746%</b>	<b>9.0754%</b>	<b>9.0751%</b>	<b>9.0639%</b>	<b>9.0513%</b>



<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Interest on loan	1298.29	1186.14	1072.21	961.54	851.02



**ANNEXURE-2****DETAILS OF LOAN PORTFOLIO FOR 2019-24****(₹ in lakh)**

<b>S. No.</b>	<b>Particulars</b>	<b>Interest Rate (%)</b>	<b>Loan deployed as on 1.4.2019</b>	<b>Additions during the tariff period</b>	<b>Repayment</b>	<b>Total</b>
1	BOND XXVIII - 1.DOCO	9.33%	1235.00	0.00	514.58	1235.00
2	BOND XXVIII - 10.DOCO DRAWL ON 01	9.33%	850.00	0.00	354.17	850.00
3	BOND XXVIII - 19.DOCO DRAWL ON 01-	9.33%	715.00	0.00	297.92	715.00
4	BOND XXIX - 11.DOCO DRAWL ON 01-	9.20%	1515.00	0.00	631.25	1515.00
5	BOND XXIX -2.DOCO	9.20%	2894.00	0.00	1205.83	2894.00
6	BOND XXIX - 20.DOCO DRAWL ON 01-	9.20%	869.00	0.00	362.08	869.00
7	BOND XXX -12.DOCO DRAWL ON 01-	8.80%	580.00	0.00	241.67	580.00
8	BOND XXX -22.DOCO	8.80%	261.18	0.00	108.83	261.18
9	BOND XXX -3.DOCO	8.80%	1812.00	0.00	755.00	1812.00
10	BOND XXXI - 13.DOCO	8.90%	897.00	0.00	373.75	897.00
11	BOND XXXI - 24.DOCO	8.90%	898.93	0.00	374.55	898.93
12	BOND XXXI -7.DOCO	8.90%	1361.33	0.00	567.22	1361.33
13	BOND XXXIII - 21.DOCO DRAWL ON 01	8.64%	205.00	0.00	85.42	205.00
14	BOND XXXIII - 9.ADDCAP FOR 2010-20	8.64%	116.15	0.00	48.40	116.15
15	BOND-XXXIV - 14.ADDCAP FOR 20102	8.84%	165.87	0.00	69.11	165.87
16	BOND-XXXIV - 25.DOCO	8.84%	587.47	0.00	244.78	587.47
17	BOND-XXXIV - 8.ADDCAP FOR 2010-20	8.84%	80.53	0.00	33.55	80.53
18	BOND-XXXV - 15.ADDCAP FOR 2011-2	9.64%	54.00	0.00	22.50	54.00
19	BOND XXXVI - 16.ADDCAP FOR	9.35%	190.00	0.00	63.33	190.00



S. No.	Particulars	Interest Rate (%)	Loan deployed as on 1.4.2019	Additions during the tariff period	Repayment	Total
	2011-2					
20	BOND XXXVIII - 17.ADDCAP FOR 2011-2	9.25%	696.60	0.00	0.00	696.60
21	BOND XXXV01- 18.ADDCAP FOR 2012-2	9.25%	50.85	0.00	0.00	50.85
22	BOND XXXVIII - 23.ADDCAP FOR 2012-2	9.25%	50.85	0.00	0.00	50.85
23	BOND XXXVIII - 26.ADDCAP FOR 2011-2	9.25%	406.38	0.00	0.00	406.38
24	BOND XXXVIII - 4.ADDCAP FOR 2011-20	9.25%	220.55	0.00	0.00	220.55
25	BOND XXXVIII - 5.ADDCAP FOR 2012-20	9.25%	14.67	0.00	0.00	14.67
26	BOND XXXVIII - 6.ADDCAP FOR 2013-20	9.25%	27.31	0.00	0.00	27.31
27	SBI (2014-15) -ADD CAP 2014-15	8.25%	19.01	0.00	9.51	19.01
28	BOND 58 -ADD CAP 2015-16	7.89%	18.87	0.00	0.00	18.87
29	BOND 59 -ADD CAP 2017-18	7.30%	128.85	0.00	0.00	128.85
	<b>TOTAL</b>		<b>16921.40</b>	<b>0.00</b>	<b>6363.45</b>	<b>16921.40</b>

**WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2019-24 TARIFF PERIOD**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross opening loan	16921.40	16921.40	16921.40	16921.40	16921.40
Cumulative repayments of loans up to previous year	8154.64	9427.33	10700.02	11972.71	13245.40
Net loans opening	8766.76	7494.07	6221.38	4948.69	3676.00
Add: drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: repayment(s) of loan during the year	1272.69	1272.69	1272.69	1272.69	1272.69
Net closing loan	7494.07	6221.38	4948.69	3676.00	2403.32
Average net loan	8130.42	6857.73	5585.04	4312.35	3039.66
<b>Rate of interest on loan</b>	<b>9.0499%</b>	<b>9.0475%</b>	<b>9.0441%</b>	<b>9.0387%</b>	<b>9.0287%</b>
Interest on loan	735.79	620.45	505.12	389.78	274.44

