

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 647/TT/2020**

**Coram:**

**Shri I.S. Jha, Member  
Shri Arun Goyal, Member  
Shri P. K. Singh, Member**

**Date of Order: 29.07.2022**

**In the matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 **Asset-I:** 400 kV D/C Manesar-Neemrana line along with associated bays, **Asset-II:** 500 MVA, 400/220 kV ICT-1 at Neemrana, **Asset-III:** 315 MVA, 400/220 kV ICT-2 at Neemrana, **Asset-IV:** 400 kV D/C Bhiwadi – Neemrana transmission line along with associated bays, **Asset-V:** 80 MVAR Bus Reactor at Neemrana Sub-station, **Asset-VI:** LILO of 400 kV S/C Bhiwadi-Bassi transmission line at Kotputli Sub-station, **Asset-VII:** 315 MVA 400/220 kV ICT-I & II with 02 number of 220 kV line bays at Kotputli Sub-station, **Asset-VIII:** 04 number of 220 kV line bays at Kotputli and **Asset-IX:** 80 MVAR Bus Reactor at Kotputli Sub-station under “Northern Region System Strengthening Scheme-XV” in Northern Region.

**And in the matter of:**

Power Grid Corporation of India Limited,  
“Saudamini”, Plot No. 2,  
Sector 29, Gurgaon-122001, Haryana.

**....Petitioner**

**Vs.**

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,  
Vidyut Bhawan, Vidyut Marg,  
Jaipur – 302 005.
2. Ajmer Vidyut Vitran Nigam Limited,  
132 kV, GSS RVPNL Sub-station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur – 302 017 (Rajasthan).



3. Jaipur Vidyut Vitran Nigam Limited,  
132 kV, GSS RVPNL Sub-station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur – 302 017 (Rajasthan).
4. Jodhpur Vidyut Vitran Nigam Limited,  
132 KV, GSS RVPNL Sub-station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur – 302 017(Rajasthan).
5. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan, Kumar House Complex Building II,  
Shimla – 171 004 (Himachal Pradesh).
6. Punjab State Electricity Board,  
Thermal Shed Tia, Near 22 Phatak,  
Patiala – 147 001 (Punjab).
7. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector-6,  
Panchkula – 134 109 (Haryana).
8. Power Development Department,  
Government of Jammu & Kashmir,  
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Limited,  
(Formerly Uttar Pradesh State Electricity Board),  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow – 226 001 (Uttar Pradesh).
10. Delhi Transco Limited,  
Shakti Sadan, Kotla Road,  
New Delhi – 110 002.
11. BSES Yamuna Power Limited,  
B-Block, Shakti Kiran, Building (Near Karkadooma Court),  
Karkadooma 2<sup>nd</sup> Floor,  
New Delhi – 110 092.
12. BSES Rajdhani Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi – 110 019.
13. Tata Power Delhi Distribution Limited,  
NDPL house, Hudson Lines Kingsway Camp,  
Delhi – 110 009.
14. Chandigarh Administration,  
Sector-9, Chandigarh.



15. Uttarakhand Power Corporation Limited,  
Urja Bhawan, Kanwali Road,  
Dehradun (Uttarakhand).
16. North Central Railway,  
Allahabad (Uttar Pradesh).
17. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi – 110 002.

...Respondents

**For Petitioner** : Shri S.S. Raju, PGCIL  
Ms. Anshul Garg, PGCIL  
Shri Ved Prakash Rastogi, PGCIL  
Shri D.K. Biswal, PGCIL

**For Respondents** : Shri R.B. Sharma, Advocate, BRPL  
Shri Sachin Dubey, Advocate, BYPL/BRPL

### **ORDER**

The Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for truing-up of transmission tariff for 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as the “the 2014 Tariff Regulations”) and tariff determination for 2019-24 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following assets under “North Region System Strengthening Scheme-XV ” in Northern Region (hereinafter referred to as the “the transmission project”):

**Asset-I:** 400 kV D/C Manesar-Neemrana Transmission Line along with associated bays;



- Asset-II:** 500 MVA, 400/220 kV ICT-1 at Neemrana;
- Asset-III:** 315 MVA, 400/220 kV ICT-2 at Neemrana;
- Asset-IV:** 400 kV D/C Bhiwadi-Neemrana Transmission Line along with associated bays;
- Asset-V:** 80 MVAR Bus Reactor at Neemrana Sub-station;
- Asset-VI:** LILO of 400 kV S/C Bhiwadi-Bassi Transmission Line at Kotputli Sub-station;
- Asset-VII:** 315 MVA 400/220 kV ICT-I & II with 02 number of 220 kV line bays at Kotputli Sub-station;
- Asset-VIII:** 04 Number of 220 kV line bays at Kotputli; and
- Asset-IX:** 80 MVAR Bus Reactor at Kotputli Sub-station

With reference to Asset-I, Asset-II, Asset-III (Combined Asset-A), Asset-IV, Asset-V (Combined Asset-B), Asset-VI (C-1), Asset-VII (C-2), Asset-VIII (C-3) and Asset-IX, term 'transmission assets' has been used wherever they are jointly referred in 2014-19 tariff period. During 2019-24 period, all the transmission assets have been combined except for Asset-C3 and combined tariff has accordingly been allowed for them except for Asset-C3. Hence, in 2019-24 tariff period expression 'Combined Asset' has been used for the transmission assets except subject Asset-C3, for which separate tariff has been allowed.

2. The Petitioner has made the following prayers in this petition:

*"1) Approve the actual Additional Capitalisation expenditure incurred during 2014-19 tariff block, Projected add cap during 2019-24 tariff block and allowable initial spares claimed project wise as per para nos 9.1, 9.2.3 and 11.4 respectively.*

*2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition as per para 10.1 & 11.5.*

*3) 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 Hon'ble Commission as provided in Tariff Regulations, 2014 and Tariff Regulations, 2019.*

*4) 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.*

*5) 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.*

*6) 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.*

*7) Allow the Petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as prayed at para no 11.12.*

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

*9) 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 Hon'ble 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) Investment Approval (IA) in respect of the transmission project was accorded by the Board of Directors of the Petitioner in its 218<sup>th</sup> meeting held on 11.2.2009 vide letter No. C/CP/NRSS-XV and conveyed vide dated 20.2.2009 for ₹52048.00 lakh including IDC of ₹3445.00 lakh (based on 4<sup>th</sup> Quarter, 2008 price level). Subsequently, the Revised



Cost Estimate (RCE) was accorded by the Board of Directors of the Petitioner in its 326<sup>th</sup> meeting held on 9.3.2016 vide letter no. C/CP/RCE-NRSS-15 dated 11.3.2016 for ₹47077.00 lakh, including IDC of ₹3794.00 lakh (based on December, 2015 price level).

b) The scope of work covered under the transmission project is as follows:

**Transmission Line:**

- (i) Manesar- Neemrana 400 kV D/C line-90 km
- (ii) Bhiwadi- Neemrana 400 kV D/C line-60 km
- (iii) LILO of Bhiwadi-Bassi (Jaipur) 400 kV S/C line at new 400/220 kV Kotputli Sub-station- 15 km

**Sub-stations:**

- (i) New 2x315 MVA, 400/ 220 kV Neemrana Sub-station;
- (ii) New 2x315 MVA, 400/ 220 kV Kotputli Sub-station;
- (iii) Extension of 400/ 220 kV Bhiwadi Sub-station;
- (iv) Extension of 400/ 220 kV Manesar Gas Insulated Sub-station;
- (v) Extension of 400/ 220 kV Bassi (Jaipur) Sub-station;

**Reactive Compensation:**

Particulars	Approximate line length	Line reactor from bus	Line reactor to bus
1. LILO of Bhiwadi- Bassi (Jaipur) 400 kV S/C line at new 400/ 220 kV Kotputli Sub-station			
- Bhiwadi-Kotputli section	70	Nil	Nil
- Kotputli-Jaipur section	160	Nil	50 MVAR existing line reactor to be made switchable
2. 80 MVAR Bus Reactor at Kotputli			
3. 80 MVAR Bus Reactor at Neemrana			



- c) Complete scope of work as per IA is covered in the instant petition. Details of the date of commercial operation (COD) of transmission assets covered in the instant petition are as follows:

<b>Assets</b>	<b>Description</b>	<b>COD</b>
Asset-I	400 kV D/C Manesar-Neemrana line along with associated bays	1.6.2012
Asset-II	500 MVA, 400/220 kV ICT-1 at Neemrana	1.4.2012
Asset III	315 MVA, 400/220 kV ICT-2 at Neemrana	1.1.2012
Asset IV	400 kV D/C Bhiwadi-Neemrana transmission line along with associated bays	1.1.2012
Asset V	80 MVAR Bus Reactor at Neemrana Sub-station	1.4.2012
Asset VI	LILO of 400 kV S/C Bhiwadi-Bassi transmission line at Kotputli Sub-station	1.4.2014
Asset VII	315 MVA 400/220 kV ICT-I&II with 02 number of 220 kV line bays at Kotputli Sub-station.	1.4.2014
Asset VIII	04 number of 220 kV line bays at Kotputli	10.9.2014*
Asset-IX	80 MVAR Bus Reactor at Kotputli Sub-station	10.9.2014

\* COD approved under Regulation 4(3)(ii) of the 2014 Tariff Regulations.

- d) The Petitioner vide order dated 21.3.2016 in Petition No. 294/TT/2015 was allowed combined tariff for 2014-19 period in respect of Asset-I, Asset-II and Asset-III and combined tariff in respect of Asset-IV and Asset-V vide order dated 25.2.2016 in Petition No. 063/TT/2015 for 2014-19 period. The Commission vide order dated 29.4.2016 in Petition No. 100/TT/2014 has determined transmission tariff in respect of Asset-VI, Asset-VII and Asset- VIII. Further, the Commission vide order dated 30.3.2016 in Petition No. 477/TT/2014 has determined transmission tariff in respect of Asset-IX.
- e) The details of previous orders wherein tariff of the transmission assets was determined and their nomenclature in the instant petition is as follows:



Assets	Description	Assets' Nomenclature in instant Petition	Previous Orders
Asset-I	400 kV D/C Manesar-Neemrana line along with associated bays	Combined Asset-A	Combined during determination of transmission charges for 2014-19 period vide order dated 21.3.2016 in Petition No. 294/TT/2015
Asset-II	500 MVA, 400/220 kV ICT-1 at Neemrana		
Asset III	315 MVA, 400/220 kV ICT-2 at Neemrana		
Asset IV	400 kV D/C Bhiwadi-Neemrana transmission line along with associated bays	Combined Asset-B	Combined during determination of transmission charges for 2014-19 period vide order dated 25.2.2016 in Petition No. 063/TT/2015
Asset V	80 MVAR Bus Reactor at Neemrana Sub-station		
Asset VI	LILO of 400 kV S/C Bhiwadi-Bassi transmission line at Kotputli Sub-station	Asset-C1	Order dated 29.4.2016 in Petition No. 100/TT/2014
Asset VII	315 MVA 400/220 kV ICT-I & II with 02 Number of 220 kV line bays at Kotputli Sub-station.	Asset-C2	
Asset VIII	04 number of 220 kV line bays at Kotputli	Asset-C3	
Asset-IX	80 MVAR Bus Reactor at Kotputli Sub-station	Asset-D	Order dated 30.3.2016 in Petition No. 477/TT/2014

- f) As per IA dated 11.2.2009, transmission assets were scheduled to be put into commercial operation within 33 months from the date of the IA. Details of scheduled date of commercial operation (SCOD), date of commercial operation (COD) of the transmission assets along with time over-run are as follows:

Nomenclature of Assets in Current Petition	Particulars	SCOD	COD	Time over-run
Combined Asset-A	Asset-I	1.12.2011	1.6.2012	6 months
	Asset-II	1.12.2011	1.4.2012	4 months
	Asset-III	1.12.2011	1.12.2012	1 month
Combined Asset-B	Asset-IV	1.12.2011	1.1.2012	1 month
	Asset-V	1.12.2011	1.4.2012	4 months
Asset-C1	Asset-VI	1.12.2011	1.4.2014	28 months





Asset-C2	Asset-VII	1.12.2011	1.4.2014	28 months
Asset-C3	Asset-VIII	1.12.2011	10.9.2014	33 months and 21 days
Asset-D	Asset-IX	19.11.2011	10.9.2014	33 months and 21 days

4. The Respondents are distribution licensees, power departments and transmission licensees, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Northern Region.

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. BSES Rajdhani Private Limited (BRPL) i.e. Respondent No. 12 has filed its reply vide affidavit dated 19.4.2021 and has raised issues such as truing up of tariff during 2009-14 period, grossing up of RoE as per 2009 Tariff Regulations, Revised Cost Estimates (RCE), statutory COD, accrued IDC, additional capitalization during 2014-19, tax on transmission business, Indian Accounting Standards, Deferred Tax Liability and over payment of income tax, annual truing up during 2019-24 period, security expenses, capital spares, GST and filing fees etc. In response, the Petitioner has filed rejoinder dated 3.5.2021.

6. BRPL has raised the issues of Indian Accounting Standards, tax on transmission business, deferred tax liability and over-payment of income tax etc. The Commission vide its order dated 11.2.2021 in Petition No. 24/TT/2020 and vide order dated 17.5.2021 in Petition No. 8/TT/2020 has deliberated upon these issues raised by BRPL and therefore we not going into these issues



again in the present petition. However, the issues which are specific to the instant petition and have not been dealt by us earlier are considered in the relevant paragraphs of this order taking into consideration the submissions of BRPL and the Petitioner.

7. BRPL has submitted that truing up of tariff for 2009-14 period and determination of transmission tariff for 2014-19 period vide order dated 21.3.2016 in Petition No. 294/TT/2015 for Combined Asset-I, Asset-II and Asset-III (Combined Asset-A in the instant petition) and vide order dated 25.2.2016 in Petition No. 063/TT/2015 for Combined Asset-IV and Asset-V (Combined Asset-B in the instant petition) is not in accordance with Regulation 6(1) of the 2009 Tariff Regulations. Referring to Regulation 15(3) of the 2009 Tariff Regulations, BRPL has submitted that actual tax rate applicable to the transmission company was to be trued-up and if the tariff recovered from the beneficiaries exceeded the approved tariff, then the difference was liable to be refunded to the said beneficiaries. It is further submitted that transmission licensees have been allowed huge tax benefits under the Income Tax Act, 1961 ("1961 Act") in the form of Tax Holiday for enterprises engaged in infrastructure development etc. as per Section 80 IA of the 1961 Act as well as other benefits like the higher depreciation allowed in initial years. It is also submitted that the claim for grossing up can be allowed only if the Petitioner can submit documents indicating payment of tax on its transmission business. BRPL has submitted that order dated 21.3.2016 in Petition No. 294/TT/2015 and order dated 25.2.2016 in Petition No.063/TT/2015 may be revisited in view of the above submissions.



8. In response, the Petitioner has refuted the submissions of BRPL. The Petitioner has submitted that it is paying tax as per provisions of the Income Tax Act, 1961 and considering deduction permissible under the extended provision including depreciation as per Annexure-I of Income Tax Rules 1962 and Tax Holiday benefit under Section 80 IA. The Petitioner has further submitted that after deducting depreciation and tax holiday benefit under normal provision, income tax for the respective year is calculated along with surcharge and cess. In case, tax computed under normal provision is less than the tax calculated on book profit at the percentage prescribed under Section 115JB (Minimum Alternate Tax), then the Company has to pay tax computed as per the provisions of section 115JB of the Income Tax Act, 1961. The Petitioner has submitted that tax computed under normal provision is less than the tax calculated under the provisions of Section 115 JB (MAT provisions), the Petitioner is paying MAT. The Petitioner has also submitted that in the absence of higher depreciation and tax holiday benefit under Section 80 IA, the Petitioner could have paid higher tax. The Petitioner has submitted that higher depreciation as prescribed under Appendix-I read with Rule 5 of Income Tax Rule, 1962 and tax holiday under Section 80 IA are not applicable while paying minimum alternate tax (MAT). The Petitioner has submitted that it is paying tax at MAT rates as per Section 115JB of the Income Tax Act, 1961 for assessment year for 2009-10 to 2018-19. The Petitioner has further submitted that it is furnishing the desired information timely and there is no over recovery of income tax by the Petitioner in any of the financial years and as such the claim of the respondent for refund of excess claims is not tenable. The



Petitioner has submitted that tried up orders issued by the Commission in Petition No. 294/TT/2015 and Petition No. 63/TT/2015 are as per the prevailing Tariff Regulations norms and issues have already been settled. The Petitioner has submitted that BRPL should have challenged the said orders and the BRPL is adopting delaying tactics to adjudicate the present petition.

9. We have considered the submissions of the Petitioner and BRPL and have also gone through the record. BRPL has submitted that the order dated 21.3.2016 in Petition No. 294/TT/2015 in case of Combined Asset-I, Asset-II and Asset-III (Combined Asset-A in the instant petition) and order dated 25.2.2016 in Petition No. 063/TT/2015 in case of Combined Asset-IV and Asset-V (Combined Asset-B in the instant petition) are not in accordance with Regulation 6(1) of the 2009 Tariff Regulations and therefore requested to revisit the said orders. The issue of payment of income tax by the Petitioner raised by BRPL have already been dealt by the Commission in the said orders. If BRPL was aggrieved with order dated 21.3.2016 in Petition No. 294/TT/2015 and order dated 25.2.2016 in Petition No. 63/TT/2015, it had the option to file a review or an Appeal. Since BRPL has failed to file a review or an Appeal, therefore, it cannot raise this issue now as the said orders have attained finality.

10. BRPL has submitted that the Commission recognizes the need and permits any association/forum or other bodies corporate or any group of consumers to participate in any proceedings before the Commission in accordance with Regulation-18 of the Central Electricity Regulatory



Commission (Conduct of Business) Regulations, 1999. BRPL has submitted that one of such agencies may be asked to represent the interest of consumers in the present petition as representation and participation in the proceedings is integral part of hearing in the instant petition in terms of Section 94(3) of the Electricity Act, 2003.

11. The Petitioner vide affidavit dated 8.5.2020 has published notice of the tariff petition in newspapers on 4.2.2020 as per Regulation 3(6) and Regulation 3(8) of the Central Electricity Regulatory Commission (Procedure for Making of Application for Determination of Tariff, Publication of Application and Other Related Matters) Regulations, 2004. The Petitioner has also uploaded the petition on its website. No suggestions/objections with regard to present tariff petition were received by the Commission before listing of the present petition for hearing. Therefore, we are of the view that there is no need in the present case to engage any agency to represent the consumers' interest. Even otherwise, the Commission while determining tariff applies prudence check in all tariff petitions and keeps in mind the interests of consumers.

12. Hearing in this matter was held on 11.2.2022 through video conference and order was reserved.

13. Having heard the representatives of the Petitioner and BRPL and having perused the materials on record, we proceed to dispose of the petition.

14. This order is issued considering the submissions made by the Petitioner in the petition vide affidavits dated 23.1.2020 and 13.4.2021 and 25.2.2022,



BRPL's reply filed vide affidavit dated 19.4.2021 and the Petitioner's rejoinder dated 3.5.2021.

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

15. BRPL has submitted that Asset-VIII (Asset-C3 in instant Petition) has not achieved actual COD. However, COD of the same was approved by the Commission under proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations due to non-execution of downstream system. Hence, the asset cannot be put to use due to non-completion of downstream system. BRPL has submitted that in 'cost-plus' mechanism of tariff determination, the capital cost of an asset which is not in use is to be excluded. BRPL has further submitted that Regulation 9(6)(a) of the 2014 Tariff Regulations prohibits inclusion of an asset which is not in use into the capital cost of the project. Therefore, inclusion of tariff of an asset which is not in use amounts to unreasonable tariff.

16. In response, the Petitioner has submitted that under proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations, the Petitioner can approach the Commission in case it is prevented from regular service due to delay in commissioning of the concerned generating station or in execution of the upstream or downstream transmission system. Once the transmission licensee has completed the scope of work, it is entitled to receive the transmission tariff of completed scope. Further, the Petitioner has submitted that the Commission approved COD of Asset-VIII in Petition No. 100/TT/2014 after considering the submissions made by the Petitioner and has directed the concerned Discom to bear the transmission charges till the execution of the downstream system.



Accordingly, the issue of execution of the transmission asset has already been settled by the Commission.

17. We have considered the submissions of the Petitioner and BRPL. The Commission has already approved the COD of Asset-VIII (Asset C-3 in instant petition) under proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations and held that the transmission charges for the same shall be borne by the concerned Discom till the execution of the downstream system. Relevant portion of the order dated 29.4.2016 100/TT/2014 is as follows:

*“13. In view of the above we are approving the COD of the Asset A & B (i) as 1.4.2014 and Asset B (ii) as 10.9.2014 under the Regulation 4 (3(ii)) of the 2014 Tariff Regulations. However, as regards the recovery of the transmission charges is concerned, the transmission charges is to be recovered from the concerned State Discoms in accordance with the transmission service agreements as set forth in forthcoming paragraph of this order.”*

18. In view of above discussions, we are of the opinion that that the Petitioner has already completed its scope of work and it cannot be prevented from approaching the Commission seeking declaration of COD due to delay in execution of downstream system which is in the scope of a beneficiary. We are further of the view that contentions of BRPL are misplaced insofar as it contends that transmission charges in respect of Asset-VIII will be placed under PoC mechanism. It is pertinent to mention here that the Commission vide order dated 29.4.2016 in Petition No. 100/TT/2014 directed the concerned Discom to bear the transmission charges till the actual execution of the transmission assets and the charges were not placed under PoC mechanism. Out of these 4 number of bays, 2 number of line bays under Rajasthan have achieved COD on 13.1.2018. Therefore, proportionate transmission charges



have now been covered under PoC since 13.1.2018 and 2 number of bays have not yet come up, therefore, the same shall be billed bilaterally to Rajasthan as per this order. Hence, the contentions of BRPL are rejected.

19. The details of the transmission charges claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

<b>Combined Asset-A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	924.16	932.89	936.47	939.07	941.16
Interest on Loan	1085.46	1013.80	933.75	852.12	769.82
Return on Equity	1186.44	1202.31	1205.90	1209.05	1214.82
O & M Expenses	729.36	753.58	778.61	804.41	831.13
Interest on Working Capital	113.86	114.11	113.82	113.50	113.26
<b>Total</b>	<b>4039.28</b>	<b>4016.69</b>	<b>3968.55</b>	<b>3918.15</b>	<b>3870.19</b>

(₹ in lakh)

<b>Combined Asset-B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	466.33	475.15	478.71	481.51	483.84
Interest on Loan	485.29	453.69	414.72	374.32	333.44
Return on Equity	555.03	567.46	571.16	574.29	578.46
Interest on Working Capital	53.23	53.61	53.51	53.38	53.26
O & M Expenses	335.74	346.90	358.41	370.32	382.58
<b>Total</b>	<b>1895.62</b>	<b>1896.81</b>	<b>1876.51</b>	<b>1853.82</b>	<b>1831.58</b>

(₹ in lakh)

<b>Asset-C1</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	99.51	121.67	131.36	144.49	152.66
Interest on Loan	124.58	141.74	144.80	149.87	144.91
Return on Equity	119.42	144.89	158.69	176.35	186.02
Interest on Working Capital	14.91	16.63	17.49	18.56	19.11
O & M Expenses	126.77	130.98	135.33	139.82	144.45
<b>Total</b>	<b>485.19</b>	<b>555.91</b>	<b>587.67</b>	<b>629.09</b>	<b>647.15</b>

(₹ in lakh)

<b>Asset-C2</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	262.05	288.07	299.34	307.82	313.13





Interest on Loan	332.51	340.14	327.12	308.93	286.61
Return on Equity	319.54	350.89	364.87	375.96	383.19
Interest on Working Capital	37.03	39.06	39.89	40.48	40.85
O & M Expenses	289.44	299.04	308.98	319.22	329.82
<b>Total</b>	<b>1240.57</b>	<b>1317.20</b>	<b>1340.20</b>	<b>1352.41</b>	<b>1353.60</b>

(₹ in lakh)

Asset-C3					
Particulars	2014-15 Pro-rata for 203 days	2015-16	2016-17	2017-18	2018-19
Depreciation	14.94	33.68	38.79	42.99	44.56
Interest on Loan	19.19	40.54	44.12	45.96	43.62
Return on Equity	17.20	38.98	46.25	52.52	54.49
Interest on Working Capital	6.37	12.24	12.93	13.54	13.91
O & M Expenses	93.90	174.44	180.24	186.20	192.40
<b>Total</b>	<b>151.60</b>	<b>299.88</b>	<b>322.33</b>	<b>341.21</b>	<b>348.98</b>

(₹ in lakh)

Asset-D					
Particulars	2014-15 Pro-rata for 203 days	2015-16	2016-17	2017-18	2018-19
Depreciation	27.16	55.22	57.95	59.74	61.19
Interest on Loan	36.51	68.01	64.40	58.15	53.58
Return on Equity	31.92	64.78	67.80	69.81	71.62
Interest on Working Capital	4.05	7.77	7.93	7.99	8.09
O & M Expenses	33.54	62.30	64.37	66.51	68.71
<b>Total</b>	<b>133.18</b>	<b>258.08</b>	<b>262.45</b>	<b>262.20</b>	<b>263.19</b>

20. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

Combined Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	60.78	62.80	64.88	67.03	69.26
O&M Expenses	109.40	113.04	116.79	120.66	124.67
Receivables	673.21	669.45	661.43	653.03	645.03
Total	843.39	845.29	843.10	840.72	838.96
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Total</b>	<b>113.86</b>	<b>114.11</b>	<b>113.82</b>	<b>113.50</b>	<b>113.26</b>



(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	27.98	28.91	29.87	30.86	31.88
O&M Expenses	50.36	52.04	53.76	55.55	57.39
Receivables	315.94	316.14	312.75	308.97	305.26
Total	394.28	397.09	396.38	395.38	394.53
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Total</b>	<b>53.23</b>	<b>53.61</b>	<b>53.51</b>	<b>53.38</b>	<b>53.26</b>

(₹ in lakh)

Asset- C1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	10.56	10.92	11.28	11.65	12.04
O&M Expenses	19.02	19.65	20.30	20.97	21.67
Receivables	80.87	92.65	97.94	104.85	107.86
Total	110.45	123.22	129.52	137.47	141.57
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Total</b>	<b>14.91</b>	<b>16.63</b>	<b>17.49</b>	<b>18.56</b>	<b>19.11</b>

(₹ in lakh)

Asset-C2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	24.12	24.92	25.75	26.60	27.49
O&M Expenses	43.42	44.86	46.35	47.88	49.47
Receivables	206.76	219.53	223.37	225.40	225.60
Total	274.30	289.31	295.47	299.88	302.56
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Total</b>	<b>37.03</b>	<b>39.06</b>	<b>39.89</b>	<b>40.48</b>	<b>40.85</b>

(₹ in lakh)

Asset-C3					
Particulars	2014-15 Pro-rata for 203 days	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	14.07	14.54	15.02	15.52	16.03
O&M Expenses	25.33	26.17	27.04	27.93	28.86
Receivables	45.43	49.98	53.72	56.87	58.16
Total	84.83	90.69	95.78	100.32	103.05
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Total</b>	<b>6.37</b>	<b>12.24</b>	<b>12.93</b>	<b>13.54</b>	<b>13.91</b>



(₹ in lakh)

Asset-D					
Particulars	2014-15 Pro-rata for 203 days	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	5.03	5.19	5.36	5.54	5.73
O&M Expenses	9.05	9.35	9.66	9.98	10.31
Receivables	39.91	43.01	43.74	43.70	43.87
Total	53.99	57.55	58.76	59.22	59.91
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Total</b>	4.05	7.77	7.93	7.99	8.09

### Effective Date of Commercial Operation (E-COD)

21. The Petitioner has claimed E-COD of Combined Asset-A as 1.5.2012 and Combined Asset-B as 1.1.2012. Based on the trued-up admitted capital and actual COD of the transmission assets, E-COD has been worked out as follows:

### Combined Asset-A

Computation of E-COD					
Assets	Actual COD	Admitted Capital Cost as on 31.3.2014	Weight of the cost (in %)	No. of days from last COD	Weighted days
Asset-I	01-06-2012	10538.45	52.84	0.00	0.00
Asset-II	01-04-2012	4924.86	24.69	61.00	15.06
Asset-III	01-01-2012	4482.42	22.47	152.00	34.16
Total		19945.73			
<b>Effective COD- 12.4.2012</b>					

### Combined Asset-B

Computation of E-COD					
Assets	Actual COD	Admitted Capital Cost as on 31.3.2014	Weight of the cost (%)	No. of days from last COD	Weighted days
Asset-IV	01-01-2012	8133.16	87.72	91.00	79.82
Asset-V	01-04-2012	1138.78	12.28	0.00	0.00



Total		9271.94	100.00		
<b>Effective COD- 12.1.2012</b>					

22. E-COD is used to determine the lapsed life of Combined Asset-A and Combined Asset-B which works out to be as one (1) year and two (2) year as on 1.4.2014 (i.e. the number of completed years as on 1.4.2014 from E-COD).

**Weighted Average Life (“WAL”)**

23. The life as defined in Regulation 27 of the 2014 Tariff Regulations has been considered for determination of WAL. The Combined Assets may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different span of life. Therefore, the concept of WAL has been used as the useful life of the project as a whole.

24. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2014 and their respective life as stipulated in the 2014 Tariff Regulations. The element-wise life as defined in the 2009 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2014 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Assets has been worked out as 29 years for the Combined Asset-A and 32 years for the Combined Asset-B and the same is as follows:

**Combined Asset-A**

Particulars	Admitted Capital Cost as on 31.3.2014 (₹ in lakh) (a)	Life as per 2014 Tariff Regulation (Year) (b)	Weight c= (a) x (b)	Weighted Average Life of Asset (in years) (d)=(c)/(a)
<b>Building</b>	532.18	25	13304.5	29.16 years, rounded to 29 years
<b>Transmission Line</b>	7599.82	35	265993.7	



<b>Sub-station</b>	8728.80	25	218207	
<b>PLCC</b>	133.31	15	1999.65	
<b>IT Equipment and Software</b>	169.29	6	1015.74	
<b>Total</b>	17162.88		500520.59	

### **Combined Asset-B**

<b>Particulars</b>	<b>Admitted Capital Cost as on 31.3.2014 (₹ in lakh) (a)</b>	<b>Life as per 2014 Tariff Regulation (Year) (b)</b>	<b>Weight c= (a) x (b)</b>	<b>Weighted Average Life of Asset (in years) (d)= (c)/ (a)</b>
<b>Building</b>	206.44	25	5161.12	31.68 years, rounded off to 32 years
<b>Transmission Line</b>	6037.10	35	211298.42	
<b>Sub-station</b>	2098.66	25	52466.58	
<b>PLCC</b>	156.72	15	2350.83	
<b>IT Equipment and Software</b>	78.80	6	472.80	
<b>Total</b>	8577.73		271749.74	

25. WAL as on 1.4.2014 as determined above is applicable prospectively (i.e. for 2014-19 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed above in the relevant paras, E-COD of the Combined Asset-A is 12.4.2012 and E-COD of the Combined Asset-B is 12.1.2012. The lapsed life of the Combined Asset-A works out as one (1) year as on 1.4.2014 (i.e. the number of completed years as on 1.4.2014 from Effective COD) and Combined Asset-B, works out as two (2) years as on 1.4.2014 (i.e. the number of completed years as on 1.4.2014 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2014 to be 28 years in Combined Asset-A and 30 years in Combined Asset-B.



## Capital Cost

26. Capital cost approved by the Commission vide orders dated 21.3.2016 in Petition No. 294/TT/2015, vide order dated 25.2.2016 in Petition No. 063/TT/2015, vide order dated 29.4.2016 in Petition No. 100/TT/2014 and vide order dated order dated 30.3.2016 in Petition No. 477/TT/2014 is as follows:

(₹ in lakh)

Particulars	Capital Cost (as on COD or 31.3.2014 whichever is later)	ACE (Allowed)	Total Capital Cost (as on 31.3.2019)
Combined Asset-A	19945.73	716.12	20661.85
Combined Asset-B	9271.94	243.87	9515.81
Asset-C1	1806.88	1371.36	3178.24
Asset-C2	5008.69	1763.45	6772.14
Asset- C3	422.50	537.45	959.95
Asset-D	878.85	342.81	1221.66

27. The Petitioner vide Auditor's Certificate dated 5.8.2019 for Asset-II, Asset-III, Asset-IV, Asset-VIII and Auditor's Certificate dated 4.12.2019 for Asset-I, Asset-V, Asset-VI, Asset-VII and Asset-IX has submitted capital cost up to COD along with Additional Capital Expenditure (ACE) upto 31.3.2019. The details of the apportioned approved capital cost as per RCE, capital cost as on COD or 31.3.2014 whichever later and ACE incurred upto 31.3.2019 as claimed by the Petitioner in the instant true up petition in respect of the transmission assets are as follows:

(₹ in lakh)

Assets' Nomenclature in current petition	Particulars	Appor-tioned approved cost as per RCE	Capital Cost up to COD or as on 31.3.2014 whichever is later	ACE					Capital Cost (as on 31.3.2019 )
				2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-A	Asset-I	12554.78	10603.37	34.82	8.55	8.22	5.75	5.57	10666.28
	Asset-II	5415.25	4924.86	153.43	37.89	40.39	16.53	28.88	5201.98
	Asset III	5215.25	4482.42	94.23	23.52	23.60	12.14	16.17	4652.08
Combined Asset-B	Asset-IV	9053.62	8133.16	50.82	10.27	9.14	18.07	7.17	8228.63
	Asset-V	1704.29	1158.78	219.78	53.33	62.29	16.32	47.16	1557.66



Assets' Nomenclature in current petition	Particulars	Appor-tioned approved cost as per RCE	Capital Cost up to COD or as on 31.3.2014 whichever is later	ACE					Capital Cost (as on 31.3.2019 )
				2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-C1	Asset- VI	3215.77	1813.83	582.23	109.75	357.00	240.47	69.97	3173.25
Asset-C2	Asset- VII	7543.10	5008.69	837.49	173.12	305.73	69.58	140.30	6534.91
Asset-C3	Asset-VII	1028.60	422.50	212.43	51.81	191.24	20.82	41.16	939.96
Asset-D	Asset- IX	1345.97	878.85	191.70	49.59	53.80	14.05	40.74	1228.73
<b>Total</b>		<b>47076.63</b>	<b>37426.46</b>	<b>2376.93</b>	<b>517.83</b>	<b>1051.41</b>	<b>413.73</b>	<b>397.12</b>	<b>42183.48</b>

28. The Petitioner has claimed total capital cost of ₹42183.48 lakh in respect of the transmission assets as on 31.3.2019.

### **Cost Over-run**

29. BRPL has submitted that the Petitioner has enclosed Revised Cost Estimates (RCE) revising the original cost estimates. Perusal of RCE would show that it is merely an indication of revision of cost of various assets without furnishing any justification for increase in cost approved. It may further be stated that even the power delegated to the Board of Directors of the Petitioner, by the Department of Public Enterprise (DPE), Ministry of Heavy Industries and Public Enterprises, Government of India through its OM No. 26(3)/2005-GM-GL-92 dated 1.5.2008 and OM No. DPE/11(2)/97-Fin dated 22.7.1997 or anybody subordinate to it, cannot exercise the power of revision without indicating reasons and justification of time and cost over-run. Any exercise, if made without justifiable reasons would be arbitrary in nature and the Petitioner cannot claim tariff on the basis of such arbitrary exercise of power. BRPL has submitted that cost over-run in respect of the transmission assets of the transmission project which were not allowed, may be rejected by the Commission in the instant case. BRPL has further submitted that RCE has been provided by the Petitioner without explaining the need for such RCE.



30. In response, the Petitioner has submitted that Revised Cost Estimate (RCE) along with proper justification of cost over-run was submitted during proceedings in earlier petitions and same had been decided by the Commission. The Petitioner has further submitted that RCE has been provided in the instant petition just to demonstrate that transmission assets are within RCE apportioned cost and that there is no cost over-run. The Petitioner has further submitted that the Competent Authority to approve RCE is the Board of Directors of the Petitioner as per the powers delegated to by the Department of Public Enterprise (DPE), Ministry of Heavy Industries and Public Enterprises, Government of India through its OM No. 26(3)/2005-GM-GL-92 dated 1.5.2008 and OM No. DPE/11(2)/97-Fin dated 22.7.1997.

31. We have considered the submissions of the Petitioner and BRPL. It is found that the Petitioner has not claimed any deviation from RCE and cost over-run from earlier petition. It is pertinent to mention here that the issues with reference to cost over-run have already been addressed in the earlier orders pertaining to the transmission assets. Thus, no fresh finding is required to be given with reference to cost over-run.

32. The capital cost claimed by the Petitioner including ACE in respect of the transmission assets is ₹ 42183.48 lakh which is within the approved apportioned capital cost of ₹47076.63 lakh.





### **Time Over-run**

33. As per IA dated 11.2.2009, transmission assets were scheduled to be put into commercial operation within 33 months from the date of IA. Details of COD of the transmission assets along with time over-run are as follows:

<b>Nomenclature of assets in current petition</b>	<b>Particulars</b>	<b>SCOD</b>	<b>COD</b>	<b>Time over-run</b>
Combined Asset-A	Asset-I	1.12.2011	1.6.2012	6 months
	Asset-II		1.4.2012	4 months
	Asset-III		1.12.2012	1 month
Combined Asset-B	Asset-IV		1.1.2012	1 month
	Asset-V		1.4.2012	4 months
Asset-C1	Asset-VI		1.4.2014	28 months
Asset-C2	Asset-VII		1.4.2014	28 months
Asset-C3	Asset-VIII	19.11.2011	10.9.2014	33 months and 21 days
Asset-D	Asset-IX	19.11.2011	10.9.2014	33 months and 21 days

34. The Commission has already condoned time over run in respect of Asset-I, Asset-II and Asset-III (Combined Asset-A in the instant petition) of 6 months, 4 months and 1 month, respectively vide order dated 21.3.2016 in Petition No. 294/TT/2015. The Commission has also condoned time over-run of 1 month in case of Asset-IV (part of Combined Asset-B) vide order dated 26.6.2013 in Petition No. 182/TT/2011. However, the Commission did not condone time over-run of 4 months in case of Asset-V (part of Combined Asset-B) vide order dated 9.5.2013 in Petition No. 203/TT/2012. The Commission vide order dated 29.4.2016 in Petition No. 100/TT/2014 has condoned time over run of 28 months in case of Asset-C1 and Asset-C2. The Commission vide order dated 30.3.2016 in Petition No. 477/TT/2014 has condoned delay of 21 months out of entire time over-run in case of Asset-D.



35. Time over- run in case of Asset-C3 is dealt in the instant order in the following paragraphs.

36. The Commission vide order dated 29.4.2016 in Petition No. 100/TT/2014 did not deal with the issue of time over-run in case of Asset-C3. The Petitioner has submitted reasons for delay in case of Asset-C3 vide affidavit dated 25.2.2022 and the same are as follows:

i. **Land acquisition: July, 2009 to November, 2011 (29 months)**

The Petitioner has submitted that delay of 33 months in execution is mainly due to delay in land acquisition process for Kotputli Sub-station. As per L2 network, the land for Kotputli Sub-station was to be handed over by the Petitioner to the contractor by December, 2009. However, in actual land was handed over to the Petitioner in November, 2011. It is submitted that the Petitioner started process in June, 2009, immediately after Investment Approval. However, land-owners were not ready to hand over land to the Petitioner and matter was taken up in Hon'ble High Court where no settlement could be arrived at till November, 2011. The Petitioner approached Government of Rajasthan for intervention and after discussions and persistent follow-up, alternate land was identified and finally physical possession of land was handed over in December, 2011.

ii. **Approval for cutting of tree falling under approach road to Kotputli Sub-station (November, 2011 to December, 2012) (12 months):**

Even though sub-station land was allotted and physical possession of land was handed over in December, 2012, there was subsequent delay in



granting permission for building of approach road by District Administration and ultimately measurement was done in July, 2012 and further delay was due to approval for cutting of trees falling under the approach road corridor. Accordingly, approach road issue took a considerable time (another 12 months).

iii. The Petitioner has further submitted that as per L2 network, land was to be handed over to contractor by December, 2009, while actual work could only be started by December, 2009.

iv. The Petitioner has submitted chronology of events with respect to delay and the same is as follows:

Description of Activity/Works/ Service	Original Schedule (As per Planning)		Actual Achieved (As per Actual)		Time over-run	Agency responsible
	Start Date	Completion Date	Start Date	Completion Date	Months	
Investment Approval	20.2.2009	20.2.2009	20.2.2009	20.2.2009	33	<i>Delay is mainly due to delay in acquisition of land at Kotputli Sub-station, RoW issues created by land-owners and subsequent delay in getting NOC for tree cutting from the approving authorities.</i>
NOA	20.4.2009	20.8.2009	20.4.2009	30.11.2009		
Land acquisition	20.2.2009	31.12.2009	June, 2009	17.11.2011		
Approach Road and Tree cutting approval	NA	NA	November, 2011	December 2012		
Civil Work	1.1.2010	30.9.2011	22.2.2012	31.1.2014		
Supplies	15.3.2010	20.9.2011	7.12.2012	27.2.2014		
Erection	15.4.2010	20.10.2011	6.3.2013	22.3.2014		
Testing & Commissioning	21.10.2011	20.11.2011	12.3.2014	10.9.2014		

37. We have considered the submissions of the Petitioner. The Commission vide order dated 29.4.2016 in Petition No.100/TT/2014 has already considered



time over-run at Kotputli Sub-station and relevant extracts of the said order are as follows:

*“24. It is observed that the overall delay in the completion of works is of 28 months (total time between SCOD and COD). Based on the reasons explained above it is evident that the delay in execution of the project is beyond the control of the petitioner. Moreover, in view of the documentation and correspondence submitted by the petitioner it is evident that the petitioner has made best efforts to expedite the land acquisition process for the site and the approach road. Thus, we condone the overall time overrun.”*

38. Accordingly, delay till 1.4.2014 i.e. delay of 28 months on account of land acquisition had already been condoned in case of Asset-C3 vide order dated 29.4.2016 in Petition No. 100/TT/2014., The Petitioner has executed 4 number of 220 kV line bays at Kotputli on 10.4.2019. It is observed that the Petitioner has not submitted any specific reasons from COD of Kotputli Sub-station to COD of 4 number of 220 kV line bays at Kotputli on 10.9.2014. Therefore, time over-run from 1.4.2014 to 10.9.2014 is not condoned. Out of the total delay of 33 months and 21 days, delay of 28 months is condoned.

#### **Interest During Construction (“IDC”)**

39. The Petitioner has claimed IDC in respect of the transmission assets and has submitted Auditor’s Certificates in support of the same. The Petitioner has submitted computation of IDC along with year-wise details of the IDC discharged.

40. The allowable IDC has been worked out considering the information submitted by the Petitioner for individual assets separately on cash basis. The loan details submitted in Form-9C for 2014-19 tariff period and IDC computation sheet have been considered for the purpose of IDC calculation on



cash basis and on accrued basis. The undischarged IDC as on COD has been considered as ACE during the year in which it has been discharged.

41. Accordingly, based on the information filed by the Petitioner, IDC considered in respect of the transmission assets is as follows:

(₹ in lakh)

Particulars	IDC claimed by the Petitioner (As per Auditor's Certificate)	Entitled IDC up to COD	IDC disallowed as on SCOD due to time over-run/ computation difference	Undischarged portion of entitled IDC as on SCOD	IDC allowed on cash basis as on SCOD
	A	B	C=A-B	D	E=B-D
Asset-C1	439.06	344.60	94.46	55.75	288.85
Asset- C2	789.22	789.22	0.00	127.63	661.59
Asset-C3	48.75	40.78	7.97	0.00	40.78
Asset-D	79.43	44.25	35.18	0.00	44.25

### **Incidental Expenditure During Construction ("IEDC")**

42. The Petitioner has claimed IEDC in respect of the transmission assets and submitted Auditor's Certificate in support of the same. IEDC is allowed subject to adjustment as per condonation of time over run. The details of claimed and allowed IEDC in respect of the transmission assets are as follows:

(₹ in lakh)

Particulars	IEDC claimed as per Auditor Certificate	IEDC disallowed due to time over-run	IEDC allowed as on COD
	1	2	3 = (1-2)
Asset- C1	122.11	0.00	122.11
Asset- C2	235.95	0.00	235.95
Asset- C3	20.29	1.63	18.66
Asset- D	30.39	22.75	7.64

### **Initial Spares**

43. The Petitioner has submitted that the Commission has restricted the initial spares in case of Asset-I based on the individual capital cost in order dated



21.3.2016 in Petition No. 294/TT/2015, deducted ₹6.96 lakh of initial spares in case of Asset-VI in order dated 29.4.2016 in Petition No. 100/TT/2014 and disallowed ₹3.12 lakh in case of Asset-IX in order dated 30.3.2016 in Petition No. 474/TT/2014. The Petitioner has submitted that the initial spares was allowed earlier under Regulation 8 of the 2009 Tariff Regulations for the transmission assets put into commercial operation during the 2009-14 tariff period. The Petitioner has further submitted that the initial spares for the 2009-14 tariff period may be allowed based on the total project cost as per the directions of APTEL vide judgment dated 14.9.2019 in Appeal No. 74 of 2017. The Petitioner has re-calculated Initial Spares on the basis of the total capital cost of the assets which have been put into commercial operation during 2009-14 tariff block. The Initial Spares claimed by the Petitioner for the assets put into commercial operation in 2009-14 tariff block are as follows:

Assets	Asset Detail	Capital Cost under S/s head	Spares Claimed under S/s head	Spare Limit under S/s head	Spares already Allowed in previous orders	Allowable Spares on Project cost basis	Balance Spares reclaimed
Asset-I	400 kV D/C Manesar-Neemrana Line along with associated bays	3063.61	139.22	2.50%	74.30	423.88	64.92
Asset-II	500 MVA 400/220 kV ICT-1 at Neemrana	5331.98	33.94	2.50%	33.94		0.00
Asset-III	315 MVA 400/220kV ICT-2 at Neemrana	4652.09	45.74	2.50%	45.74		0.00
Asset-IV	400 kV D/C Bhiwadi-Neemrana transmission line along with associated bays	2141.84	30.43	2.50%	30.43		0.00
Asset-V	80 MVAR Bus Reactor Bay at Neemrana Sub Sub-station	1607.66	16.55	2.50%	16.55		0.00
	<b>Total</b>	<b>16797.18</b>	<b>265.88</b>	<b>2.50%</b>	<b>200.96</b>	<b>423.88</b>	<b>64.92</b>

44. Similarly, the Petitioner has claimed the Initial for Assets-VI to IX put into commercial operation in 2014-19 tariff period on the basis of the APTEL's judgement. The Petitioner has reclaimed Initial Spares of ₹6.96 lakh in Asset-



VI and ₹3.12 lakh in Asset-IX which have been deducted by Commission in order dated 29.4.2016 in Petition No. 100/TT/2014 and order dated 30.3.2016 in Petition No. 477/TT/2014 respectively.

45. We have considered the submissions of the Petitioner. As per APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017, Initial Spares are to be allowed initially as percentage of the capital cost of the individual transmission assets and later at the time of truing up on the basis of the total project cost. In the instant case, the Initial Spares are allowed for the transmission assets put into commercial operation in 2009-14 and 2014-19 tariff period taking into consideration their individual capital cost based on the norms specified in the 2009 and 2014 Tariff Regulations respectively. The Initial Spares already allowed for the instant transmission assets has to be revised on the basis of the total project cost, which is possible when all the transmission assets are put into commercial operation and the total project cost is arrived at. The transmission project has been completed during 2014-19 tariff period. However, the total project cost has not been arrived at as tariff for Asset-C3 is computed separately based on its individual capital cost, as its tariff has to be recovered bilaterally from the beneficiary Discoms. The overall project cost of the transmission project in the instant case shall be known when Asset-C3 is also combined with all the other assets. Accordingly, Initial Spares are allowed based on the individual capital cost of the transmission asset and Initial Spares shall be allowed on the basis of the total project cost as per the directions of APTEL in judgement dated 14.9.2019 in Appeal No. 74 of 2017 when capital cost of Asset-C3 is combined with other assets of the transmission project and



total project is arrived at. The Petitioner is at liberty claim to Initial Spares as per the APTEL judgement dated 14.9.2019 in Appeal No. 74 of 2017 when all the transmission assets are combined and the total project cost is arrived at.

46. Therefore, the Initial Spares earlier allowed for the transmission assets put into commercial operation in 2009-14 tariff period vide orders dated 21.3.2016 and 25.2.2016 in Petition No. 294/TT/2015 and Petition No. 063/TT/2015 is considered in the instant order. The details of the Initial Spares allowed in respect of the transmission assets which have been put into commercial operation during 2014-19 tariff block, namely, Asset-C1, Asset-C2, Asset-C3 and Asset-D for 2014-19 tariff period are as follows:

**Sub-station**

(₹ in lakh)

Particulars	Plant & Machinery cost up to cut-off date (excluding IDC and IEDC as per Auditor's certificate) (A)	Initial Spares claimed (B)	Ceiling limit (in %) (C)	Allowable Initial Spares worked out	Excess Initial Spares	Initial Spares allowed
				$D = [(A-B) * C / (100-C)]$		
Asset- C1	993.90	42.98	4.00	39.62	3.36	39.62
Asset- C2	4314.83	150.36	4.00	173.52	0.00	150.36
Asset-C3	614.45	0.00	4.00	25.60	0.00	0.00
Asset- D	916.61	3.12	4.00	38.06	0.00	3.12

**Transmission Line**

(₹ in lakh)

Particulars	Plant & Machinery cost up to cut-off date (excluding IDC and IEDC as per Auditor's certificate) (A)	Initial Spares claimed (B)	Ceiling limit (in %) (C)	Allowable Initial Spares worked out	Excess Initial Spares	Initial Spares allowed
				$D = [(A-B) * C / (100-C)]$		
Asset- C1	769.19	11.19	1.00	7.66	3.53	7.66

**Capital cost as on COD**

47. Accordingly, capital cost allowed in respect of the transmission assets as on COD is as follows:





(₹ in lakh)

Particulars	Capital cost as on 1.4.2014 or COD whichever is later as per Auditor's Certificate	Less: IDC as on COD due to		Less: IEDC disallowed as on COD	Excess Initial Spares	Capital cost considered as on 1.4.2014 COD whichever is later
		Time over-run/ Computation difference	Un-discharged			
Combined Asset-A	19945.73	0.00	0.00	0.00	0.00	19945.73
Combined Asset-B	9271.94	0.00	0.00	0.00	0.00	9271.94
Asset-C1	1813.83	94.46	55.75	0.00	6.89	1656.72
Asset-C2	5136.32	0.00	127.63	0.00	0.00	5008.69
Asset-C3	422.50	7.97	0.00	1.63	0.00	412.90
Asset-D	926.12	35.18	0.00	22.75	0.00	868.19

48. In Asset-V (Part of Combined Asset-B), the Petitioner has added liquidated damages (LD) of ₹20.00 lakh recovered from the contractor/supplier to the capital cost as on 1.4.2014. The Petitioner made similar claim in Petition No.63/TT/2015 and the same was rejected by the Commission vide order dated 25.2.2016. The relevant portion of the order dated 25.2.2016 in Petition No.63/TT/2015 is extracted hereunder. Accordingly, the Petitioner's claim for adding the LD of ₹20.00 lakh to the capital cost of Asset-V is not allowed as it has already been rejected by the Commission in order dated 25.2.2016.

*"18. We have considered the submissions of the petitioner w.r.t Asset-1. In Petition No.203/TT/2012, the petitioner claimed capital cost of ₹1066.53 lakh as on COD. As discussed above, IDC and IEDC amounting to ₹31.28 lakh was disallowed due to time over-run of 4 months. Thus, capital cost of ₹ 1035.25 lakh was approved vide order dated 9.5.2013 in Petition No.203/TT/2012. In the instant petition, the petitioner has claimed capital cost of ₹1055.25 lakh (by deducting ₹31.28 lakh of disallowed IDC and IEDC and including ₹20.00 lakh of LD recovered from the contractors) as on COD. The petitioner has added LD amount of ₹20.00 lakh to the capital cost as on COD without submitting any rationale for the same. The petitioner should prudently claim the LD from the contractor/supplier for any losses due to the acts and omissions of the contractor/supplier. The LD recovered in excess of disallowed IDC and IEDC should be adjusted in the capital cost and if the LD recovered is less than the IDC and IEDC it will be held back by the petitioner to offset the disallowed IDC and IEDC. In the instant case, the petitioner has added the LD recovered to the capital cost, which is departure from usual practice and is contrary to the normal accounting principles. We are of the view that the petitioner's act of adding LD amount to the capital cost is not appropriate. We are surprised how the same has been certified by the petitioner's Auditor. The petitioner is directed to desist from making such claims in future. The petitioner's claim for*



including the LD amount of ₹20.00 lakh to the capital cost as on COD is not allowed.”

49. Therefore, we have considered the capital cost as on 1.4.2014 approved by the Commission vide order dated 25.2.2016 in Petition No. 63/TT/2015.

**Additional Capital Expenditure (“ACE”)**

50. The Commission allowed Additional Capital Expenditure (ACE) vide order dated 21.3.2016 in Petition No. 294/TT/2015 for Combined Asset-A, vide order dated 25.2.2016 in Petition No. 063/TT/2015 for Combined Asset-B, vide order dated 23.11.2015 in Petition No. 100/TT/2014 for Asset-C1, Asset-C2, Asset-C3 and vide order dated 30.3.2016 in Petition No. 477/TT/2014 for Asset-D respectively and the same is as follows:

(₹ in lakh)

Particulars	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-A	282.48	433.64	0.00	0.00	0.00
Combined Asset-B	243.87	0.00	0.00	0.00	0.00
Asset-C1	1371.36	0.00	0.00	0.00	0.00
Asset-C2	837.49	925.96	0.00	0.00	0.00
Asset-C3	212.43	325.02	0.00	0.00	0.00
Asset-D	189.74	153.07	0.00	0.00	0.00

51. The Petitioner has claimed the following ACE in respect of the transmission assets and submitted Auditor’s Certificate in support of its claim:

(₹ in lakh)

Particulars	Additional Capital Expenditure				
	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-A	282.48	69.97	72.21	34.42	50.64
Combined Asset-B	270.60	63.60	71.42	34.39	54.33
Asset-C1	582.23	109.75	357.00	240.47	69.97
Asset-C2	709.86	173.12	305.73	69.58	140.30
Asset-C3	212.43	51.81	191.24	20.82	41.16
Asset-D	189.74	46.04	53.80	14.05	40.74



52. BRPL has submitted that the Petitioner has included accrued IDC as ACE which is not supported by any Regulation of the 2014 Tariff Regulations and as such the Petitioner's claim for the same may be rejected.

53. In response, the Petitioner has submitted that BRPL's submissions are misleading and IDC discharged during a particular financial year has been claimed along with ACE during the respective financial year.

54. ACE claimed includes the accrued IDC discharged during 2014-19 tariff period. It is observed that the total estimated completion cost in respect of the transmission assets including ACE for 2014-19 period is within the approved cost as per RCE.

55. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i), Regulation 14(1)(ii) and Regulation 14(3)(V) of the 2014 Tariff Regulations as it is towards balance and retention payments and works deferred for execution. The undischarged IDC as on COD has been allowed as ACE. The details of ACE allowed in respect of the transmission assets are as follows:

Combined Asset-A	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of Balance & Retention Payments and work deferred for execution/ ACE to the extent of unexecuted work.	282.48	69.97	72.21	34.42	50.64
Add: IDC Discharged	0.00	0.00	0.00	0.00	0.00
Add: Un-discharged Initial Spares allowed as ACE	0.00	0.00	0.00	0.00	0.00
<b>Total ACE allowed</b>	<b>282.48</b>	<b>69.97</b>	<b>72.21</b>	<b>34.42</b>	<b>50.64</b>



(₹ in lakh)

Asset- B	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of Balance & Retention Payments and work deferred for execution/ ACE to the extent of unexecuted work.	270.60	63.60	71.42	34.39	54.33
Add: IDC Discharged	0.00	0.00	0.00	0.00	0.00
Add: Un-discharged Initial Spares allowed as ACE	0.00	0.00	0.00	0.00	0.00
<b>Total ACE allowed</b>	<b>270.60</b>	<b>63.60</b>	<b>71.42</b>	<b>34.39</b>	<b>54.33</b>

(₹ in lakh)

Asset-C1	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of Balance & Retention Payments and work deferred for execution/ ACE to the extent of unexecuted work	582.23	109.75	357.00	240.47	69.97
Add: IDC Discharged	55.75	0.00	0.00	0.00	0.00
Add: Un-discharged Initial Spares allowed as ACE	0.00	0.00	0.00	0.00	0.00
<b>Total ACE allowed</b>	<b>637.98</b>	<b>109.75</b>	<b>357.00</b>	<b>240.47</b>	<b>69.97</b>

(₹ in lakh)

Asset-C2	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of Balance & Retention Payments and work deferred for execution/ ACE to the extent of unexecuted work	709.86	173.12	305.73	69.58	140.30
Add: IDC Discharged	127.63	0.00	0.00	0.00	0.00
Add: Un-discharged Initial Spares allowed as ACE	0.00	0.00	0.00	0.00	0.00
<b>Total ACE allowed</b>	<b>837.49</b>	<b>173.12</b>	<b>305.73</b>	<b>69.58</b>	<b>140.30</b>

(₹ in lakh)

Asset-C3	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of Balance & Retention Payments and work deferred for execution/ ACE to the extent of unexecuted work	212.43	51.81	191.24	20.82	41.16
Add: IDC Discharged	0.00	0.00	0.00	0.00	0.00
Add: Un-discharged Initial Spares allowed as ACE	0.00	0.00	0.00	0.00	0.00
<b>Total ACE allowed</b>	<b>212.43</b>	<b>51.81</b>	<b>191.24</b>	<b>20.82</b>	<b>41.16</b>



(₹ in lakh)

Asset-D	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of Balance & Retention Payments and work deferred for execution/ ACE to the extent of unexecuted work.	189.74	46.04	53.80	14.05	40.74
Add: IDC discharged	0.00	0.00	0.00	0.00	0.00
Add: Un-discharged Initial Spares allowed as ACE	0.00	0.00	0.00	0.00	0.00
<b>Total ACE allowed</b>	<b>189.74</b>	<b>46.04</b>	<b>53.80</b>	<b>14.05</b>	<b>40.74</b>

### **Capital Cost for 2014-19 tariff period**

56. Accordingly, capital cost in respect of the transmission assets considered for 2014-19 tariff period is as follows:

(₹ in lakh)

Particulars	Apportioned Approved Capital Cost as per RCE	Capital Cost as on COD on cash basis	ACE					Total Capital Cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-A	23185.28	19945.73	282.48	69.97	72.21	34.42	50.64	20455.45
Combined Asset-B	10757.91	9271.94	270.60	63.60	71.42	34.39	54.33	9766.28
Asset-C1	3215.77	1656.72	637.98	109.75	357.00	240.47	69.97	3071.94
Asset-C2	7543.10	5008.69	837.49	173.12	305.73	69.58	140.30	6534.91
Asset-C3	1028.60	412.90	212.43	51.81	191.24	20.82	41.16	930.36
Asset-D	1345.97	868.19	189.74	46.04	53.80	14.05	40.74	1212.56

### **Debt-Equity Ratio**

57. The Petitioner has considered debt-equity ratio of 70:30 as on COD and for ACE post COD. Debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during 2014-19 period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of debt-equity ratio in respect of the transmission assets as on COD and as on 31.3.2019 are as follows:



Combined Asset-A	As on 1.4.2014		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ lakh)		(₹ lakh)	
Debt	13692.02	70.00	14318.83	70.00
Equity	5983.71	30.00	6136.62	30.00
<b>Total</b>	<b>19945.73</b>	<b>100.00</b>	<b>20455.45</b>	<b>100.00</b>
Combined Asset-B	As on 1.4.2014		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ lakh)		(₹ lakh)	
Debt	6490.36	70.00	6836.40	70.00
Equity	2781.58	30.00	2929.88	30.00
<b>Total</b>	<b>9271.94</b>	<b>100.00</b>	<b>9766.28</b>	<b>100.00</b>
Asset-C1	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ lakh)		(₹ lakh)	
Debt	1159.71	70.00	2150.33	70.00
Equity	497.02	30.00	921.56	30.00
<b>Total</b>	<b>1656.72</b>	<b>100.00</b>	<b>3071.90</b>	<b>100.00</b>
Asset-C2	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ lakh)		(₹ lakh)	
Debt	3506.08	70.00	4574.44	70.00
Equity	1502.61	30.00	1960.47	30.00
<b>Total</b>	<b>5008.69</b>	<b>100.00</b>	<b>6534.91</b>	<b>100.00</b>
Asset-C3	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ lakh)		(₹ lakh)	
Debt	289.03	70.00	651.27	70.00
Equity	123.87	30.00	279.10	30.00
<b>Total</b>	<b>412.90</b>	<b>100.00</b>	<b>930.36</b>	<b>100.00</b>
Asset-D	As on COD		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ lakh)		(₹ lakh)	
Debt	607.73	70.00	848.81	70.00
Equity	260.45	30.00	363.75	30.00
<b>Total</b>	<b>868.19</b>	<b>100.00</b>	<b>1212.56</b>	<b>100.00</b>

### Depreciation

58. Depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during



2014-19 tariff period. The Gross Block during 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD) and working of WAROD is given at Annexure-I. Depreciation for 2014-19 tariff period is trued-up in respect of the transmission assets as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations and the same is as follows:

(₹ in lakh)

Combined Asset-A						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	19945.73	20228.21	20298.18	20370.39	20404.81
B	Addition during the year 2014-19	282.48	69.97	72.21	34.42	50.64
C	Closing Gross Block (A+B)	20228.21	20298.18	20370.39	20404.81	20455.45
D	Average Gross Block (A+C)/2	20086.97	20263.20	20334.29	20387.60	20430.13
E	Depreciable value(D*90%)	15573.71	15732.31	15796.29	15844.28	15882.55
F	Weighted average rate of Depreciation (WAROD) (in %)	4.50	4.51	4.51	4.51	4.51
G	Lapsed useful life at the beginning of the year (Year)	1	2	3	4	5
H	Balance useful life at the beginning of the year (Year)	28	27	26	25	24
I	Cumulative Depreciation at the beginning of the year	1598.57	2502.85	3415.86	4332.45	5251.64
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	13975.14	13229.46	12380.43	11511.83	10630.91
K	<b>Depreciation during the year</b>	<b>904.28</b>	<b>913.01</b>	<b>916.59</b>	<b>919.19</b>	<b>921.28</b>
L	Cumulative Depreciation at the end of the year (I+K)	2502.85	3415.86	4332.45	5251.64	6172.92
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	13070.86	12316.45	11463.84	10592.63	9709.63

(₹ in lakh)

Combined Asset-B						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	9271.94	9542.54	9606.14	9677.56	9711.95
B	Addition during the year 2014-19	270.60	63.60	71.42	34.39	54.33
C	Closing Gross Block (A+B)	9542.54	9606.14	9677.56	9711.95	9766.28
D	Average Gross Block (A+C)/2	9407.24	9574.34	9641.85	9694.76	9739.12
E	Depreciable value(D*90%)	7841.72	7992.11	8052.87	8100.49	8140.41
F	Weighted average rate of Depreciation (WAROD) (in %)	4.87	4.87	4.88	4.88	4.88
G	Lapsed useful life at the beginning of the year (Year)	2	3	4	5	6
H	Balance useful life at the beginning of the year (Year)	30	29	28	27	26
I	Cumulative Depreciation at the beginning of the year	978.79	1436.47	1902.97	2373.04	2845.89





Combined Asset-B						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	6862.93	6555.64	6149.90	5727.45	5294.52
K	<b>Depreciation during the year</b>	<b>457.68</b>	<b>466.50</b>	<b>470.06</b>	<b>472.85</b>	<b>475.19</b>
L	Cumulative Depreciation at the end of the year (I+K)	1436.47	1902.97	2373.04	2845.89	3321.08
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	6405.25	6089.14	5679.84	5254.60	4819.33

(₹ in lakh)

Asset- C1						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	1656.72	2294.71	2404.46	2761.46	3001.93
B	Addition during the year 2014-19	637.98	109.75	357.00	240.47	69.97
C	Closing Gross Block (A+B)	2294.71	2404.46	2761.46	3001.93	3071.90
D	Average Gross Block (A+C)/2	1975.72	2349.58	2582.96	2881.69	3036.91
E	Depreciable value(D*90%)	1668.24	2004.72	2214.76	2483.62	2623.32
F	Weighted average rate of Depreciation (WAROD) (in %)	4.89	4.95	4.88	4.83	4.85
G	Lapsed useful life at the beginning of the year (Year)	0	1	2	3	4
H	Balance useful life at the beginning of the year (Year)	27	26	25	24	23
I	Cumulative Depreciation at the beginning of the year	0.00	96.67	213.00	339.02	478.17
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	1668.24	1908.05	2001.76	2144.60	2145.15
K	<b>Depreciation during the year</b>	<b>96.67</b>	<b>116.33</b>	<b>126.02</b>	<b>139.15</b>	<b>147.32</b>
L	Cumulative Depreciation at the end of the year (I+K)	96.67	213.00	339.02	478.17	625.49
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	1571.58	1791.72	1875.74	2005.45	1997.83

(₹ in lakh)

Asset- C2						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	5008.69	5846.18	6019.30	6325.03	6394.61
B	Addition during the year 2014-19	837.49	173.12	305.73	69.58	140.30
C	Closing Gross Block (A+B)	5846.18	6019.30	6325.03	6394.61	6534.91
D	Average Gross Block (A+C)/2	5427.44	5932.74	6172.17	6359.82	6464.76
E	Depreciable value(D*90%)	4335.07	4789.85	5005.33	5174.22	5268.66
F	Weighted average rate of Depreciation (WAROD) (in %)	4.56	4.61	4.61	4.61	4.61
G	Lapsed useful life at the beginning of the year (Year)	0	1	2	3	4
H	Balance useful life at the beginning of the year (Year)	22	21	20	19	18
I	Cumulative Depreciation at the beginning of the year	0.00	247.46	520.73	805.25	1098.27





Asset- C2						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	4335.07	4542.39	4484.60	4368.96	4170.40
K	<b>Depreciation during the year</b>	<b>247.46</b>	<b>273.27</b>	<b>284.53</b>	<b>293.01</b>	<b>298.33</b>
L	Cumulative Depreciation at the end of the year (I+K)	247.46	520.73	805.25	1098.27	1396.60
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	4087.61	4269.12	4200.07	4075.95	3872.06

(₹ in lakh)

Asset- C3						
	Particulars	2014-15 Pro-rata for 203 days	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	412.90	625.33	677.14	868.38	889.20
B	Addition during the year 2014-19	212.43	51.81	191.24	20.82	41.16
C	Closing Gross Block (A+B)	625.33	677.14	868.38	889.20	930.36
D	Average Gross Block (A+C)/2	519.12	651.24	772.76	878.79	909.78
E	Depreciable value(D*90%)	467.21	586.11	695.49	790.91	818.81
F	Weighted average rate of Depreciation (WAROD) (in %)	5.11	5.11	4.96	4.84	4.85
G	Lapsed useful life at the beginning of the year (Year)	0	0	1	2	3
H	Balance useful life at the beginning of the year (Year)	24	24	23	22	21
I	Cumulative Depreciation at the beginning of the year	0.00	14.75	48.02	86.33	128.83
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	467.21	571.36	647.47	704.59	689.97
K	<b>Depreciation during the year</b>	<b>14.75</b>	<b>33.27</b>	<b>38.30</b>	<b>42.51</b>	<b>44.08</b>
L	Cumulative Depreciation at the end of the year (I+K)	14.75	48.02	86.33	128.83	172.91
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	452.45	538.09	609.16	662.08	645.89

(₹ in lakh)

Asset- D						
	Particulars	2014-15 Pro-rata for 203 days	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	868.19	1057.93	1103.97	1157.77	1171.82
B	Addition during the year 2014-19	189.74	46.04	53.80	14.05	40.74
C	Closing Gross Block (A+B)	1057.93	1103.97	1157.77	1171.82	1212.56
D	Average Gross Block (A+C)/2	963.06	1080.95	1130.87	1164.79	1192.19
E	Depreciable value(D*90%)	811.73	917.84	962.76	993.30	1017.95
F	Weighted Average Rate of Depreciation (WAROD) (in %)	4.72	4.78	4.81	4.82	4.83
G	Elapsed useful life at the beginning of	0	0	1	2	3



<b>Asset- D</b>						
	<b>Particulars</b>	<b>2014-15 Pro-rata for 203 days</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
	the year (Year)					
H	Balance useful life at the beginning of the year (Year)	23	23	22	21	20
I	Cumulative Depreciation at the beginning of the year	0.00	25.31	77.03	131.38	187.53
J	Remaining Aggregate Depreciable Value at the beginning of the year (E-I)	811.73	892.53	885.74	861.92	830.43
K	<b>Depreciation during the year</b>	<b>25.31</b>	<b>51.72</b>	<b>54.35</b>	<b>56.14</b>	<b>57.59</b>
L	Cumulative Depreciation at the end of the year (I+K)	25.31	77.03	131.38	187.53	245.12
M	Remaining Aggregate Depreciable Value at the end of the year (E-L)	786.43	840.81	831.38	805.77	772.84

59. The details of depreciation allowed in respect of the transmission assets vide order dated 21.3.2016 in Petition No. 294/TT/2015 for Combined Asset-A, vide order dated 25.2.2016 in Petition No. 063/TT/2015 for Combined Asset-B, vide order dated 29.4.2016 in Petition No. 100/TT/2014 for Asset-C1, Asset-C2 and Asset-C3, vide order dated 30.3.2016 in Petition No. 477/TT/2014 for Asset-D as claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)						
<b>Asset</b>	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Combi ned Asset- A	Allowed vide order dated 21.3.2016 in Petition No. 294/TT/2015	904.28	922.71	934.13	934.13	934.13
	As claimed by the Petitioner	924.16	932.89	936.47	939.07	941.16
	Approved after Truing Up	904.28	913.01	916.59	919.19	921.28
Combi ned Asset- B	Allowed vide order dated 25.2.2016 in Petition No. 063/TT/2015	456.88	463.29	463.29	463.29	463.29
	As claimed by the Petitioner	466.33	475.15	478.71	481.51	483.84
	Approved after Truing Up	457.68	466.50	470.06	472.85	475.19



<b>Asset</b>	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Asset-C1	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	123.57	159.44	159.44	159.44	159.44
	As claimed by the Petitioner	99.51	121.67	131.36	144.49	152.66
	Approved after Truing Up	<b>96.67</b>	<b>116.33</b>	<b>126.02</b>	<b>139.15</b>	<b>147.32</b>
Asset-C2	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	247.46	292.53	316.19	316.19	316.19
	As claimed by the Petitioner	262.05	288.07	299.34	307.82	313.13
	Approved after Truing Up	247.46	273.27	284.53	293.01	298.33
Asset-C3	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	15.08	40.98	49.52	49.52	49.52
	As claimed by the Petitioner	14.94	33.68	38.79	42.99	44.56
	Approved after Truing Up	14.75	33.27	38.30	42.51	44.08
Asset-D	Allowed vide order dated 30.3.2016 in Petition No. 477/TT/2014	25.61	55.09	59.13	59.13	59.13
	As claimed by the Petitioner	27.16	55.22	57.95	59.74	61.19
	Approved after Truing Up	25.31	51.72	54.35	56.14	57.59

### **Interest on Loan (“IoL”)**

60. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. The change in interest rate is due to floating rate of interest applicable for the project to be claimed/ adjusted over a period of 5 years directly from the beneficiaries. We have considered the submissions of the Petitioner and accordingly calculated IoL based on actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations. The IoL has been worked out as detailed below:



(i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.

(ii) The repayment for tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period.

(₹ in lakh)

<b>Combined Asset-A</b>						
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Gross Normative Loan	13962.02	14159.76	14208.74	14259.29	14283.38
B	Cumulative Repayments up to Previous Year	1598.57	2502.85	3415.86	4332.45	5251.64
C	Net Loan-Opening (A-B)	12363.45	11656.90	10792.87	9926.84	9031.74
D	Addition due to ACE	197.74	48.98	50.55	24.09	35.45
E	Repayment during the year	904.28	913.01	916.59	919.19	921.28
F	Net Loan-Closing(C+D-E)	11656.90	10792.87	9926.84	9031.74	8145.91
G	Average Loan (A+F)/2	12010.17	11224.89	10359.85	9479.29	8588.82
H	Weighted Average Rate of Interest on Loan (in %)	9.011	9.019	9.017	9.012	9.009
I	<b>Interest on Loan (GxH)</b>	<b>1082.26</b>	<b>1012.39</b>	<b>934.14</b>	<b>854.29</b>	<b>773.78</b>

(₹ in lakh)

<b>Combined Asset-B</b>						
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Gross Normative Loan	6490.36	6679.78	6724.30	6774.30	6798.37
B	Cumulative Repayments up to Previous Year	978.79	1436.47	1902.97	2373.04	2845.89
C	Net Loan-Opening (A-B)	5511.57	5243.31	4821.33	4401.26	3952.48
D	Addition due to ACE	189.42	44.52	50.00	24.07	38.03
E	Repayment during the year	457.68	466.50	470.06	472.85	475.19
F	Net Loan-Closing(C+D-E)	5243.31	4821.33	4401.26	3952.48	3515.32
G	Average Loan (A+F)/2	5377.44	5032.32	4611.30	4176.87	3733.90
H	Weighted Average Rate of Interest on Loan (in %)	9.008	9.014	9.008	8.997	8.990
I	<b>Interest on Loan (GxH)</b>	<b>484.42</b>	<b>453.59</b>	<b>415.41</b>	<b>375.78</b>	<b>335.68</b>

(₹ in lakh)

<b>Asset- C1</b>						
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Gross Normative Loan	1159.71	1606.29	1683.12	1933.02	2101.35
B	Cumulative Repayments up to Previous Year	0.00	96.67	213.00	339.02	478.17
C	Net Loan-Opening (A-B)	1159.71	1509.63	1470.12	1594.00	1623.18
D	Addition due to ACE	446.59	76.83	249.90	168.33	48.98
E	Repayment during the year	96.67	116.33	126.02	139.15	147.32



<b>Asset- C1</b>						
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
F	Net Loan-Closing(C+D-E)	1509.63	1470.12	1594.00	1623.18	1524.84
G	Average Loan (A+F)/2	1334.67	1489.87	1532.06	1608.59	1574.01
H	Weighted Average Rate of Interest on Loan (in %)	9.086	9.113	9.094	9.010	8.926
I	<b>Interest on Loan (GxH)</b>	<b>121.27</b>	<b>135.78</b>	<b>139.33</b>	<b>144.94</b>	<b>140.50</b>

(₹ in lakh)

<b>Asset-C2</b>						
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Gross Normative Loan	3506.08	4092.33	4213.51	4427.52	4476.23
B	Cumulative Repayments up to Previous Year	0.00	247.46	520.73	805.25	1098.27
C	Net Loan-Opening (A-B)	3506.08	3844.87	3692.78	3622.27	3377.96
D	Addition due to ACE	586.24	121.18	214.01	48.71	98.21
E	Repayment during the year	247.46	273.27	284.53	293.01	298.33
F	Net Loan-Closing(C+D-E)	3844.87	3692.78	3622.27	3377.96	3177.84
G	Average Loan (A+F)/2	3675.48	3768.83	3657.52	3500.12	3277.90
H	Weighted Average Rate of Interest on Loan (in %)	9.065	9.078	9.035	8.958	8.925
I	<b>Interest on Loan (GxH)</b>	<b>333.17</b>	<b>342.14</b>	<b>330.44</b>	<b>313.56</b>	<b>292.54</b>

(₹ in lakh)

<b>Asset-C3</b>						
	<b>Particulars</b>	<b>2014-15 Pro-rata for 203 days</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Gross Normative Loan	289.03	437.74	474.01	607.88	622.46
B	Cumulative Repayments up to Previous Year	0.00	14.75	48.02	86.33	128.83
C	Net Loan-Opening (A-B)	289.03	422.98	425.99	521.56	493.62
D	Addition due to ACE	148.70	36.28	133.87	14.57	28.81
E	Repayment during the year	14.75	33.27	38.30	42.51	44.08
F	Net Loan-Closing(C+D-E)	422.98	425.99	521.56	493.62	478.36
G	Average Loan (A+F)/2	356.01	424.49	473.77	507.59	485.99
H	Weighted Average Rate of Interest on Loan (in %)	9.575	9.434	9.198	8.960	8.886
I	<b>Interest on Loan (GxH)</b>	<b>18.96</b>	<b>40.04</b>	<b>43.58</b>	<b>45.48</b>	<b>43.18</b>

(₹ in lakh)

<b>Asset-D</b>						
	<b>Particulars</b>	<b>2014-15 Pro-rata for 203 days</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Gross Normative Loan	607.73	740.55	772.79	810.45	820.29
B	Cumulative Repayments up to Previous Year	0.00	25.31	77.03	131.38	187.53
C	Net Loan-Opening (A-B)	607.73	715.25	695.76	679.07	632.76



<b>Asset-D</b>						
	<b>Particulars</b>	<b>2014-15 Pro-rata for 203 days</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
D	Addition due to ACE	132.82	32.23	37.66	9.84	28.52
E	Repayment during the year	25.31	51.72	54.35	56.14	57.59
F	Net Loan-Closing(C+D-E)	715.25	695.76	679.07	632.76	603.69
G	Average Loan (A+F)/2	661.49	705.50	687.41	655.92	618.23
H	Weighted Average Rate of Interest on Loan (in %)	9.816	9.552	9.311	8.857	8.709
<b>I</b>	<b>Interest on Loan (GxH)</b>	<b>36.11</b>	<b>67.39</b>	<b>64.01</b>	<b>58.09</b>	<b>53.84</b>

61. The details of IoL allowed in respect of the transmission assets vide order dated 21.3.2016 in Petition No. 294/TT/2015 for Combined Asset-A, vide order dated 25.2.2016 in Petition No. 063/TT/2015 for Combined Asset-B, vide order dated 29.4.2016 in Petition No. 100/TT/2014 for Asset-C1, Asset-C2 and Asset-C3, vide order dated 30.3.2016 in Petition No. 477/TT/2014 for Asset-D as claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)						
<b>Assets</b>	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Combined Asset-A	Allowed vide order dated 21.3.2016 in Petition No. 294/TT/2015	1081.71	1022.36	952.27	867.94	783.79
	As claimed by the Petitioner	1085.46	1013.80	933.75	852.12	769.82
	Approved after Truing Up	<b>1082.26</b>	<b>1012.39</b>	<b>934.14</b>	<b>854.29</b>	<b>773.78</b>
Combined Asset-B	Allowed vide order dated 25.2.2016 in Petition No. 63/TT/2015	483.56	450.15	408.48	366.82	325.20
	As claimed by the Petitioner	485.29	453.69	414.72	374.32	333.44
	Approved after Truing Up	484.42	453.59	415.41	375.78	335.68



<b>Assets</b>	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Asset-C1	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	152.32	183.11	168.73	154.32	139.92
	As claimed by the Petitioner	124.58	141.74	144.80	149.87	144.91
	Approved after Truing Up	<b>121.27</b>	<b>135.78</b>	<b>139.33</b>	<b>144.94</b>	<b>140.50</b>
Asset- C2	vide order dated 29.4.2016 in Petition No. 100/TT/2014	330.44	360.27	361.73	332.98	304.30
	As claimed by the Petitioner	332.51	340.14	327.12	308.93	286.61
	Approved after Truing Up	<b>333.17</b>	<b>342.14</b>	<b>330.44</b>	<b>313.56</b>	<b>292.54</b>
Asset- C3	Approved vide order dated 29.4.2016 in Petition No. 100/TT/2014	18.48	46.82	52.88	48.37	43.93
	As claimed by the Petitioner	19.19	40.54	44.12	45.96	43.62
	Approved after Truing Up	<b>18.96</b>	<b>40.04</b>	<b>43.58</b>	<b>45.48</b>	<b>43.18</b>
Asset- D	Allowed vide order dated 30.3.2016 in Petition No. 477/TT/2014	36.03	71.51	71.18	65.54	59.90
	As claimed by the Petitioner	36.51	68.01	64.40	58.15	53.58
	Approved after Truing Up	<b>36.11</b>	<b>67.39</b>	<b>64.01</b>	<b>58.09</b>	<b>53.84</b>

### **Return on Equity (“RoE”)**

62. The Petitioner has claimed RoE in respect of the transmission assets in terms of Regulation 24 and Regulation 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed the following effective tax rates for 2014-19 tariff period. The Petitioner has also prayed for claiming the differential tariff on account of trued-up RoE based on effective rate calculated on completion of income tax assessment/re-





assessment for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of respective assessment orders, directly from the beneficiaries, on year-to-year basis as provided under the 2014 Tariff Regulations.

Year	Claimed effective tax (in %)	Grossed-up RoE (in %) [(Base Rate)/(1-t)]
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

63. We have considered the submissions of the Petitioner. The tariff for each year of the tariff period 2014-19 is determined considering the effective tax percentage to arrive at grossed up RoE. The Commission vide 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. The relevant portion of the order dated 27.4.2020 is as under:

*“26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. 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 transmission customers/ DICs as the case may be on year to year basis.*

*27. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of rate of return on equity:*





<b>Year</b>	<b>Notified MAT rates (inclusive of surcharge &amp;cess) (in %)</b>	<b>Effective Tax (in %)</b>
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

64. MAT rates allowed vide order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing up of tariff of 2014-19 period in terms of the provisions of 2014 Tariff Regulations and the same are as follows:

<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	20.961	15.50	19.610	19.624
2015-16	21.342	15.50	19.705	19.715
2016-17	21.342	15.50	19.705	19.704
2017-18	21.342	15.50	19.705	19.704
2018-19	21.549	15.50	19.758	19.757

65. Accordingly, RoE allowed in respect of the transmission assets is as follows:

(₹ in lakh)

<b>Combined Asset-A</b>						
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Opening Equity	5983.71	6068.45	6089.44	6111.10	6121.43
B	Addition due to ACE	84.74	20.99	21.66	10.33	15.19
C	Closing Equity (A+B)	6068.45	6089.44	6111.10	6121.43	6136.62
D	Average Equity(A+B)/2	6026.08	6078.95	6100.27	6116.27	6129.03
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax)</b>	<b>1181.72</b>	<b>1197.86</b>	<b>1202.06</b>	<b>1205.21</b>	<b>1210.97</b>



(₹ in lakh)

<b>Combined Asset-B</b>						
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Opening Equity	2781.58	2862.76	2881.84	2903.26	2913.58
B	Addition due to ACE	81.18	19.08	21.42	10.32	16.30
C	Closing Equity (A+B)	2862.76	2881.84	2903.26	2913.58	2929.88
D	Average Equity(A+B)/2	2822.17	2872.30	2892.55	2908.42	2921.73
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax)</b>	<b>553.43</b>	<b>565.99</b>	<b>569.98</b>	<b>573.10</b>	<b>577.27</b>

(₹ in lakh)

<b>Asset- C1</b>						
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Opening Equity	497.02	688.41	721.33	828.43	900.57
B	Addition due to ACE	191.39	32.92	107.10	72.14	20.99
C	Closing Equity (A+B)	688.41	721.33	828.43	900.57	921.56
D	Average Equity(A+B)/2	592.71	704.87	774.88	864.50	911.07
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax)</b>	<b>116.23</b>	<b>138.89</b>	<b>152.69</b>	<b>170.35</b>	<b>180.01</b>

(₹ in lakh)

<b>Asset – C2</b>						
	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
A	Opening Equity	1502.61	1753.85	1805.79	1897.51	1918.38
B	Addition due to ACE	251.25	51.94	91.72	20.87	42.09
C	Closing Equity (A+B)	1753.85	1805.79	1897.51	1918.38	1960.47
D	Average Equity(A+B)/2	1628.23	1779.82	1851.65	1907.94	1939.42
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax)</b>	<b>319.30</b>	<b>350.71</b>	<b>364.87</b>	<b>375.96</b>	<b>383.19</b>



(₹ in lakh)

Asset – C3						
	Particulars	2014-15 Pro-rata for 203 days	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	123.87	187.60	203.13	260.50	266.75
B	Addition due to ACE	63.73	15.53	57.37	6.25	12.35
C	Closing Equity (A+B)	187.60	203.13	260.50	266.75	279.10
D	Average Equity(A+B)/2	155.73	195.36	231.82	263.62	272.92
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax)</b>	<b>16.98</b>	<b>38.50</b>	<b>45.68</b>	<b>51.95</b>	<b>53.92</b>

(₹ in lakh)

Asset – D						
	Particulars	2014-15 Pro-rata for 203 days	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	260.45	317.37	331.18	347.32	351.53
B	Addition due to ACE	56.92	13.81	16.14	4.21	12.22
C	Closing Equity (A+B)	317.37	331.18	347.32	351.53	363.75
D	Average Equity(A+B)/2	288.91	324.28	339.25	349.42	357.64
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	<b>Return on Equity (Pre-tax)</b>	<b>31.51</b>	<b>63.90</b>	<b>66.85</b>	<b>68.85</b>	<b>70.66</b>

66. The details of RoE allowed in respect of the transmission assets vide order dated 21.3.2016 in Petition No. 294/TT/2015 for Combined Asset-A, vide order dated 25.2.2016 in Petition No. 063/TT/2015 for Combined Asset-B, vide order dated 29.4.2016 in Petition No. 100/TT/2014 for Asset-C1, Asset-C2 and Asset-C3, vide order dated 30.3.2016 in Petition No. 477/TT/2014 for Asset-D



as claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)						
Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-A	Allowed vide order dated 21.3.2016 in Petition No. 294/TT/2015	1181.72	1202.78	1215.54	1215.54	1215.14
	As claimed by the Petitioner	1186.44	1202.31	1205.90	1209.05	1214.82
	Approved after Truing Up	<b>1181.72</b>	<b>1197.86</b>	<b>1202.06</b>	<b>1205.21</b>	<b>1210.97</b>
Combined Asset-B	Allowed vide order dated 25.2.2016 in Petition No. 63/TT/2015	552.63	559.80	559.80	559.80	559.80
	As claimed by the Petitioner	555.03	567.46	571.16	574.29	578.46
	Approved after Truing Up	<b>553.43</b>	<b>565.99</b>	<b>569.98</b>	<b>573.10</b>	<b>577.27</b>
Asset-C1	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	146.64	186.98	186.98	186.98	186.98
	As claimed by the Petitioner	119.42	144.89	158.69	176.35	186.02
	Approved after Truing Up	<b>116.23</b>	<b>138.89</b>	<b>152.69</b>	<b>170.35</b>	<b>180.01</b>
Asset-C2	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	319.30	371.18	398.41	398.41	398.41
	As claimed by the Petitioner	319.54	350.89	364.87	375.96	383.19
	Approved after Truing Up	<b>319.30</b>	<b>350.71</b>	<b>364.87</b>	<b>375.96</b>	<b>383.19</b>
Asset-C3	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	17.37	46.91	56.48	56.48	56.48
	As claimed by the Petitioner	17.20	38.98	46.25	52.52	54.49
	Approved after Truing Up	<b>16.98</b>	<b>38.50</b>	<b>45.68</b>	<b>51.95</b>	<b>53.92</b>



Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-D	Allowed vide order dated 30.3.2016 in Petition No. 477/TT/2014	31.86	67.37	71.87	71.87	71.87
	As claimed by the Petitioner	31.92	64.78	67.80	69.81	71.62
	Approved after Truing Up	<b>31.51</b>	<b>63.90</b>	<b>66.85</b>	<b>68.85</b>	<b>70.66</b>

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

67. The Petitioner has claimed O&M Expenses in respect of the Combined Asset-A, Combined Assets-B, Asset-C1, Asset-C2 and Asset-D. The details of the O&M Expenses claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

<b>Combined Asset-A</b>			
<b>Transmission lines</b>			
<b>Name of Line</b>	<b>Single Circuit/ Double Circuit</b>	<b>Number of Sub- Conductors</b>	<b>Line Length (in km)</b>
400 kV D/C Manesar-Neemrana Transmission Line	Double Circuit	2	67.037
<b>220 kV Sub-station bay</b>			
Neemrana: ICT-II Bay at Neemrana			
Neemrana: Line Bays at Neemrana			
Neemrana: ICT-II 220 KV Bay at Neemrana			
Neemrana:220 KV line Bay at Neemrana			
<b>400 kV Sub-station bay</b>			
Neemrana: ICT-II Bay at Neemrana			
Manesar: Neemrana Line I and II GIS Bay at Manesar			
Neemrana: Manesar Line I and II Bay			
Neemrana: ICT-I 400 kV Bay at Neemrana			

(₹ in lakh)

<b>O&amp;M Expenses</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Sub-station</b>					
<b>220 kV</b>					
Number of bays	8	8	8	8	8
<b>400 kV</b>					
Number of bays	4	4	4	4	4
<b>Transmission lines</b>					



D/C Twin/ Triple Conductor (km)	67.037	67.037	67.037	67.037	67.037
Total O&M Expenses (₹ in lakh)	<b>729.36</b>	<b>753.58</b>	<b>778.61</b>	<b>804.41</b>	<b>831.13</b>

<b>Combined Asset-B</b>					
<b>Transmission lines</b>					
<b>Name of Line</b>	<b>Single Circuit/ Double Circuit</b>	<b>Number of Sub-Conductors</b>		<b>Line Length (in km)</b>	
400 kV D/C Bhiwadi-Neemrana TL	Double Circuit	2		48.428	
<b>400 kV Sub-station bay</b>					
Neemrana: 80 MVAR Bus Reactor at Neemrana					
Neemrana: 400 KV Line Bays (Neemrana)					
Bhiwadi:400 kV Line Bays (Bhiwadi)					
<b>O&amp;M Expenses</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Sub-station</b>					
<b>400 kV</b>					
<b>Number of bays</b>	5	5	5	5	5
<b>Transmission lines</b>					
<b>D/C Twin/ Triple Conductor (km)</b>	48.428	48.428	48.428	48.428	48.428
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>335.74</b>	<b>346.90</b>	<b>358.41</b>	<b>370.32</b>	<b>382.58</b>

(₹ in lakh)

<b>Asset-C1</b>			
<b>Transmission lines</b>			
<b>Name of Line</b>	<b>Single Circuit/ Double Circuit</b>	<b>Number of Sub-Conductors</b>	<b>Line Length (in km)</b>
LILO of 400 kV S/C Bhiwadi Bassi TL at Kotputli	Single Circuit	2	8.722
<b>400 kV Sub-station bay</b>			
Kotputli: Bassi Bay I at Kotputli			
Kotputli: Bhiwadi Bay I at Kotputli			

<b>O&amp;M Expenses</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Sub-station</b>					
<b>400 kV</b>					
<b>Number of bays</b>	2	2	2	2	2
<b>Transmission lines</b>					
<b>D/C Twin/ Triple Conductor (km)</b>	8.722	8.722	8.722	8.722	8.722
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>126.77</b>	<b>130.98</b>	<b>135.33</b>	<b>139.82</b>	<b>144.45</b>



(₹ in lakh)

Asset-C2					
Transmission lines					
<b>400 kV Sub-station bay</b>					
Kotputli:400 kV ICT Bay at Kotpitali					
<b>220 kV Sub-station bay</b>					
Kotputli:220 kV ICT Bay at Kotputli					
Kotputli:220 kV Downstream Line Bays at Kotputli					
O&M Expenses					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Sub-station</b>					
<b>400 kV</b>					
Number of bays	2	2	2	2	2
<b>220 kV</b>					
Number of bays	4	4	4	4	4
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>289.44</b>	<b>299.04</b>	<b>308.98</b>	<b>319.22</b>	<b>329.82</b>

(₹ in lakh)

Asset-C3					
Transmission lines					
<b>220 kV Sub-station bay</b>					
Kotputli: Line Bay at Kotputli					
Kotputli:220 kV Downstream Line Bay at Kotputli					
O&M Expenses					
Particulars	2014-15 Pro-rata for 203 days	2015-16	2016-17	2017-18	2018-19
<b>Sub-station</b>					
<b>220 kV</b>					
Number of bays	4	4	4	4	4
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>93.90</b>	<b>174.44</b>	<b>180.24</b>	<b>186.20</b>	<b>192.40</b>

(₹ in lakh)

Asset- D					
Transmission lines					
<b>400 kV Sub-station bay</b>					
Kotputli:80 MVAR Bus Reactor at Kotputli under NRSS-XV					
O&M Expenses					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Sub-station</b>					
<b>400 kV</b>					
Number of bays	1	1	1	1	1
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>33.54</b>	<b>62.30</b>	<b>64.37</b>	<b>66.51</b>	<b>68.71</b>

68. Regulation 29 (3) of the 2014 Tariff Regulations specifies norms for O&M Expenses for the transmission project and the said norms specified for the elements covered under the transmission assets are as follows:



<b>Combined Asset-A</b>						
<b>Element</b>	<b>O&amp;M</b>	<b>Norms for 2014-15</b>	<b>Norms for 2015-16</b>	<b>Norms for 2016-17</b>	<b>Norms for 2017-18</b>	<b>Norms for 2018-19</b>
400 kV Sub-station	₹ lakh/bay	60.30	62.30	64.37	66.51	68.71
400 kV Sub-station (GIS)	₹ lakh/bay	51.54	53.25	55.02	56.84	58.73
220 kV Sub-station	₹ lakh/bay	42.21	43.61	45.06	46.55	48.10
D/C Twin/Triple Conductor	₹ lakh/km	0.71	0.73	0.76	0.78	0.81

<b>Combined Asset-B</b>						
<b>Element</b>	<b>O&amp;M</b>	<b>Norms for 2014-15</b>	<b>Norms for 2015-16</b>	<b>Norms for 2016-17</b>	<b>Norms for 2017-18</b>	<b>Norms for 2018-19</b>
400 kV Sub-station	₹ lakh/bay	60.30	62.30	64.37	66.51	68.71
220 kV Sub-station	₹ lakh/bay	42.21	43.61	45.06	46.55	48.10
D/C Twin/Triple Conductor	₹ lakh/km	0.71	0.73	0.76	0.78	0.81

<b>Asset- C1</b>						
<b>Element</b>	<b>O&amp;M</b>	<b>Norms for 2014-15</b>	<b>Norms for 2015-16</b>	<b>Norms for 2016-17</b>	<b>Norms for 2017-18</b>	<b>Norms for 2018-19</b>
400 kV Sub-station	₹ lakh/bay	60.30	62.30	64.37	66.51	68.71
D/C Twin/Triple Conductor	₹ lakh/km	0.71	0.73	0.76	0.78	0.81

<b>Asset- C2</b>						
<b>Element</b>	<b>O&amp;M</b>	<b>Norms for 2014-15</b>	<b>Norms for 2015-16</b>	<b>Norms for 2016-17</b>	<b>Norms for 2017-18</b>	<b>Norms for 2018-19</b>
400 kV Sub-station	₹ lakh/bay	60.30	62.30	64.37	66.51	68.71
220 kV Sub-station	₹ lakh/bay	42.21	43.61	45.06	46.55	48.10

<b>Asset- C3</b>						
<b>Element</b>	<b>O&amp;M</b>	<b>Norms for 2014-15</b>	<b>Norms for 2015-16</b>	<b>Norms for 2016-17</b>	<b>Norms for 2017-18</b>	<b>Norms for 2018-19</b>
220 kV Sub-station	₹ lakh/bay	42.21	43.61	45.06	46.55	48.10





Asset- D						
Element	O&M	Norms for 2014-15	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19
400 kV Sub-station	₹ lakh/bay	60.30	62.30	64.37	66.51	68.71

69. We have considered the submissions of the Petitioner. O&M Expenses approved for various elements of the transmission assets under Regulation 29 (3) of the 2014 Tariff Regulations are as follows:

(₹ in lakh)

Combined Asset- A					
Details	2014-15	2015-16	2016-17	2017-18	2018-19
4 Number of 400 kV Sub-station bays	241.20	249.20	257.48	266.04	274.84
2 Number of 400 kV Sub-station bays	103.08	106.50	110.04	113.68	117.46
8 Number of 220 kV Sub-station bays	337.68	348.88	360.48	372.40	384.80
67.037 km D/C Twin/Triple Conductor transmission line	47.40	49.00	50.61	52.29	54.03
<b>Total</b>	<b>729.36</b>	<b>753.58</b>	<b>778.61</b>	<b>804.41</b>	<b>831.13</b>

(₹ in lakh)

Combined Asset- B					
Details	2014-15	2015-16	2016-17	2017-18	2018-19
5 number of 400 kV Sub-station bays	301.50	311.50	321.85	332.55	343.55
48.428 km D/C Twin/Triple Conductor transmission line	34.24	35.40	36.56	37.77	39.03
<b>Total</b>	<b>335.74</b>	<b>346.90</b>	<b>358.41</b>	<b>370.32</b>	<b>382.58</b>

(₹ in lakh)

Asset-C1					
Details	2014-15	2015-16	2016-17	2017-18	2018-19
2 number of 400 kV Sub-station bays	120.60	124.60	128.74	133.02	137.42
8.722 km D/C Twin/Triple Conductor transmission line	6.17	6.38	6.59	6.80	7.03
<b>Total</b>	<b>126.77</b>	<b>130.98</b>	<b>135.33</b>	<b>139.82</b>	<b>144.45</b>



(₹ in lakh)

<b>Asset- C2</b>					
<b>Details</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
2 number of 400 kV Sub-station bays	120.60	124.60	128.74	133.02	137.42
4 number of 220 kV Sub-station bays	168.84	174.44	180.24	186.20	192.40
<b>Total</b>	<b>289.44</b>	<b>299.04</b>	<b>308.98</b>	<b>319.22</b>	<b>329.82</b>

(₹ in lakh)

<b>Asset- C3</b>					
<b>Details</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
4 number of 400 kV Sub-station bays	93.90	174.44	180.24	186.20	192.40
<b>Total</b>	<b>93.90</b>	<b>174.44</b>	<b>180.24</b>	<b>186.20</b>	<b>192.40</b>

(₹ in lakh)

<b>Asset- D</b>					
<b>Details</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
1 number of 400 kV Sub-station bays	33.54	62.30	64.37	66.51	68.71
<b>Total</b>	<b>33.54</b>	<b>62.30</b>	<b>64.37</b>	<b>66.51</b>	<b>68.71</b>

70. The details of O&M Expenses allowed in respect of the transmission assets vide order dated 21.3.2016 in Petition No. 294/TT/2015 for Combined Asset-A, vide order dated 25.2.2016 in Petition No. 063/TT/2015 for Combined Asset-B, vide order dated 29.4.2016 in Petition No. 100/TT/2014 for Asset-C1, Asset-C2 and Asset-C3, vide order dated 30.3.2016 in Petition No. 477/TT/2014 for Asset-D as claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

<b>Asset</b>	<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Combined Asset-A	Allowed vide order dated 21.3.2016 in Petition No. 294/TT/2015	746.88	771.68	797.31	823.75	851.09
	As claimed by the Petitioner	729.36	753.58	778.61	804.41	831.13



Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	Approved after Truing Up	<b>729.36</b>	<b>753.58</b>	<b>778.61</b>	<b>804.41</b>	<b>831.13</b>
Combined Asset-B	Allowed vide order dated 25.2.2016 in Petition No. 063/TT/2015	335.74	346.90	358.41	370.32	382.58
	As claimed by the Petitioner	335.74	346.90	358.41	370.32	382.58
	Approved after Truing Up	<b>335.74</b>	<b>346.90</b>	<b>358.41</b>	<b>370.32</b>	<b>382.58</b>
Asset-C1	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	126.77	130.98	135.33	139.82	144.45
	As claimed by the Petitioner	126.77	130.98	135.33	139.82	144.45
	Approved after Truing Up	<b>126.77</b>	<b>130.98</b>	<b>135.33</b>	<b>139.82</b>	<b>144.45</b>
Asset-C2	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	289.44	299.04	308.98	319.22	329.82
	As claimed by the Petitioner	289.44	299.04	308.98	319.22	329.82
	Approved after Truing Up	<b>289.44</b>	<b>299.04</b>	<b>308.98</b>	<b>319.22</b>	<b>329.82</b>
Asset-C3	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	94.27	174.44	180.24	186.20	192.40
	As claimed by the Petitioner	93.90	174.44	180.24	186.20	192.40
	Approved after Truing Up	<b>93.90</b>	<b>174.44</b>	<b>180.24</b>	<b>186.20</b>	<b>192.40</b>
Asset-D	Allowed vide order dated 30.3.2016 in Petition No. 477/TT/2014	33.53	62.30	64.37	66.51	68.71
	As claimed by the Petitioner	33.54	62.30	64.37	66.51	68.71
	Approved after Truing Up	<b>33.54</b>	<b>62.30</b>	<b>64.37</b>	<b>66.51</b>	<b>68.71</b>



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

71. The Petitioner is entitled to claim interest on working capital as per Regulation 28(1)(c) of the 2014 Tariff Regulations.

72. IWC allowed in respect of the transmission assets is as follows:

(₹ in lakh)

<b>Combined Asset-A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Working Capital for O&M Expenses (O&M Expenses for one month)	60.78	62.80	64.88	67.03	69.26
Working Capital for Maintenance Spares (15% for O&M Expenses)	109.40	113.04	116.79	120.66	124.67
Working Capital for Receivables (Equivalent to two months of annual transmission charges)	668.47	665.06	657.45	649.35	641.66
<b>Total Working Capital</b>	<b>838.66</b>	<b>840.90</b>	<b>839.12</b>	<b>837.05</b>	<b>835.59</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of Working Capital</b>	<b>113.22</b>	<b>113.52</b>	<b>113.28</b>	<b>113.00</b>	<b>112.81</b>

(₹ in lakh)

<b>Combined Asset-B</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Working Capital for O&M Expenses (O&M Expenses for one month)	27.98	28.91	29.87	30.86	31.88
Working Capital for Maintenance Spares (15% for O&M)	50.36	52.04	53.76	55.55	57.39
Working Capital for Receivables (Equivalent to two months of annual transmission charges)	314.04	314.39	311.19	307.54	303.97
<b>Total Working Capital</b>	<b>392.38</b>	<b>395.34</b>	<b>394.82</b>	<b>393.95</b>	<b>393.24</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of Working Capital</b>	<b>52.97</b>	<b>53.37</b>	<b>53.30</b>	<b>53.18</b>	<b>53.09</b>

(₹ in lakh)

<b>Asset- C1</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Working Capital for O&M Expenses (O&M Expenses for one month)	10.56	10.91	11.28	11.65	12.04



Working Capital for Maintenance Spares (15% for O&M Expenses)	19.01	19.65	20.30	20.97	21.67
Working Capital for Receivables (Equivalent to two months of annual transmission charges)	79.27	89.70	95.08	102.07	105.17
<b>Total Working Capital</b>	<b>108.85</b>	<b>120.26</b>	<b>126.65</b>	<b>134.70</b>	<b>138.88</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of Working Capital</b>	<b>14.69</b>	<b>16.24</b>	<b>17.10</b>	<b>18.18</b>	<b>18.75</b>

(₹ in lakh)

Asset- C2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Working Capital for O&M Expenses (O&M Expenses for one month)	24.12	24.92	25.75	26.60	27.49
Working Capital for Maintenance Spares (15% for O&M Expenses)	43.42	44.86	46.35	47.88	49.47
Working Capital for Receivables (Equivalent to two months of annual transmission charges)	204.34	217.32	221.41	223.67	224.09
<b>Total Working Capital</b>	<b>271.88</b>	<b>287.10</b>	<b>293.50</b>	<b>298.15</b>	<b>301.05</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of Working Capital</b>	<b>36.70</b>	<b>38.76</b>	<b>39.62</b>	<b>40.25</b>	<b>40.64</b>

(₹ in lakh)

Asset-C3					
Particulars	2014-15 Pro-rata for 203 days	2015-16	2016-17	2017-18	2018-19
Working Capital for O&M Expenses (O&M Expenses for one month)	14.07	14.54	15.02	15.52	16.03
Working Capital for Maintenance Spares (15% for O&M Expenses)	25.33	26.17	27.04	27.93	28.86
Working Capital for Receivables (Equivalent to two months of annual transmission charges)	45.24	49.74	53.45	56.61	57.91
<b>Total Working Capital</b>	<b>84.63</b>	<b>90.45</b>	<b>95.51</b>	<b>100.05</b>	<b>102.80</b>
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of Working Capital</b>	<b>6.35</b>	<b>12.21</b>	<b>12.89</b>	<b>13.51</b>	<b>13.88</b>



(₹ in lakh)

Asset-D					
Particulars	2014-15 Pro-rata for 203 days	2015-16	2016-17	2017-18	2018-19
Working Capital for O&M Expenses (O&M Expenses for one month)	5.03	5.19	5.36	5.54	5.73
Working Capital for Maintenance Spares (15% for O&M)	9.05	9.35	9.66	9.98	10.31
Working Capital for Receivables (Equivalent to two months of annual transmission charges)	39.09	42.16	42.90	42.92	43.13
<b>Total Working Capital</b>	<b>53.16</b>	<b>56.70</b>	<b>57.92</b>	<b>58.43</b>	<b>59.16</b>
Rate of Interest on Working capital (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest of Working Capital</b>	<b>3.99</b>	<b>7.65</b>	<b>7.82</b>	<b>7.89</b>	<b>7.99</b>

73. The details of IWC allowed in respect of the transmission assets vide order dated 21.3.2016 in Petition No. 294/TT/2015 for Combined Asset-A, vide order dated 25.2.2016 in Petition No. 063/TT/2015 for Combined Asset-B, vide order dated 29.4.2016 in Petition No. 100/TT/2014 for Asset-C1, Asset-C2 and Asset-C3, vide order dated 30.3.2016 in Petition No. 477/TT/2014 for Asset-D as claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-A	Allowed vide order dated 21.3.2016 in Petition No. 294/TT/2015	114.17	115.09	115.45	114.97	114.54
	As claimed by the Petitioner	113.86	114.11	113.82	113.50	113.26
	Approved after Truing Up	<b>113.22</b>	<b>113.52</b>	<b>113.28</b>	<b>113.00</b>	<b>112.81</b>
Combined Asset-B	Allowed vide order dated 25.2.2016 in Petition No. 63/TT/2015	52.91	53.07	52.75	52.45	52.17
	As claimed by the Petitioner	53.23	53.61	53.51	53.38	53.26
	Approved after Truing Up	<b>52.97</b>	<b>53.37</b>	<b>53.30</b>	<b>53.18</b>	<b>53.09</b>
Asset-C1	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	16.73	19.42	19.33	19.25	19.17
	As claimed by the Petitioner	14.91	16.63	17.49	18.56	19.11



Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	Approved after Truing Up	14.69	16.24	17.10	18.18	18.75
Asset- C2	vide order dated 29.4.2016 in Petition No. 100/TT/2014	36.64	40.09	41.84	41.75	41.67
	As claimed by the Petitioner	37.03	39.06	39.89	40.48	40.85
	Approved after Truing Up	36.70	38.76	39.62	40.25	40.64
Asset- C3	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	6.38	12.74	13.61	13.84	14.08
	As claimed by the Petitioner	6.37	12.24	12.93	13.54	13.91
	Approved after Truing Up	6.35	12.21	12.89	13.51	13.88
Asset- D	Allowed vide order dated 30.3.2016 in Petition No. 477/TT/2014	4.00	7.91	8.21	8.20	8.19
	As claimed by the Petitioner	4.05	7.77	7.93	7.99	8.09
	Approved after Truing Up	3.99	7.65	7.82	7.89	7.99

### Approved Annual Fixed Charges for 2014-19 Tariff Period

74. Accordingly, Annual Fixed Charges (AFC) in respect of the transmission assets after truing-up for 2014-19 tariff period are as follows:

(₹ in lakh)

Combined Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	904.28	913.01	916.59	919.19	921.28
Interest on Loan	1082.26	1012.39	934.14	854.29	773.78
Return on Equity	1181.72	1197.86	1202.06	1205.21	1210.97
O & M Expenses	729.36	753.58	778.61	804.41	831.13
Interest on Working Capital	113.22	113.52	113.28	113.00	112.81
<b>Total</b>	<b>4010.84</b>	<b>3990.36</b>	<b>3944.68</b>	<b>3896.10</b>	<b>3849.97</b>

(₹ in lakh)

Combined Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	457.68	466.50	470.06	472.85	475.19
Interest on Loan	484.42	453.59	415.41	375.78	335.68
Return on Equity	553.43	565.99	569.98	573.10	577.27
O & M Expenses	335.74	346.90	358.41	370.32	382.58
Interest on Working Capital	52.97	53.37	53.30	53.18	53.09
<b>Total</b>	<b>1884.24</b>	<b>1886.35</b>	<b>1867.16</b>	<b>1845.23</b>	<b>1823.81</b>

(₹ in lakh)

Asset- C1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	96.67	116.33	126.02	139.15	147.32
Interest on Loan	121.27	135.78	139.33	144.94	140.50
Return on Equity	116.23	138.89	152.69	170.35	180.01
O & M Expenses	126.77	130.98	135.33	139.82	144.45
Interest on working capital	14.69	16.24	17.10	18.18	18.75
<b>Total</b>	<b>475.63</b>	<b>538.22</b>	<b>570.47</b>	<b>612.44</b>	<b>631.03</b>



(₹ in lakh)

<b>Asset- C2</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	247.46	273.27	284.53	293.01	298.33
Interest on Loan	333.17	342.14	330.44	313.56	292.54
Return on Equity	319.30	350.71	364.87	375.96	383.19
O & M Expenses	289.44	299.04	308.98	319.22	329.82
Interest on working capital	36.70	38.76	39.62	40.25	40.64
<b>Total</b>	<b>1226.07</b>	<b>1303.92</b>	<b>1328.44</b>	<b>1342.00</b>	<b>1344.52</b>

(₹ in lakh)

<b>Asset- C3</b>					
<b>Particulars</b>	<b>2014-15 Pro-rata for 203 days</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	14.75	33.27	38.30	42.51	44.08
Interest on Loan	18.96	40.04	43.58	45.48	43.18
Return on Equity	16.98	38.50	45.68	51.95	53.92
O & M Expenses	93.90	174.44	180.24	186.20	192.40
Interest on working capital	6.35	12.21	12.89	13.51	13.88
<b>Total</b>	<b>150.94</b>	<b>298.46</b>	<b>320.69</b>	<b>339.65</b>	<b>347.46</b>

(₹ in lakh)

<b>Asset- D</b>					
<b>Particulars</b>	<b>2014-15 Pro-rata for 203 days</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	25.31	51.72	54.35	56.14	57.59
Interest on Loan	36.11	67.39	64.01	58.09	53.84
Return on Equity	31.51	63.90	66.85	68.85	70.66
O & M Expenses	33.54	62.30	64.37	66.51	68.71
Interest on working capital	3.99	7.65	7.82	7.89	7.99
<b>Total</b>	<b>130.46</b>	<b>252.96</b>	<b>257.40</b>	<b>257.48</b>	<b>258.79</b>

75. The details of AFC allowed in respect of the transmission assets vide order dated 21.3.2016 in Petition No. 294/TT/2015 for Combined Asset-A, vide order dated 25.2.2016 in Petition No. 063/TT/2015 for Combined Asset-B, vide order dated 29.4.2016 in Petition No. 100/TT/2014 for Asset-C1, Asset-C2 and Asset-C3, vide order dated 30.3.2016 in Petition No. 477/TT/2014 for Asset-D as claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:





(₹ in lakh)

Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-A	Allowed vide order dated 21.3.2016 in Petition No. 294/TT/2015	4028.76	4034.62	4014.70	3956.33	3899.09
	Claimed by the Petitioner	4039.28	4016.69	3968.55	3918.15	3870.19
	Approved after Truing Up	<b>4010.84</b>	<b>3990.36</b>	<b>3944.68</b>	<b>3896.10</b>	<b>3849.97</b>
Combined Asset-B	Allowed vide order dated 25.2.2016 in Petition No. 63/TT/2015	1881.72	1873.22	1842.73	1812.69	1783.04
	As claimed by the Petitioner	1895.62	1896.81	1876.51	1853.82	1831.58
	Approved after Truing Up	<b>1884.24</b>	<b>1886.35</b>	<b>1867.16</b>	<b>1845.23</b>	<b>1823.81</b>
Asset-C1	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	566.03	679.93	669.81	659.81	649.96
	Claimed by the Petitioner	485.19	555.91	587.67	629.09	647.15
	Approved after Truing Up	<b>475.63</b>	<b>538.22</b>	<b>570.47</b>	<b>612.44</b>	<b>631.03</b>
Asset- C2	vide order dated 29.4.2016 in Petition No. 100/TT/2014	1223.28	1363.11	1427.15	1408.55	1390.39
	Claimed by the Petitioner	1240.57	1317.20	1340.20	1352.41	1353.60
	Approved after Truing Up	<b>1226.07</b>	<b>1303.92</b>	<b>1328.44</b>	<b>1342.00</b>	<b>1344.52</b>
Asset- C3	Allowed vide order dated 29.4.2016 in Petition No. 100/TT/2014	151.58	321.89	352.73	354.41	356.41
	Claimed by the Petitioner	151.60	299.88	322.33	341.21	348.98
	Approved after Truing Up	<b>150.94</b>	<b>298.46</b>	<b>320.69</b>	<b>339.65</b>	<b>347.46</b>
Asset- D	Allowed vide order dated 30.3.2016 in Petition No. 477/TT/2014	131.03	264.18	274.76	271.25	267.80
	Claimed by the Petitioner	133.18	258.08	262.45	262.20	263.19
	Approved after Truing Up	<b>130.46</b>	<b>252.96</b>	<b>257.40</b>	<b>257.48</b>	<b>258.79</b>

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

76. The Petitioner has considered the transmission assets into one single asset and has claimed combined tariff during 2019-24 period and has also



submitted the tariff forms in respect of the Combined Asset. During the course of hearing held on 20.4.2021, the Petitioner submitted that transmission charges for 4 number of bays covered under Asset-C3, were billed to Rajasthan till 2018. However, now transmission charges for 2 number of bays which have achieved COD have been included in POC, while transmission charges for 2 number of remaining bays which have not been put under commercial operation are still being billed bilaterally to Rajasthan. Considering this, the transmission assets cannot be combined at this stage till the downstream system of Asset-C3 are still under execution. As such, Combined Asset-A, Combined Asset-B, Asset-C1, Asset-C2 and Asset-D are combined into one asset and separate tariff is allowed for Asset-C3. Accordingly, as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, single tariff with respect to Combined Asset-A, Combined Asset-B, Asset-C1, Asset-C-2 and Asset-D has been worked out for 2019-24 tariff period.

77. The Petitioner has claimed the following transmission charges in respect of the Combined Asset for 2019-24 tariff period:

(₹ in lakh)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	2030.47	1996.64	1968.88	1968.88	1968.88
Interest on Loan	1477.03	1314.06	1136.51	961.01	785.28
Return on Equity	2393.21	2409.55	2409.55	2409.55	2409.55
O&M Expenses	1490.28	1542.96	1596.85	1653.25	1709.59
Interest on Working Capital	153.68	153.57	152.82	152.64	152.16
<b>Total</b>	<b>7544.67</b>	<b>7416.78</b>	<b>7264.61</b>	<b>7145.33</b>	<b>7025.46</b>

78. The Petitioner has claimed the following IWC in respect of the Combined Asset for 2019-24 tariff period:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	124.19	128.58	133.07	137.77	142.47
Maintenance Spares	223.54	231.44	239.53	247.99	256.44
Receivables	927.62	914.40	895.64	880.93	863.79
Total	1275.35	1274.42	1268.24	1266.69	1262.70
Rate of Interest on working capital (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	153.68	153.57	152.82	152.64	152.16

### **Effective Date of Commercial Operation (“E-COD”)**

79. The Petitioner has claimed E-COD of the Combined Asset as 25.10.2012.

Based on the trued-up admitted capital cost and actual COD of all the assets,

E-COD has been worked out as follows:

Computation of E-COD						
Asset	Actual COD	Admitted Capital Cost as on 31.3.2019	Weight of the cost (in %)	No. of Days from last COD	Weighted Days	Effective COD (Latest COD – Total weighted Days)
Combined Asset- A	12.4.2012	20455.45	49.84	881.00	439.10	1.10.2012
Combined Asset- B	12.1.2012	9766.28	23.80	972.00	231.30	
Asset- C1	1.4.2014	3071.90	7.48	162.00	12.13	
Asset- C2	1.4.2014	6534.91	15.92	162.00	25.80	
Asset- D	10.9.2014	1212.56	2.95	0.00	0.00	

80. E-COD is used to determine the lapsed life of the project as a whole which works out as (6) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

### **Weighted Average Life (“WAL”)**

81. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL.

82. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different



span of life. Therefore, concept of Weighted Average Life (WAL) has been used as useful life of the project as a whole.

83. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. Life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 29 years and the same is as follows:

<b>Admitted Capital Cost as on 31.03.2019</b>				
<b>Particulars</b>	<b>Combined Asset Cost (₹ in lakh) (1)</b>	<b>Life as per 2019 Regulation (Years) (2)</b>	<b>Weighted Cost (3)=(1)x(2)</b>	<b>Weighted Average Life of Asset (in years) (4)=(3)/(1)</b>
Building	<b>1887.73</b>	25	<b>47193.35</b>	
Transmission Line	<b>14859.31</b>	35	<b>520075.84</b>	
Sub-station	<b>19129.07</b>	25	<b>478226.76</b>	
PLCC	<b>406.91</b>	15	<b>6103.58</b>	
Leasehold Land	<b>0.00</b>	25	<b>0.00</b>	
IT Equipment and software	<b>487.08</b>	7	<b>3247.22</b>	
<b>Total</b>	<b>36770.10</b>		<b>1054846.75</b>	<b>28.69 (rounded off to 29 years)</b>

84. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed in the preceding paragraphs, E-COD of the transmission assets is 3.10.2012 and lapsed life of the project as a whole, works out as six (6) years as on 1.4.2019



(i.e. the number of completed years as on 1.4.2019 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 26 years.

### **Capital Cost**

85. Regulations 19 of the 2019 Tariff Regulations provide as follows:

**“19. Capital Cost:** (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-iring;*

(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 renovation and modernisation as admitted by this Commission in accordance with these regulations;*
- (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 upto 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 de-capitalised 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.”

86. Capital cost has been dealt in line with Regulation 19 (3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, sub-station and PLCC) as admitted by the Commission as on 31.3.2019 in respect of the transmission assets clubbed together and Asset- C3 are as follows:

						(₹ in lakh)
Elements	Combined Asset- A	Combined Asset- B	Asset- C1	Asset- C2	Asset- D	Capital Cost for Combined Assets as on 31.3.2019
Land	2782.85	694.21	122.11	610.69	61.13	4270.99
Building	613.27	207.32	366.68	590.70	109.76	1887.73
Transmission Line	7602.67	6073.76	1182.88	0.00	0.00	14859.30
Sub-station	9154.06	2555.46	1290.99	5114.96	1013.60	19129.10
PLCC	133.31	156.72	50.67	66.20	0.00	406.90
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0
IT Equipment and software	169.29	78.80	58.56	152.36	28.07	487.08
<b>Total</b>	<b>20455.45</b>	<b>9766.28</b>	<b>3071.90</b>	<b>6534.91</b>	<b>1212.56</b>	<b>41041.09</b>

		(₹ in lakh)
Elements	Asset- C3	
Land	0.00	
Building	206.69	
Transmission Line	0.00	
Sub-station	694.85	
PLCC	4.91	
Leasehold Land	0.00	
IT Equipment and software	23.92	
<b>Total</b>	<b>930.36</b>	





## **Additional Capital Expenditure (“ACE”)**

87. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provides as follows:

**“24. Additional Capitalization 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.”

88. The Petitioner has claimed ACE in respect of the Combined Asset and Asset-C3 during 2019-24 in accordance with Regulation 25(1)(d) of the 2019 Tariff Regulations as follows:

(₹ in lakh)

Asset Nomenclature in Current Petition	Asset	Apportioned Approved Cost as per RCE	Capital Cost as on 31.3.2019	Actual Add Cap for					Total cost as on 31.3.2024
				2019-20	2020-21	2021-22	2022-23	2023-24	
Combined Asset-A	Asset-I	12554.78	<b>10666.28</b>	30.00	0.00	0.00	0.00	0.00	<b>10696.28</b>
	Asset-II	5415.25	<b>5201.98</b>	0.00	0.00	0.00	0.00	0.00	<b>5201.98</b>
	Asset III	5215.25	<b>4652.08</b>	130.00	0.00	0.00	0.00	0.00	<b>4782.08</b>
Combined Asset-B	Asset-IV	9053.62	<b>8228.63</b>	30.00	0.00	0.00	0.00	0.00	<b>8258.63</b>
	Asset-V	1704.29	<b>1557.66</b>	50.00	0.00	0.00	0.00	0.00	<b>1607.66</b>
Asset-C1	Asset- VI	3215.77	<b>3173.25</b>	30.00	0.00	0.00	0.00	0.00	<b>3203.25</b>
Asset-C2	Asset- VII	7543.10	<b>6534.91</b>	240.00	0.00	0.00	0.00	0.00	<b>6774.91</b>
Asset- C3	Asset- VIII	1028.60	<b>939.96</b>	20.00	0.00	0.00	0.00	0.00	<b>959.96</b>
Asset-D	Asset- IX	1345.97	<b>1228.73</b>	50.00	0.00	0.00	0.00	0.00	<b>1278.73</b>
	<b>Total</b>	<b>47076.63</b>	<b>42183.48</b>	<b>580.00</b>	0.00	0.00	0.00	0.00	<b>42763.48</b>

89. We have considered the submissions of the Petitioner. The additional capital expenditure (ACE) claimed by the Petitioner is allowed subject to true-up. The ACE provisionally approved in respect of the Combined Asset and Asset-C3 is as follows:

(₹ in lakh)

Particulars	Regulation	ACE (2019-24)
Combined Asset	Regulation 25(1)(d)* of the 2019 Tariff Regulations	560.00
Asset- C3		20.00

\* Liability for works executed prior to the cut-off date



### Capital Cost for 2019-24 tariff period

90. Accordingly, capital cost of the Combined Asset and Asset-C3 considered for 2019-24 tariff period, subject to truing-up is as follows:

(₹ in lakh)			
Particulars	Capital Cost (As on 1.4.2019)	ACE (2019-24)	Total Estimated Completion Cost (Up to 31.3.2024)
Combined Asset	41041.09	560.00	41601.09
Asset-C3	930.36	20.00	950.36
<b>Total</b>	<b>41971.45</b>	<b>580</b>	<b>42551.45</b>

91. Against the overall apportioned approved capital cost as per RCE of ₹42561.25 lakh, the estimated project cost of the Combined Asset and Asset-C3 including ACE is ₹ 42551.45 lakh which is within the apportioned cost as per RCE. Therefore, there is no cost over-run as per the apportioned approved cost.

92. As stated in paragraph 45 above, the Initial Spares shall be allowed as per the APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017 when all the transmission assets are combined and the total project cost is arrived at.

### Debt-Equity Ratio

93. Regulation 18 of the 2019 Tariff Regulations provides as follows:

**“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.*



**Explanation-**The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

(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.

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation.”

94. The details of debt-equity considered in respect of Combined Asset and Asset-C3 for the purpose of tariff for 2019-24 tariff period are as follows:



(₹ in lakh)

Combined Assets	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	28728.82	70.00	29120.82	70.00
Equity	12312.28	30.00	12480.28	30.00
Total	<b>41041.09</b>	<b>100.00</b>	<b>41601.09</b>	<b>100.00</b>

(₹ in lakh)

Asset-C3	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	651.27	70.00	665.27	70.00
Equity	279.10	30.00	285.10	30.00
Total	<b>930.36</b>	<b>100.00</b>	<b>950.36</b>	<b>100.00</b>

### Depreciation

95. Regulation 33 of the 2019 Tariff Regulations provide as follows:

**"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 thereof 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.*

*(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.*

*(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the*



generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-

a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or

b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or

c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”

96. IT equipment has been considered as a part of the Gross Block and depreciated using Weighted Average Rate of Depreciation (WAROD). The Weighted Average Rate of Depreciation (WAROD) has been worked out at Annexure-II after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 per cent 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. Depreciation allowed in respect of the Combined Asset and Asset- C3 is as follows:

(₹ in lakh)

Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	41041.09	41601.09	41601.09	41601.09	41601.09
B	Addition during the year 2019-24 due to projected ACE	560.00	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	41601.09	41601.09	41601.09	41601.09	41601.09
D	Average Gross Block (A+C)/2	41321.09	41601.09	41601.09	41601.09	41601.09
E	Average Gross Block (90% depreciable assets)	36563.02	36843.02	36843.02	36843.02	36843.02
F	Average Gross Block (100% depreciable assets)	487.08	487.08	487.08	487.08	487.08





<b>Combined Asset</b>						
	<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
G	Depreciable value (excluding IT equipment and software) (E*90%)	32906.72	33158.72	33158.72	33158.72	33158.72
H	Depreciable value of IT equipment and software	487.09	487.09	487.09	487.09	487.09
I	Total Depreciable Value (G+H)	33393.80	33645.80	33645.80	33645.80	33645.80
J	Weighted average rate of Depreciation (WAROD) (in %)	4.77	4.77	4.77	4.77	4.76
K	Lapsed useful life at the beginning of the year (Year)	6	7	8	9	10
L	Balance useful life at the beginning of the year (Year)	23	22	21	20	19
M	<b>Depreciation during the year (D*J)</b>	<b>1971.24</b>	<b>1986.02</b>	<b>1986.02</b>	<b>1986.02</b>	<b>1980.10</b>
N	Aggregate Cumulative Depreciation at the end of the year	13732.46	15718.48	17704.50	19690.53	21670.63
O	Remaining Aggregate Depreciable Value at the end of the year (I-N)	19661.34	17927.32	15941.30	13955.27	11975.17

(₹ in lakh)

<b>Asset-C3</b>						
	<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
A	Opening Gross Block	930.36	950.36	950.36	950.36	950.36
B	Addition during the year 2019-24 due to projected ACE	20.00	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	950.36	950.36	950.36	950.36	950.36
D	Average Gross Block (A+C)/2	940.36	950.36	950.36	950.36	950.36
E	Average Gross Block (90% depreciable assets)	916.45	926.45	926.45	926.45	926.45
F	Average Gross Block (100% depreciable assets)	23.92	23.92	23.92	23.92	23.92
G	Depreciable value (excluding IT equipment and software) (E*90%)	824.80	833.80	833.80	833.80	833.80
H	Depreciable value of IT equipment and software	23.92	23.92	23.92	23.92	23.92
I	Total Depreciable Value (G+H)	848.72	857.72	857.72	857.72	857.72



J	Weighted average rate of Depreciation (WAROD) (in %)	5.11	5.11	5.11	5.11	5.11
K	Lapsed useful life at the beginning of the year (Year)	4	5	6	7	8
L	Balance useful life at the beginning of the year (Year)	20	19	18	17	16
M	<b>Depreciation during the year(D*J)</b>	<b>48.02</b>	<b>48.55</b>	<b>48.55</b>	<b>48.55</b>	<b>48.55</b>
N	Aggregate Cumulative Depreciation at the end of the year	220.93	269.48	318.02	366.57	415.11
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	627.79	588.24	539.70	491.15	442.61

### **Interest on Loan (“IoL”)**

97. Regulation 32 of the 2019 Tariff Regulations provides as follows:

**“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.*





(5a) The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company 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”.

98. The weighted average rate of IoL has been considered on the basis of the rate prevailing as on 1.4.2019. The Petitioner has prayed that 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. In view of the above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL considered in respect of the Combined Asset and Asset-C3 is as follows:

(₹ in lakh)						
<b>Combined Asset</b>						
	<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
A	Gross Normative Loan	28728.82	29120.82	29120.82	29120.82	29120.82
B	Cumulative Repayments up to Previous Year	11761.22	13732.46	15718.48	17704.50	19690.53
C	Net Loan-Opening (A-B)	16967.60	15388.36	13402.34	11416.32	9430.29
D	Addition due to ACE	392.00	0.00	0.00	0.00	0.00
E	Repayment during the year	1971.24	1986.02	1986.02	1986.02	1980.10
F	Net Loan-Closing(C+D-E)	15388.36	13402.34	11416.32	9430.29	7450.19
G	Average Loan (A+F)/2	16177.98	14395.35	12409.33	10423.30	8440.24
H	Weighted Average Rate of Interest on Loan (in %)	8.971	8.967	8.968	8.977	8.988
I	<b>Interest on Loan (GxH)</b>	<b>1451.36</b>	<b>1290.84</b>	<b>1112.83</b>	<b>935.66</b>	<b>758.63</b>

(₹ in lakh)						
<b>Asset- C3</b>						
	<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
A	Gross Normative Loan	651.27	665.27	665.27	665.27	665.27
B	Cumulative Repayments up	172.91	220.93	269.48	318.02	366.57



Asset- C3						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	to Previous Year					
C	Net Loan-Opening (A-B)	478.36	444.34	395.79	347.25	298.70
D	Addition due to ACE	14.00	0.00	0.00	0.00	0.00
E	Repayment during the year	48.02	48.55	48.55	48.55	48.55
F	Net Loan-Closing(C+D-E)	444.34	395.79	347.25	298.70	250.15
G	Average Loan (A+F)/2	461.35	420.06	371.52	322.97	274.43
H	Weighted Average Rate of Interest on Loan (in %)	8.652	8.633	8.651	8.672	8.673
I	<b>Interest on Loan (GxH)</b>	<b>39.92</b>	<b>36.26</b>	<b>32.14</b>	<b>28.01</b>	<b>23.80</b>

### **Return on Equity (“RoE”)**

99. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as follows:

**“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 on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.*

*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.

(3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one-year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODe) occurs plus 350 basis point, subject to ceiling of 14%;

**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:

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

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.

**Illustration-**

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:



$Rate\ of\ return\ on\ equity = 15.50 / (1 - 0.2155) = 19.758\%$

*(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:*

*(a) Estimated Gross Income from generation or transmission business for FY 2019- 20 is Rs 1,000 crore;*

*(b) Estimated Advance Tax for the year on above is Rs 240 crore;*

*(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;*

*(d) Rate of return on equity =  $15.50 / (1 - 0.24) = 20.395\%$ .*

*(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."*

100. BRPL has submitted that as per Regulation 31(3) of the 2019 Tariff Regulations, the Petitioner has a statutory duty to undertake the true up of the grossed-up rate of RoE at the end of every financial year based on actual tax paid.

101. In response, the Petitioner has submitted that as per Regulation 31(3) of the 2019 Tariff Regulations, the transmission licensee has to gross up the 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 including any penalty. The Petitioner has further submitted that income tax has been deposited and income tax return has been filed with the



income tax authority within the scheduled timeline notified by the Income Tax Department from time to time. However, the amount of 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 including any penalty is worked out by the income tax department through assessment order and is beyond the control of the petitioner.

102. The Petitioner has submitted that it is paying income tax at MAT rate and if any interest / penalty is levied by the Income Tax Department as per assessment order, and the same is considered by the Petitioner for working out the effective tax rate, this would result into a higher effective tax rate than that of MAT rate.

103. The Petitioner has submitted that the Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019, allowed effective tax rate on the basis of MAT rate notified by the Government.

104. We have considered the submissions of the Petitioner and BRPL. 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.

105. RoE considered in respect of the Combined Asset and Asset-C3 under Regulation 30 of the 2019 Tariff Regulations is as follows:



(₹ in lakh)

Combined Asset						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	12312.28	12480.28	12480.28	12480.28	12480.28
B	Addition due to ACE	168.00	0.00	0.00	0.00	0.00
C	Closing Equity (A+B)	12480.28	12480.28	12480.28	12480.28	12480.28
D	Average Equity(A+B)/2	12396.28	12480.28	12480.28	12480.28	12480.28
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
H	<b>Return on Equity (Pre-tax)</b>	<b>2328.27</b>	<b>2344.05</b>	<b>2344.05</b>	<b>2344.05</b>	<b>2344.05</b>

(₹ in lakh)

Asset-C3						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	279.10	285.10	285.10	285.10	285.10
B	Addition due to ACE	6.00	0.00	0.00	0.00	0.00
C	Closing Equity (A+B)	285.10	285.10	285.10	285.10	285.10
D	Average Equity(A+B)/2	282.10	285.10	285.10	285.10	285.10
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
H	<b>Return on Equity (Pre-tax)</b>	<b>52.98</b>	<b>53.55</b>	<b>53.55</b>	<b>53.55</b>	<b>53.55</b>

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

106. Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulation provide as follows:

**“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
<b>Norms for sub-station Bays (₹ Lakh per bay)</b>					
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
<b>Norms for Transformers (₹ Lakh per MVA)</b>					
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
132 kV and below	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>
<b>Norms for AC and HVDC lines (₹ Lakh per km)</b>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	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 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	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.”

107. O&M Expenses claimed by the Petitioner are in accordance with Regulation 35(3) and Regulation 35(4) of the 2019 Tariff Regulations and the same is considered in respect of the Combined Asset as follows:

(₹ in lakh)

Combined Asset				
Transmission lines				
Srl. No.	Name of Line	Single Circuit / Double Circuit	No of Sub-Conductors	Line Length Km
1	400 kV D/C Manesar-Neemrana TL	Double Circuit	2	67.037
2	400 kV D/C Bhiwadi-Neemrana Line	Double Circuit	2	48.428
3	LILO of 400 kV S/C	Double Circuit	2	8.722





Combined Asset					
Transmission lines					
Srl. No.	Name of Line	Single Circuit / Double Circuit	No of Sub-Conductors	Line Length Km	
	Bhiwadi Bassi TL at Kotputli				
<b>Sl. No.</b>	<b>400 kV Substation Bay</b>				
1	Kotputli: 80 MVAR Bus Reactor at Kotputli under NRSS-XV				
2	Neemrana: ICT-II Bay at Neemrana				
3	Manesar: Neemrana Line I and II GIS Bay at Manesar				
4	Neemrana: Manesar Line I and II Bay				
5	Neemrana: ICT-I 400 kV Bay at Neemrana				
6	Neemrana: 80 MVAR Bus Reactor at Neemrana				
7	Neemrana: 400 kV line bays (Neemrana)				
8	Bhiwadi: 400 kV line bays (Bhiwadi)				
9	Kotputli: 400 kV ICT bay at Kotputli				
10	Kotputli: Bassi Bay I at Kotputli				
11	Kotputli: Bhiwadi Bay I at Kotputli				
<b>Sl. No.</b>	<b>220 kV Sub-station Bay</b>				
1	Neemrana: ICT-II Bay at Neemrana				
2	Neemrana: Line Bays at Neemrana				
3	Neemrana: ICT-I 220 kV Bay at Neemrana				
4	Neemrana: 220 kV line bay at Neemrana				
5	Kotputli: Line Bays at Kotputli				
6	Kotputli: 200 kV ICT bay at Kotputli				
7	Kotputli: 200 kV Downstream line bay at Kotputli				
<b>Sl. No.</b>	<b>400 kV ICT</b>				
1	Kotputli: 400 kV ICT at Kotputli				
2	Neemrana: 500 MVA ICT at Neemrana				
3	Neemrana: 315 MVA ICT at Neemrana				
O&M Expenses					
	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Sub-station</b>					
220 kV					
Number of bays	12	12	12	12	12
400 kV					
Number of bays	18	18	18	18	18
400 kV GIS					
Number of bays	2	2	2	2	2
<b>Transmission lines</b>					
D/C Twin/Triple Conductor (km)	124.187	124.187	124.187	124.187	124.187
<b>Transformer</b>					
400 kV	1445	1445	1445	1445	1445



<b>PLCC</b>					
Original project cost (₹ in lakh)	414.32	414.32	414.32	414.32	414.32
<b>Total O&amp;M Expense (₹ in lakh)</b>					

108. The Petitioner has claimed O&M Expenses separately for PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition and the Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station have been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.

109. O&M Expenses allowed in respect of the Combined Asset and Asset-C3 for 2019-24 tariff period are as follows:

(₹ in lakh)

<b>Combined Asset</b>					
<b>Details</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
14 Number of 400 kV Sub-station bays	450.10	465.92	482.30	499.24	516.74
2 Number of 400 kV Sub-station GIS bays	45.01	46.59	48.23	49.92	51.67
12 Number of 220 kV Sub-station bays	270.12	279.60	289.44	299.52	310.08
1445 MVA of 400 kV Transformer	517.31	536.10	554.88	575.11	593.90
124.187 km D/C Twin/Triple Conductor transmission line	109.41	113.26	117.23	121.33	125.55
<b>Total</b>	<b>1391.95</b>	<b>1441.47</b>	<b>1492.08</b>	<b>1545.12</b>	<b>1597.94</b>



(₹ in lakh)

Asset- C3					
Details	2019-20	2020-21	2021-22	2022-23	2023-24
4 Number of 220 kV Sub-station bays	90.04	93.20	96.48	99.84	103.36
<b>Total</b>	<b>90.04</b>	<b>93.20</b>	<b>96.48</b>	<b>99.84</b>	<b>103.36</b>

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

110. Regulation 34(1)(c), Regulation 34(3) and Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specify as follows:

**“34. Interest on Working Capital:** (1) *The working capital shall cover:*

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

*(i) Receivables equivalent to 45 days of annual 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. Definition** - *In these regulations, unless the context otherwise requires:-*

**(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;”*

111. The Petitioner has submitted that it has computed IWC for 2019-24 period considering SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in



accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21, 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-22 and 10.60% (SBI 1-year MCLR applicable as on 1.4.2022 of 7.10% plus 350 basis points) for 2022-24. The components of the working capital and interest allowed thereon is as follows:

(₹ in lakh)

<b>Combined Asset</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Working Capital for O & M Expenses (O&M Expenses for one month)	116.00	120.12	124.34	128.76	133.16
Working Capital for Maintenance Spares (15 % of O&M Expenses)	208.79	216.22	223.81	231.77	239.69
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/annual transmission charges)	896.31	887.68	870.78	855.59	837.17
<b>Total</b>	<b>1221.10</b>	<b>1224.02</b>	<b>1218.93</b>	<b>1216.12</b>	<b>1210.02</b>
Rate of Interest (in %)	12.05	11.25	10.50	10.60	10.60
<b>Interest of working capital</b>	<b>147.14</b>	<b>137.70</b>	<b>127.99</b>	<b>128.91</b>	<b>128.26</b>

(₹ in lakh)

<b>Asset-C3</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Working Capital for O & M Expenses (O&M Expenses for one month)	7.50	7.77	8.04	8.32	8.61
Working Capital for Maintenance Spares (15 % of O&M Expenses)	13.51	13.98	14.47	14.98	15.50
Working Capital for receivables (Equivalent to 45 days of annual fixed cost/annual transmission charges)	29.14	29.26	29.11	29.03	28.88
<b>Total</b>	<b>50.15</b>	<b>51.00</b>	<b>51.62</b>	<b>52.33</b>	<b>52.99</b>
Rate of Interest (in %)	12.05	11.25	10.50	10.60	10.60
<b>Interest of working capital</b>	<b>6.04</b>	<b>5.74</b>	<b>5.42</b>	<b>5.55</b>	<b>5.62</b>



### **Annual Fixed Charges for 2019-24 Tariff Period**

112. Various components of Annual Fixed Charges (AFC) in respect of Combined Asset and Asset-C3 for 2019-24 tariff period are as follows:

(₹ in lakh)

<b>Combined Asset</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>201-22</b>	<b>2022-23</b>	<b>2023-24</b>
Depreciation	1971.24	1986.02	1986.02	1986.02	1980.10
Interest on Loan	1451.36	1290.84	1112.83	935.66	758.63
Return on Equity	2328.27	2344.05	2344.05	2344.05	2344.05
O&M Expenses	1391.95	1441.47	1492.08	1545.12	1597.94
Interest on Working Capital	147.14	137.70	127.99	128.91	128.26
<b>Total</b>	<b>7289.96</b>	<b>7200.08</b>	<b>7062.97</b>	<b>6939.76</b>	<b>6808.98</b>

(₹ in lakh)

<b>Asset-C3</b>					
<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>201-22</b>	<b>2022-23</b>	<b>2023-24</b>
Depreciation	48.02	48.55	48.55	48.55	48.55
Interest on Loan	39.92	36.26	32.14	28.01	23.80
Return on Equity	52.98	53.55	53.55	53.55	53.55
O&M Expenses	90.04	93.20	96.48	99.84	103.36
Interest on Working Capital	6.04	5.74	5.42	5.55	5.62
<b>Total</b>	<b>237.00</b>	<b>237.30</b>	<b>236.14</b>	<b>235.50</b>	<b>234.88</b>

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

113. The Petitioner has prayed for reimbursement of fees paid by it for filing the petition and publication expenses in terms of Regulation 70(1) of the 2019 Tariff Regulations.

114. BRPL has submitted that though the Commission can allow filing fees and publication expenses at its discretion under Regulation 70(1) of the 2019 Tariff Regulations. However, exercise of such discretion is a judicial discretion in the adjudication of tariff for which no justification has been offered by the Petitioner. BRPL has further submitted that the Commission vide order dated



11.9.2009 in Petition No. 129 of 2005 declined the Petitioner's claim for reimbursement of the application fees.

115. In response, the Petitioner has submitted that the Commission vide order dated 28.3.2016 in Petition No. 137/TT/2015 has rejected similar contentions on the same issue and allowed recovery of petition filing fees and publication of notices from the beneficiaries on pro rata basis. Accordingly, the Petitioner may be allowed to claim the filing fees and expenses incurred on publication of notices from the beneficiaries.

116. We have considered the submissions of the Petitioner and BRPL. 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 and RLDC Fees and Charges**

117. The Petitioner has prayed for reimbursement of licence fee and RLDC fees and charges.

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



### **Goods and Services Tax**

119. 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 Respondents 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 Government/Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

120. BRPL has objected to the prayer of the Petitioner regarding GST.

121. In response, the Petitioner has reiterated its submission as stated in the petition.

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

### **Security Expenses**

123. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and consequential IWC.

124. BRPL has submitted that if separate petitions are to be filed for claiming security expenses, then there is no need for IWC as the same is claimed in advance. BRPL also submitted that the Petitioner should clarify the provision of Regulations under which such a claim has been made.



125. In response, the Petitioner has reiterated its submissions and added that IWC claimed in the instant petition is exclusive of security expenses and it shall be claimed separately in a separate petition along with all other assets in accordance with the 2019 Tariff Regulations.

126. We have considered the submissions of the Petitioner and BRPL. The Petitioner has claimed consolidated security expenses on projected basis for 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

### **Capital Spares**

127. The Petitioner has sought reimbursement of capital spares at the end of tariff period. BRPL has submitted that capital spares may be allowed separately after prudence check.

128. We have considered the submissions of the Petitioner and BRPL. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

### **Sharing of Transmission Charges**

129. COD of Asset-C3 (Asset-VIII):04 number of 220 kV line bays at Kotputli the was approved as 10.9.2014 under proviso (ii) to Regulation 4(3) of the





2014 Tariff Regulations vide order dated 29.4.2016 in Petition No. 100/TT/2014 and the Commission held that its transmission charges shall be borne by the beneficiary DISCOM till the execution of their downstream system. The Relevant extracts of the order dated 29.4.2016 in Petition No. 100/TT/2014 is as follows:

*“46. The transmission charges for the instant assets shall be borne by the beneficiary Discom till the commissioning of the downstream system. Once the downstream system is commissioned by the Discom, 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.”*

130. The Petitioner has submitted that two out of the four line bays at Kotputli Sub-station were charged on 11.1.2018 and the remaining two number of the line bays have not yet been put under commercial operation. Therefore, the transmission charges of the two line bays will be billed directly to Rajasthan till the commercial operation of the same is achieved.

131. We have considered the submissions of the Petitioner. As stated above, the Commission in order dated 29.4.2016 in Petition No. 100/TT/2014 held that the transmission charges of four number of line bays at Kotputli Sub-station included in Asset-C3 from 10.9.2014 shall be borne by beneficiary DISCOM till execution of their downstream system. Two of the four line bays at Kotputli Sub-station have been put into commercial operation on 11.1.2018. Therefore, the transmission charges approved for Asset-VIII in this order shall be borne Rajasthan Discoms from 10.9.2014 to 10.1.2018. As two of the line bays have been charged and put into commercial operation 11.1.2018, 50% of the tariff allowed in this order for Asset-VIII shall be included in the PoC from 11.1.2018 and the remaining 50% of the transmission charges shall be borne by



Rajasthan Discoms till the associated downstream transmission line under the scope of Rajasthan Discoms are put into commercial operation. Thereafter, it will be included in the PoC charges.

132. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission system was governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2010 (2010 Sharing Regulations). With effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (the 2020 Sharing Regulations). Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. For subsequent period, the billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

133. To summarise:

- a) Trued-up Annual Fixed Charges (AFC) allowed in respect of the transmission assets for 2014-19 tariff period are as follows:

(₹ in lakh)					
<b>Asset A</b>					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>AFC</b>	4010.84	3990.36	3944.68	3896.10	3849.97



(₹ in lakh)

Asset B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	1884.24	1886.35	1867.16	1845.23	1823.81

(₹ in lakh)

Asset C1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	475.63	538.22	570.47	612.44	631.03

(₹ in lakh)

Asset C2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	1226.07	1303.92	1328.44	1342.00	1344.52

(₹ in lakh)

Asset C3					
Particulars	2014-15 (Pro-rata for 203 days)	2015-16	2016-17	2017-18	2018-19
AFC	150.94	298.46	320.69	339.65	347.46

(₹ in lakh)

Asset D					
Particulars	2014-15 (Pro-rata for 203 days)	2015-16	2016-17	2017-18	2018-19
AFC	130.46	252.96	257.40	257.48	258.79

- b) AFC allowed for Combined Asset and Asset-C3 for 2019-24 tariff period in the instant order are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset	7289.96	7200.08	7062.97	6939.76	6808.98

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-C3	237.00	237.30	236.14	235.50	234.88

134. Annexure-I and Annexure-II given hereinafter form part of the order.



135. This order disposes of Petition No. 647/TT/2020 in terms of the above discussions and findings.

**sd/-**  
**(P. K. Singh)**  
**Member**

**sd/-**  
**(Arun Goyal)**  
**Member**

**sd/-**  
**(I. S. Jha)**  
**Member**



2014-19

Annexure-I

Combined Asset A - True-Up

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
		<b>Land</b>	2782.85	0.00	0.00	0.00			0.00	0.00	<b>2782.85</b>	0.00%	0.00
<b>Building</b>	532.18	46.46	12.86	5.69	15.84	0.24	<b>613.27</b>	3.34%	18.55	19.54	19.85	20.21	20.48
<b>Transmission Line</b>	7599.82	1.43	0.19	0.00	1.21	0.02	<b>7602.67</b>	5.28%	401.31	401.35	401.36	401.39	401.42
<b>Sub Station</b>	8728.28	234.59	56.92	66.52	17.37	50.38	<b>9154.06</b>	5.28%	467.05	474.74	478.00	480.22	482.00
<b>PLCC</b>	133.31	0.00	0.00	0.00	0.00	0.00	<b>133.31</b>	6.33%	8.44	8.44	8.44	8.44	8.44
<b>Leasehold Land</b>	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	3.34%	0.00	0.00	0.00	0.00	0.00
<b>IT Equipment &amp; Software</b>	169.29	0.00	0.00	0.00	0.00	0.00	<b>169.29</b>	5.28%	8.94	8.94	8.94	8.94	8.94
<b>Total</b>	<b>19945.73</b>	<b>282.48</b>	<b>69.97</b>	<b>72.21</b>	<b>34.42</b>	<b>50.64</b>	<b>20455.45</b>		<b>904.28</b>	<b>913.01</b>	<b>916.59</b>	<b>919.19</b>	<b>921.28</b>
Weighted Average Rate of Depreciation (in %)									4.50%	4.51%	4.51%	4.51%	4.51%
Average Gross Block (₹ in lakh)									<b>20086.97</b>	<b>20263.20</b>	<b>20334.29</b>	<b>20387.60</b>	<b>20430.13</b>



2014-19

Annexure-I

Combined Asset B - True-Up

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	694.21	0.00	0.00	0.00	0.00	0.00	<b>694.21</b>	0.00%	0.00	0.00	0.00	0.00	0.00
Building	206.44	0.51	0.14	0.06	0.17	0.00	<b>207.32</b>	3.34%	6.90	6.91	6.92	6.92	6.92
Transmission Line	6037.10	18.41	2.39	0.00	15.58	0.28	<b>6073.76</b>	5.28%	319.24	319.79	319.86	320.27	320.69
Sub Station	2098.66	251.68	61.07	71.36	18.64	54.05	<b>2555.46</b>	5.28%	117.45	125.71	129.21	131.58	133.50
PLCC	156.72	0.00	0.00	0.00	0.00	0.00	<b>156.72</b>	6.33%	9.92	9.92	9.92	9.92	9.92
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	78.80	0.00	0.00	0.00	0.00	0.00	<b>78.80</b>	5.28%	4.16	4.16	4.16	4.16	4.16
<b>Total</b>	<b>9271.94</b>	<b>270.60</b>	<b>63.60</b>	<b>71.42</b>	<b>34.39</b>	<b>54.33</b>	<b>9766.28</b>		<b>457.68</b>	<b>466.50</b>	<b>470.06</b>	<b>472.85</b>	<b>475.19</b>
Weighted Average Rate of Depreciation (in %)									4.87%	4.87%	4.88%	4.88%	4.88%
Average Gross Block (₹ in lakh)									<b>9407.24</b>	<b>9574.34</b>	<b>9641.85</b>	<b>9694.76</b>	<b>9739.12</b>



2014-19

Annexure-I

Asset C1 - True-Up

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	122.11	0.00	0.00	0.00	0.00	0.00	122.11	0.00%	0.00	0.00	0.00	0.00	0.00
Building	78.84	13.32	2.11	269.77	2.60	0.04	366.68	3.34%	2.86	3.11	7.65	12.20	12.25
Transmission Line	653.77	277.14	33.00	0.00	215.09	3.88	1182.88	5.28%	41.84	50.02	50.89	56.57	62.35
Sub Station	711.65	328.64	74.64	87.23	22.78	66.05	1290.99	5.28%	46.25	56.90	61.17	64.08	66.42
PLCC	36.38	14.29	0.00	0.00	0.00	0.00	50.67	6.33%	2.76	3.21	3.21	3.21	3.21
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	53.97	4.59	0.00	0.00	0.00	0.00	58.56	5.28%	2.97	3.09	3.09	3.09	3.09
<b>Total</b>	<b>1656.72</b>	<b>637.98</b>	<b>109.75</b>	<b>357.00</b>	<b>240.47</b>	<b>69.97</b>	<b>3071.90</b>		<b>96.67</b>	<b>116.33</b>	<b>126.02</b>	<b>139.15</b>	<b>147.32</b>
Weighted Average Rate of Depreciation (in %)									4.89%	4.95%	4.88%	4.83%	4.85%
Average Gross Block (₹ in lakh)									<b>1975.72</b>	<b>2349.58</b>	<b>2582.96</b>	<b>2881.69</b>	<b>3036.91</b>



2014-19

Annexure-I

Asset C2 - True-Up

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	610.69	0.00	0.00	0.00	0.00	0.00	610.69	0.00%	0.00	0.00	0.00	0.00	0.00
Building	350.04	75.47	18.07	124.54	22.26	0.32	590.70	3.34%	12.95	14.51	16.90	19.35	19.72
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Sub Station	3840.96	750.46	155.05	181.19	47.32	139.98	5114.96	5.28%	222.61	246.52	255.40	261.43	266.37
PLCC	58.94	7.26	0.00	0.00	0.00	0.00	66.20	6.33%	3.96	4.19	4.19	4.19	4.19
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	148.06	4.30	0.00	0.00	0.00	0.00	152.36	5.28%	7.93	8.04	8.04	8.04	8.04
<b>Total</b>	<b>5008.69</b>	<b>837.49</b>	<b>173.12</b>	<b>305.73</b>	<b>69.58</b>	<b>140.30</b>	<b>6534.91</b>		<b>247.46</b>	<b>273.27</b>	<b>284.53</b>	<b>293.01</b>	<b>298.33</b>
Weighted Average Rate of Depreciation (in %)									4.56%	5.03%	5.24%	5.40%	5.50%
Average Gross Block (₹ in lakh)									<b>5427.44</b>	<b>5427.44</b>	<b>5427.44</b>	<b>5427.44</b>	<b>5427.44</b>





2014-19  
Asset C3 - True-Up

Annexure-I  
(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	0.00%	0.00	0.00	0.00	0.00	0.00
Building	37.99	19.54	5.38	137.02	6.66	0.10	<b>206.69</b>	3.34%	1.60	2.01	4.39	6.79	6.90
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	5.28%	0.00	0.00	0.00	0.00	0.00
Sub Station	347.95	191.22	46.25	54.22	14.16	41.06	<b>694.85</b>	5.28%	23.42	29.69	32.34	34.15	35.60
PLCC	3.23	1.66	0.02	0.00	0.00	0.00	<b>4.91</b>	6.33%	0.26	0.31	0.31	0.31	0.31
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	23.74	0.01	0.17	0.00	0.00	0.00	<b>23.92</b>	5.28%	1.25	1.26	1.26	1.26	1.26
<b>Total</b>	<b>412.90</b>	<b>212.43</b>	<b>51.81</b>	<b>191.24</b>	<b>20.82</b>	<b>41.16</b>	<b>930.36</b>		<b>26.53</b>	<b>33.27</b>	<b>38.30</b>	<b>42.51</b>	<b>44.08</b>
Weighted Average Rate of Depreciation (in %)									5.11%	5.11%	4.96%	4.84%	4.85%
Average Gross Block (₹ in lakh)									<b>519.12</b>	<b>651.24</b>	<b>772.76</b>	<b>878.79</b>	<b>909.78</b>



2014-19

Annexure-I

Asset D - True-Up

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	61.13	0.00	0.00	0.00	0.00	0.00	<b>61.13</b>	0.00%	0.00	0.00	0.00	0.00	0.00
Building	109.05	0.26	0.45	0.00	0.00	0.00	<b>109.76</b>	3.34%	3.65	3.66	3.67	3.67	3.67
Transmission Line	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	5.28%	0.00	0.00	0.00	0.00	0.00
Sub Station	670.12	189.41	45.48	53.80	14.05	40.74	<b>1013.60</b>	5.28%	40.38	46.58	49.20	51.00	52.44
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	6.33%	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	27.89	0.07	0.11	0.00	0.00	0.00	<b>28.07</b>	5.28%	1.47	1.48	1.48	1.48	1.48
<b>Total</b>	<b>868.19</b>	<b>189.74</b>	<b>46.04</b>	<b>53.80</b>	<b>14.05</b>	<b>40.74</b>	<b>1212.56</b>		<b>45.50</b>	<b>51.72</b>	<b>54.35</b>	<b>56.14</b>	<b>57.59</b>
Weighted Average Rate of Depreciation (in %)									4.72%	4.78%	4.81%	4.82%	4.83%
Average Gross Block (₹ in lakh)									<b>963.06</b>	<b>1080.95</b>	<b>1130.87</b>	<b>1164.79</b>	<b>1192.19</b>



2019-24  
Combined Asset -  
Determination

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24	Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20			2019-20	2020-21	2021-22	2022-23	2023-24
Land	4270.99	0.00	<b>4270.99</b>	0.00%	0.00	0.00	0.00	0.00	0.00
Building	1887.73	0.00	<b>1887.73</b>	3.34%	63.05	63.05	63.05	63.05	63.05
Transmission Line	14859.31	90.00	<b>14949.31</b>	5.28%	786.95	789.32	789.32	789.32	789.32
Sub Station	19129.07	470.00	<b>19599.07</b>	5.28%	1022.42	1034.83	1034.83	1034.83	1034.83
PLCC	406.91	0.00	<b>406.91</b>	6.33%	25.76	25.76	25.76	25.76	25.76
Leasehold Land	0.00	0.00	<b>0.00</b>	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	487.08	0.00	<b>487.08</b>	15.00%	73.06	73.06	73.06	73.06	67.14
<b>Total</b>	<b>41041.09</b>	<b>560.00</b>	<b>41601.09</b>		<b>1971.24</b>	<b>1986.02</b>	<b>1986.02</b>	<b>1986.02</b>	<b>1980.10</b>
Weighted Average Rate of Depreciation (in %)					4.77%	4.77%	4.77%	4.77%	4.76%
Average Gross Block (₹ in lakh)					<b>41321.09</b>	<b>41601.09</b>	<b>41601.09</b>	<b>41601.41</b>	<b>41601.41</b>



2019-24

Asset- C3 - Determination

Annexure-  
II

(₹ lakh)

Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24	Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-20			2019-20	2020-21	2021-22	2022-23	2023-24
Land	0.00	0.00	<b>0.00</b>	0.00%	0.00	0.00	0.00	0.00	0.00
Building	206.69	0.00	<b>206.69</b>	3.34%	6.90	6.90	6.90	6.90	6.90
Transmission Line	0.00	0.00	<b>0.00</b>	5.28%	0.00	0.00	0.00	0.00	0.00
Sub Station	694.85	20.00	<b>714.85</b>	5.28%	37.22	37.74	37.74	37.74	37.74
PLCC	4.91	0.00	<b>4.91</b>	6.33%	0.31	0.31	0.31	0.31	0.31
Leasehold Land	0.00	0.00	<b>0.00</b>	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment & Software	23.92	0.00	<b>23.92</b>	15.00%	3.59	3.59	3.59	3.59	3.59
<b>Total</b>	<b>930.36</b>	<b>20.00</b>	<b>950.36</b>		<b>48.02</b>	<b>48.55</b>	<b>48.55</b>	<b>48.55</b>	<b>48.55</b>
Weighted Average Rate of Depreciation (in %)					5.11%	5.11%	5.11%	5.11%	5.11%
Average Gross Block (₹ in lakh)					<b>940.36</b>	<b>950.36</b>	<b>950.36</b>	<b>950.36</b>	<b>950.36</b>

