

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 588/TT/2020

Coram:

Shri P. K. Pujari, Chairperson

Shri I. S. Jha, Member

Shri P. K. Singh, Member

Date of Order : 02.11.2021

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 the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of **Combined Asset** comprising of **Asset A-1:** Siliguri-Purnea 400 kV D/C (Quad. Conductor) Transmission Line, **Asset A-2:** Purnea-Muzaffarpur (New) 400 kV D/C (Quad. Conductor) Transmission Line, **Asset A-3:** Muzaffarpur (New)-Gorakhpur 400 kV D/C (Quad. Conductor) Transmission Line, **Asset A-4:** Gorakhpur-Lucknow 400 kV D/C (Twin Conductor) Transmission Line, **Asset A-5:** Bareilly-Mandola 400 kV D/C (Twin Conductor) Transmission Line and **Asset A-6:** Muzaffarpur (New)-Muzaffarpur (BSEB) 220 kV (Twin Conductor) transmission line under Tala inter-State Transmission System associated with Tala Hydro Electric Project in Eastern Region, Eastern-Northern Inter-Region and Northern Region.

And in the matter of

Powerlinks Transmission Limited,
10th Floor, DLF Tower A, District Centre Jasola,
New Delhi-110025.

.....Petitioner

Versus

1. Power Grid Corporation of India Limited,
'Saudamini', Plot No.-2, Sector-29,
Gurgaon-122001 (Haryana).
2. Rajasthan Rajya Vidhyut Prasaran Nigam Limited,
Vidyut Bhavan, Vidhyut Marg,
Jaipur-302005 (Rajasthan).
3. Ajmer Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura,
Jaipur.



4. Jaipur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura,
Jaipur.
5. Jodhpur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura,
Jaipur.
6. Punjab State Electricity Board,
The Mall,
Patiala-147001.
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6, II Floor,
Panchkula-134109 (Haryana).
8. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
10th Floor, Shakti Bhawan Extn.-14, Ashok Marg,
Lucknow-226001.
9. Power Development Department,
Government of Jammu and Kashmir,
Mini Secretariat,
Jammu.
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road (Near ITO),
New Delhi-110002.
11. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004 (Himachal Pradesh).
12. Chandigarh Administration,
Sector-9, Chandigarh.
13. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun.
14. Northern Central Railway,
Allahabad.



15. BSES Yamuna Power Limited,
BSES Bhawan, Building No.-20, Nehru Place,
New Delhi.
 16. BSES Rajdhani Power Limited,
BSES Bhawan, Building No. 20, Nehru Place,
New Delhi.
 17. North Delhi Power Limited,
Grid Sub-station Building, Hudson Line, Near Kingsway Camp,
New Delhi-110088.
 18. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.
 19. Bihar State Power (Holding) Company Limited,
(Formerly Bihar State Electricity Board-BSEB)
Vidyut Bhavan, Bailey Road,
Patna-800001.
 20. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II, Salt Lake City,
Calcutta-700091.
 21. Grid Corporation of Orissa Limited,
Shahid Nagar,
Bhubaneswar-751007.
 22. Jharkhand State Electricity Board,
In front of Main Secretariat, Doranda,
Ranchi-834002.
 23. Damodar Valley Corporation,
DVC Tower, Maniktala, Civic Centre, VIP Road,
Calcutta-700054.
 24. Power Department,
Government of Sikkim,
Gangtok-737101.
-Respondent(s)**

For Petitioner : Shri Venkatesh, Advocate, PTL
Shri Ashutosh K. Srivastava, Advocate, PTL
Shri Pankaj Prakash, PTL

For Respondents : None



ORDER

The Petitioner, Powerlinks Transmission Limited, has filed the instant petition for true up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of transmission tariff of the 2019-24 tariff period 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 transmission assets forming part of **Combined Asset** under Tala inter-State Transmission System (hereinafter referred to as “the Tala ISTS”) associated with 1020 MW Tala Hydro Electric Project in Eastern Region, Eastern-Northern Inter-Region and Northern Region (hereinafter referred to as “the Tala HEP”):

Asset A-1: Siliguri-Purnea 400 kV D/C (Quad. Conductor) Transmission Line;

Asset A-2: Purnea-Muzaffarpur (New) 400 kV D/C (Quad. Conductor) Transmission Line;

Asset A-3: Muzaffarpur (New)-Gorakhpur 400 kV D/C (Quad. Conductor) Transmission Line;

Asset A-4: Gorakhpur-Lucknow 400 kV D/C (Twin Conductor) Transmission Line;

Asset A-5: Bareilly-Mandola 400 kV D/C (Twin Conductor) Transmission Line; and

Asset A-6: Muzaffarpur (New)-Muzaffarpur (BSEB) 220 kV (Twin Conductor) Transmission Line.

(Nomenclature of assets is as provided by the Petitioner vide affidavit dated 16.11.2020)

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

- “(a) Approve the True-up of proposed Additional Capitalization along with the Normative IDC and Way Leave Charges for FY 2014-19 and proposed Additional Capitalization along with Normative IDC for the Tariff Period FY 2019-24.*
- “(b) Approve the proposed Annual Transmission Charges, including Transmission Majoration Factor, Interest on Loan at interest rate for Original Loan and Additional Unrecovered Depreciation, for FY 2014-19 and FY 2019-24 for its Assets A-1 to A-6 in the Eastern Region, E N Inter Region and Northern Region in accordance with the principles of Tariff Regulations 2014 and Tariff Regulations 2019 respectively.*



- (c) Approve recovery of grossed up Additional Tax due to Ind AS provisions for MAT computation under Change in Law over and above and alongwith the Annual Transmission Charges for the period FY 2014-19 and FY 2019-24.
- (d) Approve recovery of Additional O&M Expense due to GST under Change in Law over and above and alongwith the Annual Transmission Charges for the period FY 2014-19 and FY 2019-24.
- (e) Approve the recovery of Incentive based on Actual Availability, Application Fee, License Fee and RLDC fees/charges during the Tariff period FY 2019-24 directly from beneficiaries as per Tariff Regulations 2019;
- (f) Approve the recovery of Differential Incentive based on Actual Availability, License Fee and RLDC fees/charges due to truing-up during the Tariff period FY 2014-19 directly from beneficiaries as per Tariff Regulations 2014;
- (g) Provide an opportunity to present its case prior to the finalization of the Order. The Petitioner believes that such an approach would provide a fair treatment to all the stakeholders and may eliminate the need for a review or clarification;
- (h) Allow the Petitioner to propose suitable changes to the instant Petition on further analysis, prior to the final approval by the Commission;
- (i) Condone any inadvertent omissions/errors/rounding off differences/shortcomings and permit the Petitioner to add/alter this filing and make further submissions as may be required at a future date;
- (j) Pass such further and other orders, as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case."

3. **Backdrop of the case**

a) In July 2000, Power Grid Corporation of India Limited (PGCIL) had invited bids for selection of its Joint Venture (JV) partner for construction of the Tala ISTS for transmission of power generated from the Tala HEP in Bhutan to be wheeled to the constituents of Eastern and Northern Regions. Tata Power Company Limited (TPCL) was selected as the prospective JV partner by PGCIL and resultantly, Tala-Delhi Transmission Limited (TDTL) was incorporated as a JV company between TPCL and PGCIL with respective equity holding of 51% and 49%.

b) The scope of work included in the Tala ISTS was as follows:

- i. Siliguri-Purnea 400 kV D/C (Quad. Conductor) Transmission Line: 162 km;
- ii. Purnea-Muzaffarpur (New) 400 kV D/C (Quad. Conductor) Transmission Line: 242 km;
- iii. Muzaffarpur (New)-Gorakhpur 400 kV D/C (Quad. Conductor) Transmission Line: 233 km;
- iv. Gorakhpur-Lucknow 400 kV D/C (Twin Conductor) Transmission Line: 277 km;
- v. Bareilly-Mandola 400 kV D/C (Twin Conductor) Transmission Line: 237 km; and



vi. Muzaffarpur (New)-Muzaffarpur (BSEB) 220 kV (Twin Conductor) Transmission Line: 20 km.

c) The administrative approval and expenditure sanction for implementation of the Tala ISTS associated with the Tala HEP was accorded by the Ministry of Power (MoP) vide letter dated 2.7.2003 at an estimated cost of ₹198070.00 lakh, including IDC of ₹21792.00 lakh.

d) An application (vide Petition No. 40/2003) under Section 14 of the Electricity Act, 2003 was filed by TDTL for grant of transmission license to transmit electricity. Further, TDTL informed vide letter dated 9.9.2003 that its name had been changed to Powerlinks Transmission Limited (PTL).

e) The Commission vide order dated 22.10.2003 disposed of Petition No. 40/2003 and granted inter-State Transmission License (vide License No. 2/Transmission/CERC dated 13.11.2003) to PTL, to transmit electricity as a transmission licensee and for that purpose to construct, maintain and operate the Tala ISTS associated with the Tala HEP.

f) The Revised Cost Estimate in respect of the Tala ISTS associated with the Tala HEP was approved by MoP vide letter dated 29.9.2005 at ₹248388.00 lakh, including IDC of ₹14744.00 lakh with details of approved cost as follows:

- i. PGCIL portion: ₹87210.00 lakh, including IDC of ₹2574.00 lakh; and
- ii. PTL portion: ₹161178.00 lakh, including IDC of ₹12170.00 lakh.

g) The dates of commercial operation of Asset A-1, Asset A-2, Asset A-3, Asset A-4, Asset A-5 and Asset A-6 were 1.9.2006, 1.9.2006, 1.9.2006, 1.8.2006, 1.5.2006 and 1.9.2006 respectively.

h) The instant matter along with Petition No. 589/TT/2020 and Petition No. 590/TT/2020 was heard on 28.8.2020 wherein the Commission directed the Petitioner to file a combined petition for all the assets covered in Tala HEP.

i) In line with the directions of the Commission vide RoP dated 28.8.2020 and technical validation letter dated 2.11.2020, the Petitioner vide affidavit dated 16.11.2020 has filed a combined petition and consequently has claimed the combined true-up tariff and tariff of Combined Asset for the respective tariff periods in this Petition.



- j) The entire scope of work covered under the Tala ISTS associated with the Tala HEP is complete and is covered in this petition.
- k) The tariff for the period from their respective COD to 31.3.2009 [after accounting for Additional Capital Expenditure (ACE) during 2006-07 and up to 30.9.2007] in respect of Asset-A4 and Asset-A5 was allowed vide order dated 30.4.2008 in Petition No. 149/2007 which was subsequently revised on account of ACE during 2007-08 and 2008-09, vide order dated 30.7.2009 in Petition No. 64/2009.
- l) The tariff for Asset-A4 and Asset-A5 for the period from 1.4.2009 to 31.3.2014 was allowed vide order dated 17.3.2011 in Petition No. 287/2009. The tariff of the 2009-13 period was trued-up (based on truing up of capital expenditure) and for 2013-14 was revised vide order dated 23.5.2016 in Petition No. 20/TT/2014. Further, the tariff for 2013-14 was trued-up and tariff for the 2014-19 tariff period was determined vide order dated 18.4.2017 in Petition No. 516/TT/2014.
- m) The tariff from their COD to 31.3.2009 in respect of Asset-A1, Asset-A2 and Asset-A6 was allowed vide order dated 30.4.2008 in Petition No. 148/2007 which was revised on account of ACE during 2007-08 and 2008-09 vide order dated 30.7.2009 in Petition No. 65/2009.
- n) The tariff for the period from 1.4.2009 to 31.3.2014 in respect of Asset-A1, Asset-A2 and Asset-A6 was allowed vide order dated 17.3.2011 in Petition No. 288/2009. The tariff for 2009-13 was trued-up (based on truing up of capital expenditure) and for 2013-14 was revised vide order dated 16.5.2016 in Petition No. 19/TT/2014. Further, the tariff for 2013-14 was trued-up and tariff for the 2014-19 tariff period was allowed vide order dated 20.4.2017 in Petition No. 514/TT/2014.
- o) The tariff from COD to 31.3.2009 for Asset-A3 was allowed vide order dated 28.4.2008 in Petition No. 147/2007 which was revised on account of ACE during 2007-08 and 2008-09 vide order dated 29.7.2009 in Petition No. 66/2009.



p) The tariff for the period from 1.4.2009 to 31.3.2014 for Asset-A3 was allowed vide order dated 18.8.2010 in Petition No. 286/2009. The tariff for 2009-13 was trued-up (based on truing up of capital expenditure) and for 2013-14 was revised vide order dated 6.5.2016 in Petition No. 18/TT/2014. Further, the tariff for 2013-14 was trued-up and tariff for the 2014-19 tariff period was allowed vide order dated 31.3.2017 in Petition No. 515/TT/2014.

q) The details of petitions seeking approval of incentive in respect of Asset-A1, Asset-A2, Asset-A3 (50%) and Asset-A6 are as under:

i. Incentive based on availability for the year 2006-07 was allowed by the Commission vide *ad interim* order dated 2.1.2008 in I.A. No. 47/2007 in Petition No. 168/2007, followed by revised incentive allowed vide order dated 8.7.2008 in Petition No. 168/2007. The final incentive related thereto (after accounting for additional equity allowed by the Commission) was approved vide order dated 17.11.2008 in I.A. No. 47/2007 in Petition No. 168/2007.

ii. The incentive based on availability for the year 2007-08 was allowed vide *ad interim* order dated 29.7.2008 in I.A. No. 10/2008 in Petition No. 82/2008 and the final incentive related thereto was allowed vide order dated 1.12.2008 in Petition No. 82/2008 which was further revised (after accounting for additional equity allowed by the Commission) vide order dated 22.12.2009 in Petition No. 201/2009.

iii. The incentive based on availability for the year 2008-09 was allowed vide order dated 14.10.2009 in Petition No. 174/2009.

r) The details of petitions seeking approval of incentive in respect of Asset-A3 (50%) Asset-A4 and Asset-A5 are as under:

i. The incentive based on availability for the year 2006-07 was allowed by the Commission vide *ad interim* order dated 2.1.2008 in I.A. No. 48/2007 in Petition No. 169/2007, followed by revised incentive allowed vide order dated 8.7.2008 in Petition No. 169/2007. The final incentive related thereto (after accounting for additional equity allowed by the Commission) was approved vide order dated 17.11.2008 in I.A. No. 17/2008 in Petition No. 169/2007.



- ii. The incentive based on availability for the year 2007-08 was allowed by the Commission vide *ad interim* order dated 29.7.2008 in I.A. No. 9/2008 in Petition No. 81/2008, followed by final incentive allowed vide order dated 1.12.2008 in Petition No. 81/2008 which was further revised (after accounting for additional equity allowed by the Commission) vide order dated 22.12.2008 in Petition No. 200/2009.
 - iii. The incentive based on availability for the year 2008-09 was allowed vide order dated 14.10.2009 in Petition No. 173/2009.
- s) Details of other petitions corresponding to the transmission assets are as under:
- i. The Commission vide order dated 5.1.2004 in Petition No. 73/2003 did not approve the methodology proposed to be adopted by the Petitioner for price variations in supply and erection contracts and for the increase in project cost on account of escalation in price and quantity variations in the transmission assets implemented by the Petitioner.
 - ii. The Commission vide order dated 1.7.2004 in Petition No. 51/2004 had allowed the Petitioner to claim Transmission Majoration Factor (TMF) throughout the period of license with regard to the Tala ISTS associated with the Tala HEP.
 - iii. The Commission vide order dated 23.7.2004 in Petition No. 41/2004 had given directions pertaining to approval sought by the Petitioner in the “buy-out” provisions contained in the Implementation Agreement and Transmission Services Agreement entered into between the Petitioner and PGCIL for construction, implementation and operation of the Tala ISTS associated with the Tala HEP.
 - iv. The Commission vide order dated 27.11.2008 in Petition No. 92/2008 had rejected the Petitioner’s prayer for seeking O&M Expenses pertaining to the Tala ISTS associated with the Tala HEP for the years 2006-07 and 2007-08 based on actuals but vide the said order had allowed 10% of the total transmission charges as TMF.
 - v. The Commission vide order dated 3.8.2010 in Misc. Petition No. 17/2010 dismissed the Petitioner’s prayer seeking the Commission to invoke the “Power to Relax” under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to



as “the 2009 Tariff Regulations”) for grossing up Return on Equity (RoE) at Minimum Alternate Tax (MAT) rate applicable for the financial year 2009-10, for the period 2009-10.

vi. The Commission vide order dated 28.6.2007 in I.A. No. 24/2007 in Petition No. 111/2006 had granted time up to 31.10.2007 to the Petitioner for filing fresh final tariff determination petition for approval, in respect of Asset-A4, for the period from 1.8.2006 to 31.3.2009.

t) Findings of the commission on time over-run associated with the transmission assets in this petition are as under:

i. The scheduled COD of the transmission assets was 1.6.2006 against which (Asset A-1, Asset A-2, Asset A-3 and Asset A-6) and Asset A-4 were commissioned with a time over-run of (03 months) and 02 months respectively. However, there was no time over-run in the commissioning of Asset A-5.

ii. The respective time over-run in the commissioning of (Asset A-1, Asset A-2 and Asset A-6), Asset A-3 and Asset A-4 was condoned by the Commission vide order dated (30.4.2008), 28.4.2008 and 30.4.2008 in (Petition No. 148/2007), Petition No. 147/2007 and Petition No. 149/2007 respectively.

u) The Petitioner sought approval of trued-up transmission tariff of the 2014-19 tariff period and determination of tariff for the 2019-24 tariff period for Asset A-3 (in instant Petition No. 588/TT/2020), for Asset A-1, Asset A-2 and Asset A-6 in Petition No. 589/TT/2020 and for Asset A-4 and Asset A-5 in Petition No. 590/TT/2020. The said petitions were heard together by the Commission on 28.8.2020 and vide Record of Proceedings (RoP) for the said date, it was directed that a combined petition for all the assets covered in the Tala HEP should be filed instead of three different petitions.

4. The Petitioner has submitted the tariff forms combining the transmission assets into Combined Asset. Accordingly, transmission tariff for Combined Asset has been worked out under the applicable Tariff Regulations.



5. The Respondents are distribution licensees, power departments and transmission licensees, which are procuring transmission services from the Petitioner, mainly beneficiaries of Northern Region, Northern-Eastern Inter-Region and Eastern Region.

6. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has 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. None of the Respondents have filed reply in the matter.

7. This order is issued considering the submissions made by the Petitioner in the Petition vide affidavit dated 16.11.2020 in compliance of the Commission's directions vide RoP dated 28.8.2020 and technical validation letter dated 2.11.2020.

8. The hearing in this matter was held on 28.8.2020 and 15.6.2021 through video conference and the order was reserved. Having heard the learned counsel(s) and representative of the Petitioner and after perusal of the materials on record, we proceed to dispose of the petition.

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

9. The transmission tariff of the transmission assets for the 2014-19 tariff period allowed by the Commission vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No.515/TT/2014 and Petition No.516/TT/2014 respectively has been combined together for Combined Asset and is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	8160.73	8163.63	8163.63	8163.63	8163.63
Interest on Loan	4191.44	3424.84	2654.31	1881.66	1110.7
Return on Equity	9170.25	9174.98	9176.46	9176.46	9176.46
Interest on Working Capital	553.29	537.74	522.02	505.95	490.67
O&M Expenses	1047.87	1082.74	1118.3	1149.64	1194.15
Total	23123.58	22383.94	21634.72	20877.36	20135.61
Add: Transmission Majoration	2312.36	2238.39	2163.47	2087.74	2013.56



Factor @10% of above					
Total	25435.94	24622.33	23798.19	22965.10	22149.17

10. The details of the trued-up transmission charges as claimed by the Petitioner in respect of Combined Asset for the 2014-19 tariff period are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	8201.65	8257.16	8568.46	8197.62	8220.52
Interest on Loan	4218.68	3454.87	2679.77	1940.69	1185.38
Return on Equity	9172.19	9178.11	9221.94	9225.05	9256.26
Interest on Working Capital	554.90	540.66	532.96	509.54	495.53
O&M Expenses	1047.87	1082.74	1118.30	1155.63	1194.15
Total	23195.29	22513.54	22121.43	21028.53	20351.83
Add: Transmission Majoration Factor @10% of above	2319.53	2251.35	2212.14	2102.85	2035.18
Total	25514.82	24764.89	24333.57	23131.38	22387.02

11. The details of the trued-up Interest on Working Capital (IWC) as claimed by the Petitioner in respect of Combined Asset for the 2014-19 tariff period are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	157.18	162.41	167.74	173.34	179.12
O&M expenses	87.32	90.23	93.19	96.30	99.51
Receivables	3865.88	3752.26	3686.90	3504.75	3391.97
Total	4110.38	4004.90	3947.84	3774.40	3670.61
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	554.90	540.66	532.96	509.54	495.53

Effective Date of Commercial Operation (E-COD)

12. E-COD of 11.8.2006 for Combined Asset has been worked out based on the admitted capital cost as on 31.3.2014 of individual transmission assets and their actual COD as follows:

Computation of E-COD					
Asset	Actual COD	Admitted Capital Cost as on 31.3.2014 (₹ in lakh)	Weight of the cost (%)	Number of days from last COD	Weighted Days
Asset A-1, Asset A-2 and Asset A-6 (Eastern Region)	1.9.2006	71412.66	45.83	0	0.00



Asset A-3 (Eastern-Northern Inter-Region)	1.9.2006	41870.97	26.87	0	0.00
Asset A-4 (Northern Region)	1.8.2006	21424.90	13.75	31	4.26
Asset A-5 (Northern Region)	1.5.2006	21113.55	13.55	123	16.67
Total		155822.08	100.00		20.93
E-COD (Latest COD - Total Weighted Days) 11.8.2006					

13. E-COD is used to determine the lapsed life of Combined Asset, which works out as seven (7) years as on 1.4.2014 (i.e. the number of completed years as on 1.4.2014 from E-COD).

Weighted Average Life (WAL)

14. 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, the concept of WAL has been used as the useful life of the Tala HEP, as a whole.

15. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2014 and their respective useful life as stipulated in the 2014 Tariff Regulations. The element-wise life as is defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual transmission assets has been ignored for this purpose. Accordingly, WAL of Combined Asset has been worked out as 35 years as follows:

Particulars	Combined Asset Cost (₹ in lakh) (a)	Life as per the 2014 Tariff Regulations (b)	(₹ in lakh)
			Weighted Average Life of Combined Asset (in years) (a) x (b)
Freehold Land	131.39	0	0.00
Leasehold Land	0.00	0	0.00
Building & Other Civil Works	3229.45	25	80736.25
Transmission Line	152461.24	35	5336143.41
Sub-Station Equipment	0.00	25	0.00
PLCC	0.00	15	0.00
Total	155822.08		5416879.66
Weighted Average Life 35 Years			



16. Accordingly, considering E-COD of 11.8.2006 and WAL as 35 years, the remaining useful life of Combined Asset as on 1.4.2014 comes to be 28 years.

Capital Cost as on 1.4.2014

17. The capital cost of the Tala ISTS has been dealt in accordance with Regulations 9(3) and 9(6) of the 2014 Tariff Regulations.

18. The details of the capital cost of the transmission assets as on 31.3.2014 allowed by the Commission vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No. 515/TT/2014 and Petition No. 516/TT/2014, respectively along with details of the combined capital cost of Combined Asset as on 31.3.2014 are as follows:

Particulars	Capital Cost approved (as on 31.3.2014)				Combined Capital Cost for Combined Asset (as on 31.3.2014)
	Order dated 20.4.2017 in Petition No. 514/TT/2014	Order dated 31.3.2017 in Petition No. 515/TT/2014	Order dated 18.4.2017 in Petition No. 516/TT/2014		
	Asset A-1, Asset A-2 and Asset A-6	Asset A-3	Asset A-4	Asset A-5	
Freehold Land	62.82	68.57	0.00	0.00	131.39
Leasehold Land	0.00	0.00	0.00	0.00	0.00
Building and Other Civil Works	984.57	721.63	760.00	763.25	3229.45
Transmission Line	70365.27	41080.77	20664.90	20350.30	152461.24
Sub-station Equipment	0.00	0.00	0.00	0.00	0.00
PLCC	0.00	0.00	0.00	0.00	0.00
Total	71412.66	41870.97	21424.90	21113.55	155822.08

19. The details of combined opening capital cost and closing capital cost of the transmission assets as on 31.3.2014 and 31.3.2019 respectively and combined projected ACE during the 2014-19 tariff period for the transmission assets as allowed by the Commission vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No. 515/TT/2014 and Petition No. 516/TT/2014, respectively are as follows:



(₹ in lakh)						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Opening Capital Cost	155822.08	155932.22	155982.61	155982.61	155982.61	155822.08
ACE	110.14	50.39	0.00	0.00	0.00	160.53
Closing Capital Cost	155932.22	155982.61	155982.61	155982.61	155982.61	155982.61

20. Accordingly, the details of the combined capital cost as on 31.3.2014, as on 31.3.2019 and combined projected ACE during the 2014-19 tariff period as allowed by the Commission for the transmission assets are as follows:

(₹ in lakh)		
Combined Capital Cost allowed (as on 31.3.2014)	Combined ACE allowed (2014-19)	Combined Capital Cost allowed (as on 31.3.2019)
155822.08	160.53	155982.61

21. In view of above, the combined capital cost of ₹155822.08 lakh as on 31.3.2014 for the transmission assets as allowed earlier by the Commission is considered for tariff purpose in this petition.

Initial spares

22. The Petitioner has not claimed any initial spares for period 2014-19.

Additional Capital Expenditure(ACE)

23. The details of combined projected ACE during the 2014-19 period as allowed for the transmission assets vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No. 515/TT/2014 and Petition No. 516/TT/2014, respectively are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
ACE on account of SAP implementation after cut-off date under Regulation 14(3) (ix) of the 2014 Tariff Regulations and land for diversion to Forest Authority	110.14	50.39	0.00	0.00	0.00

24. The Petitioner has claimed ACE (without normative IDC) during the 2014-19 period in respect of Combined Asset and has submitted Auditor's Certificate in support of the same. The details of ACE claimed are as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Freehold Land	0.00	49.14	1.11	0.02	0.00	50.27
SAP Implementation Cost	110.14	0.00	0.00	0.00	0.00	110.14
Insulator Replacement	130.35	170.78	906.09	120.64	117.81	1445.67
Tower Collapse	15.73	0.00	0.00	0.00	0.00	15.73
Tower Footing Protection	0.00	0.00	0.00	14.47	61.57	76.04
Way Leave Charges	0.00	0.00	125.81	65.04	12.72	203.57
Total	256.22	219.92	1033.01	200.17	192.10	1901.42

25. The Petitioner has submitted justification for ACE claimed during the 2014-19 period and has requested to admit the same under applicable clause of Regulation 14(3) of the 2014 Tariff Regulations.

26. The Petitioner has submitted that ACE has been arrived at by deducting un-discharged liability from Gross Fixed Asset (GFA) as on 31st March of each Financial Year and since the Petitioner has not taken any loan for funding ACE during the 2014-19 tariff period, the same has been funded entirely through internal resources.

27. The Petitioner has submitted that corresponding to actual ACE for replacement of existing assets, there has been de-capitalisation of the replaced assets in the books of account at original cost of such replaced assets and, therefore, net ACE during the 2014-19 period has been claimed after deducting de-capitalisation from the cash ACE in the present Petition. The Petitioner has submitted certificate of the Statutory Auditors and Management pertaining to such ACE and de-capitalization along with summary of net actual cash ACE excluding IDC during the 2014-19 period.

28. The Petitioner has claimed total ACE of ₹370.31 lakh (including normative IDC of ₹47.40 lakh on ACE) for the 2014-19 period. Accordingly, the combined cost as claimed by the Petitioner in the instant petition for the 2014-19 period is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Opening Capital Cost	155822.08	155997.94	156023.55	155976.43	156128.73	155822.08
ACE	175.861	25.610	-47.122	152.295	63.662	370.31
Closing Capital Cost	155997.94	156023.55	155976.43	156128.73	156192.39	156192.39



29. The Petitioner has submitted the details of proposed net cash capitalization of ₹322.84 lakh towards Freehold Land, SAP Implementation, Insulator Replacement, Tower Collapse, Tower Footing Protection and Way Leave Charges as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Freehold Land	0.00	49.14	1.11	0.02	0.00	50.27
SAP Implementation Cost	110.14	0.00	0.00	0.00	0.00	110.14
Insulator Replacement	130.35	170.78	906.09	120.64	117.81	1445.67
Tower Collapse	15.73	0.00	0.00	0.00	0.00	15.73
Tower Footing Protection Work	0.00	0.00	0.00	14.47	61.57	76.04
Way Leave Charges	0.00	0.00	125.81	65.04	12.72	203.58
Sub-total	256.22	219.92	1033.01	200.17	192.10	1901.42
Less: De-capitalisation	84.88	199.18	1103.12	55.45	135.94	1578.59
Grand Total	171.33	20.74	-70.11	144.72	56.16	322.84

30. The Petitioner has made detailed submissions and given justifications in support of ACE claimed during the 2014-19 tariff period for the purpose of computation of Annual Transmission Charges (ATC) as follows:

a) Freehold Land

i. The Petitioner has used 1.644 Hectare of the forest land located in the Kushinagar district of Uttar Pradesh for construction of Asset A-3 that was commissioned on 1.9.2006. On application, the Forest Department had vide letter dated 3.3.2010 provided *in-principle* approval for the usage of the above land in accordance to major conditions precedent to such usage which are as follows:

- The Petitioner to provide equivalent land of 1.644 hectares and compensation for plantation and protection of 869 trees and the transferred land to be declared as reserved forest land.
- The Petitioner to provide necessary compensation at the present wage rate for plantation and protection of saplings below Asset A-3.
- The said compensation shall be computed at Net Present Value as per the order passed by the Hon'ble Supreme Court of India in the matter of Interlocutory Application No. 566 in Writ Petition No. 202/1995.

ii. At the time of filing of Petition No. 515/TT/2014, the legal acknowledgement of the said forest land was pending fulfilment of the above conditions in line with the Forest (Conservation) Act, 1980.



iii. The approval letter of the Forest Department has been submitted by the Petitioner and the Forest Department has notified conditions precedent mentioned above.

iv. The Commission vide order dated 31.3.2017 in Petition No. 515/TT/2014 had allowed capitalization of ₹50.39 lakh incurred towards purchase of land to compensate the Forest Department.

v. The liability of such cost was deferred on account of delay in identification and purchase of land but has not been waived off. The actual cost of land was ₹50.27 lakh.

vi. In view of above, the Petitioner has prayed for capitalisation of the cost of the land as the same is transferred to the Forest Department.

b) SAP Implementation

i. The Petitioner planned to have robust ERP system, as the existing ERP system was technically outdated and also not capable for fulfilling the increasing requirement of business like capturing the maintenance data and billing and collection recording after implementation of PoC mechanism.

ii. Implementation of SAP has various benefits and systematic functionality, such as Inventory Management, Financials, Controlling, Sales and Distribution, Plant Maintenance, Human Capital Management, Governance Risk and Compliances etc.

iii. The Commission vide its order dated 31.3.2017 in Petition No. 515/TT/2014 had allowed the claim of ACE on account of SAP implementation under Regulation 14(3)(ix) of the 2014 Tariff Regulations.

iv. In view of above, expenditure of Rs.110.14 lakh (excluding normative IDC) towards SAP implementation may be allowed in respect of Combined Asset as per Regulation 14(3)(ix) of the 2014 Tariff Regulations.

c) Insulator Replacement

i. The Petitioner replaced all 160 kN insulators located in Asset A-1 between tower location no. 100 to 300 during 2012-13 and 2013-14 on account of their repetitive failure during 2011-12. The said issue was taken up with the manufacturers and various tests were conducted on unused samples as well as insulators removed from Asset A-1. After the tests, it was concluded that the sample with hairline crack failed in test mostly in foggy conditions. Although the reason for the hairline crack could not be established, it was proposed to replace



all the balance JSI make 160 kN Insulators in Asset A-1 and in part of the Purnea-Saharas section with Polymer Insulators.

ii. The estimated cost for insulator replacement during 2014-19 period is estimated to be ₹1445.67 lakh (excluding Normative IDC) for Combined Asset.

iii. The Commission vide order dated 20.4.2017 in Petition No. 514/TT/2014 had held the replacement of insulators as admissible under Regulation 14(3)(ix) of the 2014 Tariff Regulations.

iv. Further, the Commission was of the view that the insulators were required to be replaced with the polymer insulators for efficient operation. Accordingly, ACE towards replacement of damaged insulators with porcelain insulators was admissible under Regulation 14(3)(ix) of the 2014 Tariff Regulations.

v. The Commission had admitted the cost pertaining to replacement of insulators but did not consider the cost in tariff calculation due to absence of Auditor/ Management Certificate indicating the segregated values for these replacements and the absence of de-capitalized value of the old assets and granted liberty to the Petitioner to submit these details at the time of true-up.

vi. The Petitioner has now submitted Certificate of the Statutory Auditors/ Management. Also, duly updated Form 10B regarding de-capitalization has been submitted.

vii. In view of above, the Petitioner has prayed to approve the proposed ACE of ₹1445.67 lakh for insulator replacement in respect of Combined Asset.

d) Tower Collapse

i. During 2013-14, one of the towers related to Asset A-6 had collapsed due to severe cyclone in Muzaffarpur District, being an Act of God, was beyond the control of the Petitioner and was an event of *force majeure* as per the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 and the 2014 Tariff Regulations.

ii. The Petitioner in Petition No. 19/TT/2014 had proposed ACE with respect to said tower collapse as per provisions of the 2009 Tariff Regulations. Further, the balance capitalization was scheduled in 2014-15 and the same was proposed for approval under Regulation 14(3)(ix) of the 2014 Tariff Regulations and was held to be admissible by the Commission vide order dated 20.4.2017 in Petition No. 514/TT/2014.



- iii. The Commission had admitted the cost pertaining to tower collapse but did not consider the cost in tariff calculation due to absence of Auditor/ Management Certificate indicating the segregated values for these replacements and the absence of decapitalized value of the old assets and granted liberty to the Petitioner to submit these details at the time of true-up.
- iv. The Petitioner has now submitted Certificate of the Statutory Auditors/ Management. Also, duly updated Form 10B regarding de-capitalization has been submitted.
- v. In view of above, the Petitioner has prayed to approve the proposed ACE of ₹15.73 lakh during 2014-15 for Tower Collapse in respect of Combined Asset.

e) Tower Footing Protection Work

- i. The tower footing protection work was required for tower strengthening at Tower Location No: 441 (DD+0) of 400 kV D/C (Quad) Kishanganj-Purnea, Tower Location No. 336 and 348 of Asset A-2 and Tower Location No. 444 of Asset A-1 in Bihar. The justification and reasons for the said protections work are as follows:

- Tower Location No. 441 of 400 kV Kishanganj-New Purnea (PKG#A1) had become vulnerable and was in hazardous condition because of one heavy water channel that had developed by natural drainage of overflowed water of entire area as per the natural undulation of the area during heavy floods in October 2017. The same drainage had been causing considerable soil erosion at tower foundation. When the cutting-edge distance from tower leg (C leg) of the said location was approximately 1 m, it was felt that soil erosion will be continued during monsoon and distance from tower footings (Leg: B and C) will be reduced and tower foundation will be exposed because of progressing of overflow rainwater through the channel. Hence, to maintain the stability of the line, it was imminent for the Petitioner to plan for protection of tower by construction of RRM wall and boulder pitching at damaged bond area and soil filling at eroded area maintaining proper slope for drainage system for passing the natural rainwater of the entire area through the same portion without any soil erosion. Also, it was planned to install 600 mm diameter Reinforced Cement Concrete (RCC) pipe with one-way valve for drainage of water through existing permanent channel of irrigation department available at backside of the tower.



- Tower Location No. 336 situated near branch river of Koshi and during monsoon huge flood water passed between Leg A to leg D and B within tower base. It is also an anchor tower of Koshi Pile last location Tower Location No. 335 towards Koshi-Muzaffarpur section. For several years, due to change in Koshi river course, the flood water discharge was being noticed through tower footing. Further, during the peak time of monsoon, the discharge of flood water increases every year making the tower prone to collapse. Hence, to avoid any untoward incident or accident, it was decided by management of the Petitioner to take up RRM and DRM work at tower site and in all affected tower footings viz. A and B to D, where soil got exposed after monsoon in dry work location to protect the tower base by providing boulders in wire mesh and RCC work.
 - With respect to Tower Location No. 444 of Asset A-1 in Bihar, it was observed that when water level of nearby River Parman increased, the water current hit directly its base and soil got eroded in that portion. Further, during the rainy season, the soil gets eroded at river bank of Soura River due to drainage of overflowing water from entire agriculture land to river as per natural undulation of the area leading to the weakening of base of the tower. Considering the above imminent threat, it was decided that an extension of protection wall be developed to fully protect the tower from soil erosion. This extension of Protection wall has been carried out at Tower Location No. 444.
- ii. At the time of the construction, the river was away from these towers and was at safe distance. However, due to the change in river course coupled with flood during monsoons, the water is flowing through the nearby fields as well as tower footings leading to the erosion of soil. The soil erosion at the foot of these towers imposed imminent risk to the stability of the afore-mentioned lines. Hence, the Petitioner had to carry out the tower footing protection work at these towers for tower strengthening during 2018-19. Some of the tower footing works were also expected to be completed in 2020.
- iii. The Certificate of the Statutory Auditors/ Management pertaining to ACE of ₹76.04 lakh (excluding normative IDC) incurred towards cost of tower footing protection work during 2014-19 has been submitted.



iv. In view of above, the Petitioner has prayed to allow the proposed tower footing protection work with respect to Asset A-1 and in part of Purnea-Saharsa section related to Combined Asset.

f) Way Leave Charges

- i. During construction of the transmission lines, for getting permission/privilege for crossing of railway lines through Railway Land at various locations, the Petitioner had availed Way Leave Facility from Indian Railways and agreements were signed with Railway authorities for availing such facility for a period of ten years starting from the years 2005 and 2006. Way Leave Charges as per their demand at various locations were paid to the Railway authorities.
- ii. Now, since these agreements have expired after completion of 10 years, the Petitioner has received demand notes from Railway Authorities for renewal of their agreements for a further period of ten years. However, in most cases these demands have been made after expiry of 10 years period. Therefore, the Petitioner has paid these charges and executed agreements subsequent to such expiry during the 2014-19 period but effective retrospectively from the date of expiry of the relevant agreement.
- iii. In view of above, the Commission may allow the Way Leave Charges amounting to ₹203.58 lakh (₹125.81 lakh in 2016-17, ₹65.04 lakh in 2017-18 and ₹12.72 lakh in 2018-19) paid by the Petitioner to be capitalized as ACE in the year of payment of such charges. Since this expenditure is to be amortized in balance unexpired period of way leave, the Commission may also permit depreciation of the same at the rate of its amortization in the books as the rate of 5.28% as per the 2014 Tariff Regulations 2014-19 for 'Any other assets not covered above' shall not be sufficient to amortize the same in 10 years. Hence, it requires a rate of slightly more than 10%. Accordingly, the Commission may allow ACE towards Way Leave Charges during the 2014-19 period under Regulation 14(3)(ix) of the 2014 Tariff Regulations.
- iv. The Petitioner has submitted that similar agreements will be required to be renewed if any further demand notes from Railway authorities are received in future for remaining Railway crossings. In such a scenario, the Petitioner has sought leave of the Commission to come back subsequently at the time of true-up for the 2019-24 period.



31. As given above, the Petitioner has proposed de-capitalisation (towards replacement of removed insulators) of ₹1578.59 lakh as per the original values of assets, as certified by the Petitioner's management. The Petitioner has also claimed ACE for some works.

32. Regulation 14(3)(ix) of the 2014 Tariff Regulations provides as follows:

“14. Additional Capitalisation and De-capitalisation:

...
(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

...
*(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolescence of technology, replacement of switchyard equipment due to increase of fault level, **tower strengthening**, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system; and*
...”

33. We have considered the submissions of the Petitioner. The Petitioner has claimed ACE of ₹322.84 lakh during the 2014-19 period towards Freehold Land, SAP Implementation, Insulator Replacement, Tower Collapse, Tower Footing Protection and Way Leave Charges under Regulation 14(3)(ix) of the 2014 Tariff Regulations for Combined Asset against the admitted ACE of ₹160.53 lakh. Further, corresponding to actual ACE for replacement of existing assets, there has been de-capitalisation of the replaced assets in the books of account at original cost of such replaced assets. Therefore, net ACE during the 2014-19 period has been claimed after deducting the de-capitalisation from the cash ACE in this petition.

34. The Commission vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No. 515/TT/2014 and Petition No. 516/TT/2014 respectively had allowed ACE of ₹160.53 lakh during the 2014-19 period towards the purchase of freehold land to compensate Forest Department and SAP Implementation



due to 'obsolescence of technology' which had become necessary for successful and efficient operation of transmission system pertaining to Combined Asset. Therefore, the trued-up cost of ₹50.27 lakh towards freehold land and ₹110.14 lakh towards SAP Implementation is allowed under Regulation 14(3)(ix) of the 2014 Tariff Regulations.

35. Further, the Commission vide aforementioned orders had admitted the proposal pertaining to replacement of insulators and replacement of tower due to tower collapse but did not consider the expenditure in tariff calculation due to absence of Statutory Auditor/ Management Certificate indicating the segregated values for these replacements and due to the absence of decapitalized value of the old assets and had granted liberty to the Petitioner to submit these details at the time of truing-up. Now, the Petitioner has submitted the Certificate of the Statutory Auditors and accompanying Statement of ACE pertaining to such ACE and de-capitalisation for the 2014-19 period along with updated Form-10B.

36. Therefore, ACE of ₹1445.67 lakh towards replacement of insulators and ₹15.73 lakh towards replacement of tower due to tower collapse together with de-capitalisation of ₹1578.59 lakh towards replaced assets is allowed under Regulation 14(3)(ix) of the 2014 Tariff Regulations.

37. The Petitioner has claimed ACE of ₹76.04 lakh towards tower footing protection work under Regulation 14(3)(ix) of the 2014 Tariff Regulations for 2014-19 tariff period and has submitted that the same was required for tower strengthening at Tower Location No. 441 and Tower Location No. 444 of Asset A-1 and Tower Location No. 336 and Tower Location No. 348 of Asset A-2 in Bihar. The Petitioner has submitted that at the time of the construction, rivers like Kosi, Parman and Soura were away from these towers and the towers were at safe distance. However, due to the change in river course coupled with flood during monsoons, the water was flowing through the nearby fields as well as tower footings leading to the erosion of soil. Soil erosion at the



foot of these towers imposed imminent risk to the stability of transmission line. Hence, the Petitioner had to carry out tower footing protection work at these towers for tower strengthening during 2017-18 and 2018-19. Some of the tower footing works were also expected to be completed in 2019-20.

38. We observe that Regulation 14(3)(ix) of the 2014 Tariff Regulations provides for ACE towards 'tower strengthening' and 'any other expenditure which has become necessary for successful and efficient operation of transmission system' and that the tower footing protection work had become necessary due to change in river course and flooding of the tower footings which is covered under the provisions of the said Regulation. However, the Petitioner has not made any mention of such threat to tower footings due to change in river course and flooding at the time of the hearing of Petition No. 514/TT/2014. The change in river course and flooding is a matter which needs to be observed by the Petitioner during routine patrolling of the transmission line as change in river course is a gradual phenomenon and floods are regular occurrences in these vicinities. Therefore, the Petitioner should have affirmed its apprehension at the time of hearing of Petition No. 514/TT/2014, which was disposed vide order dated 20.4.2017. Nevertheless, considering the fact that the work of tower footing protection was emergent in nature caused by natural disaster and the Petitioner carried out this work during 2017-18 and 2018-19 after issuance of order dated 20.4.2017 in Petition No. 514/TT/2014, we allow ACE of ₹76.04 lakh towards tower footing protection works under the provisions of Regulation 14(3)(ix) of the 2014 Tariff Regulations.

39. The Petitioner has claimed ACE of ₹203.58 lakh on account of Way Leave Charges under Regulation 14(3)(ix) of the 2014 Tariff Regulations for the 2014-19 tariff period and has submitted that the same were required to be paid for getting permission/ privilege for crossing of railway lines through Railway land at various



locations during the construction of the transmission lines. Agreements were initially signed with Railway authorities for availing such facility for a period of ten years starting from the years 2005 and 2006. Since these agreements have expired after completion of 10 years, the Petitioner has received demand notes from Railway Authorities for renewal of such agreements for a further period of ten years. However, in most cases these demands have been made after expiry of 10 years period. Therefore, the Petitioner has paid these charges and executed agreements subsequent to such expiries during the 2014-19 period but effective retrospectively from the date of expiry of the relevant agreement. The Petitioner has also submitted that as this expenditure is mandatorily required to continue operation of transmission lines of the Petitioner, the same is permissible under the said Regulation.

40. The Petitioner has requested to permit depreciation of 'Way Leave Charges' at the rate of amortisation in the books of the Petitioner since the rate of 5.28% in Appendix II of Tariff Regulations, 2014-19 for 'Any other assets not covered above' shall not be sufficient to amortise the same in 10 years. The Petitioner has, thereupon, proposed a rate of depreciation which is slightly more than 10%.

41. We have considered the submissions of the Petitioner. The Petitioner has incurred the claimed expenditure of ₹203.58 lakh on account of Way Leave Charges during 2016-17, 2017-18 and 2018-19 in respect of Combined Asset that had become necessary for payment to Indian Railways authorities which are not covered under the provisions of Regulation 14(3)(ix) of the 2014 Tariff Regulations.

42. The Petitioner has further acquiesced that these expenditures were paid for a period of 10 years after expiry of few years from its effectiveness and has, therefore, booked these charges under 'Other Non-current Assets' in its books of account in the year of incurring such expenditure and is amortising the same equally in the Profit and Loss Account in the balance unexpired period of way leave.



43. In view of above, we allow the additional capitalisation of ₹203.58 lakh on account of 'Way Leave Charges' actually paid to the Indian Railways authorities as onetime payment. This amount shall not be capitalized and shall be recovered directly from the beneficiaries. As the Way Leave Charges are being allowed as one time pass through and are not being allowed to be capitalised, question of allowing additional depreciation at the rate of its amortisation in the books, does not arise.

44. Accordingly, ACE (without normative IDC) for 2014-15 to 2018-19 period is allowed and the same is as follows:

						(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	ACE allowed
Freehold Land	0.00	49.14	1.11	0.02	0.00	50.27
SAP Implementation Cost	110.14	0.00	0.00	0.00	0.00	110.14
Insulator Replacement	130.35	170.78	906.09	120.64	117.81	1445.67
Tower Collapse	15.73	0.00	0.00	0.00	0.00	15.73
Tower Footing Protection	0.00	0.00	0.00	14.47	61.57	76.04
Way Leave Charges	0.00	0.00	0.00	0.00	0.00	0.00*
Total	256.22	219.92	907.20	135.13	179.38	1697.85

(*) Way Leave Charges of ₹203.58 lakh actually paid to the Indian Railways Authorities is allowed as onetime payment and shall be recovered directly from the beneficiaries

Normative IDC on ACE (for the 2014-19 Tariff Period)

45. The Petitioner has submitted that entire expenditure on additional capitalisation has been incurred from internal resources and no actual loan was taken for such expenditure. Since 70% of such internal funds, which are in excess of 30% equity, are treated as normative loan for the purpose of tariff determination under provisions of the 2014 Tariff Regulations and the 2019 Tariff Regulations, interest on 70% of total internal funds before capitalisation needs to be treated as Normative IDC and added to the cash additional capitalisation to arrive at ACE for tariff purposes. However, the Commission in order dated 20.4.2017 in Petition No. 514/TT/2014 had disallowed Normative IDC on additional capitalisations done through internal resources.



46. Aggrieved by the above disallowance of normative IDC, the Petitioner had filed Appeal No. 231 of 2017 before the APTEL with the prayer to allow the Normative IDC on the Normative Loan considered for funding the additional capitalization for the 2014-19 period. The APTEL vide judgment dated 3.10.2019 held that there is always a cost of funding and, hence, additional capitalization through normative loan is entitled to be compensated in terms of normative IDC. The relevant extract of the judgment dated 3.10.2019 is as follows:

“8 (ix) The Central Commission should have taken into consideration the aspect that whatever be the types of funds it is never free of cost. There is always a cost of funding. The argument that no actual loan for additional capital expenditure was taken and therefore it is not admissible for any normative IDC is wrong. It is the commercial decision of the Appellant whether to borrow the money from the market for the purpose of additional capitalisation or use its internal accruals. In either case, the capitalisation deserves to be given the Interest During Construction. For the simple reasons that if the internal accruals were not to be used as additional capital than it would have been invested in the market in any interest earning instrument. Additional capitalisation is therefore entitled to be compensated in terms of normative IDC. The Central Commission should have considered this aspect that no funds are free funds.”

47. In this regard, the Petitioner had also filed I.A. bearing I.A. No. 2/IA/2020 in Petition No. 514/TT/2014 before the Commission praying to permit the Petitioner to claim Normative IDC as part of Petition No. 588/TT/2020 and consequent impact in tariff along with applicable carrying cost.

48. Based on above, the Petitioner has computed Normative IDC on 70% of the average funds deployed during the year for the additional capitalization claimed in the instant petition.

49. The Petitioner has submitted the computation of Normative IDC as follows:

a) Computation of Capital Works in Progress (CWIP) Schedule during the year

i. The Petitioner has first computed the opening and closing amounts of CWIP actually incurred in cash (cash CWIP) by subtracting un-discharged liabilities from CWIP amounts on corresponding dates. Similarly, cash additional capitalization has been simply referred to as additional capitalization for this purpose.



- ii. Since the closing amount of CWIP during a financial year is obtained after subtracting additional capitalisation during the year, CWIP schedule during the year is considered as the sum of CWIP schedule obtained by opening and closing amounts of CWIP and that for additional capitalisation.
- iii. While CWIP schedule obtained by opening and closing amounts of CWIP is assumed to increase or decrease linearly from opening to closing amounts, the CWIP schedule for additional capitalisation is assumed to increase linearly from zero in the beginning to the amount of additional capitalisation in the mid of the year.
- iv. The said assumption is based on the fact that the Commission considers average of opening and closing GFA i.e. additional capitalisation at the mid of the year, for the purposes of computing equity, loan and depreciation. Hence, for capitalisation to take place in mid of the year, entire CWIP for that capitalisation must have been incurred up to mid of the year.

b) Computation of Normative IDC on Normative Loan used in CWIP Schedule

- i. Average CWIP has been obtained as sum of (a) average of opening and closing CWIP for entire year $(\text{opening CWIP} + \text{closing CWIP})/2$ and (b) average of additional capitalisation up to mid year $(0 + \text{Additional Capitalisation})/4$.
- ii. The Petitioner has then considered 70% of CWIP in a financial year as the normative loan during that year and normative IDC has been computed on average normative loan at Weighted Average Rate of Interest (WAROI) on long term loan for that year.
- iii. Therefore, total normative IDC has been computed as sum of IDC on 70% of average additional capitalisation and IDC on 70% of average of opening and closing amounts of CWIP.

c) Computation of IDC Capitalized

- i. Since CWIP is assumed to be capitalised in the mid of the year, a part of normative IDC up to mid of the year has been capitalised depending upon the amount of additional capitalisation out of total CWIP in the mid of the year and balance normative IDC during the year is carried forward to the next year.
- ii. For the purpose of capitalisation of IDC, it is assumed that CWIP incurred first would be capitalised first. Hence, once the opening CWIP increases to the value



of additional capitalisation during the year, IDC related to this CWIP up to half year is capitalised and balance is carried forward.

- iii. In case, opening CWIP is more than additional capitalisation during the year, additional capitalisation is done from the opening CWIP and normative IDC to be capitalised for half year would be $70\% \times \text{additional capitalisation} \times 0.5$.

50. The summary of normative IDC as submitted in this petition is as follows:

						(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00
SAP Implementation Cost	1.83	0.00	0.00	0.00	0.00	1.83
Insulator Replacement	2.43	4.87	21.12	6.41	6.41	41.24
Tower Collapse	0.26	0.00	0.00	0.00	0.00	0.26
Tower Footing Protection	0.00	0.00	0.00	0.21	0.91	1.12
Way Leave Charges	0.00	0.00	1.88	0.96	0.19	3.02
Total	4.52	4.87	22.99	7.58	7.50	47.47

51. The Petitioner has prayed to approve the above methodology adopted by the Petitioner for computation of normative IDC and to include the same in additional capitalization of various assets capitalized during the 2014-19 period and projected to be capitalized during the 2019-24 period. The Petitioner has also submitted normative IDC computation and the management certificate on the amounts of CWIP.

52. We have considered the submissions of the Petitioner and observe that the Petitioner has neither submitted normative IDC duly certified by Auditors nor the dates of infusion of funds, corresponding dates of capitalisation, the applicable interest rates etc. and their supporting documents, if any, and in the absence of required information, we have worked out the normative IDC based on the assumptions as follows:

- Infusion of funds has been assumed to be at the beginning of the year of ACE incurred;
- Date of capitalisation has been assumed to be at the mid of the year; and
- WAROI on actual loan of respective years have been applied in calculation of Normative IDC of respective years.



53. The Normative IDC on ACE has been worked out by applying WAROI on actual loan of the particular years on average normative loan for the respective year applied for half of the year of the time span. Further, ACE in respect of Way Leave Charges has not been allowed to be capitalized. Therefore, the normative IDC thereof has also not been allowed.

54. Accordingly, the details of allowed normative IDC on ACE are as follows:

(₹ in lakh)						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00
SAP Implementation Cost	1.83	0.00	0.00	0.00	0.00	1.83
Insulator Replacement	2.17	2.84	14.89	1.98	1.93	23.80
Tower Collapse	0.26	0.00	0.00	0.00	0.00	0.26
Tower Footing Protection	0.00	0.00	0.00	0.24	1.01	1.25
Way Leave Charges	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.26	2.84	14.89	2.21	2.94	27.14

55. Resultantly, the summary of ACE allowed after cut-off date under the provisions of Regulation 14(3)(ix) of the 2014 Tariff Regulations after considering normative IDC but before considering de-capitalisation for the purpose of tariff calculations during truing up of the 2014-19 tariff period is as follows:

(₹ in lakh)						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Freehold Land	0.00	49.14	1.11	0.02	0.00	50.27
SAP Implementation Cost	110.14	0.00	0.00	0.00	0.00	110.14
Insulator Replacement	132.52	173.62	920.98	122.62	119.74	1469.47
Tower Collapse	15.99	0.00	0.00	0.00	0.00	15.99
Tower Footing Protection Work	0.00	0.00	0.00	14.71	62.58	77.29
Way Leave Charges	0.00	0.00	0.00	0.00	0.00	0.00
Total	260.48	222.76	922.09	137.34	182.32	1724.99

De-capitalization

56. The Petitioner has furnished Form-10 B for de-capitalization claimed in respect of insulator replacement and the same has been allowed in respect of Combined Asset during the 2014-19 period as follows:

(₹ in lakh)					
2014-15	2015-16	2016-17	2017-18	2018-19	Total
84.88	199.18	1103.12	55.45	135.94	1578.57



57. Further, the summary of element-wise net ACE allowed after adjustment of normative IDC and de-capitalisation in respect of Combined Asset are as follows:

(₹ in lakh)						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Freehold Land	0.00	49.14	1.11	0.02	0.00	50.27
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Line	63.63	-25.56	-182.14	81.87	46.38	-15.82
Sub-Station Equipment	111.97	0.00	0.00	0.00	0.00	111.97
PLCC	0.00	0.00	0.00	0.00	0.00	0.00
Total	175.60	23.58	-181.03	81.89	46.38	146.42

Capital Cost Considered as on 31.3.2019

58. In view of the above, the details of capital cost allowed as on 31.3.2019 after adjustment of normative IDC and de-capitalisation for tariff purpose at the time of truing up in respect of Combined Asset is as follows:

(₹ in lakh)		
Capital Cost allowed (as on 1.4.2014)	ACE allowed during 2014-19 period	Total Completion Cost allowed (as on 31.3.2019)
155822.08	146.42	155968.50

Debt-Equity Ratio

59. The Petitioner has claimed debt-equity ratio as on 31.3.2014 as approved by the Commission vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No.515/TT/2014 and Petition No.516/TT/2014 respectively. The debt-equity ratio has been considered in accordance with Regulation 19(3) of the 2014 Tariff Regulations and the debt-equity ratio allowed for determination of tariff for the period ending on 31.3.2014 has been considered as opening debt and equity ratio as on 1.4.2014.

60. The Petitioner has claimed ACE during the 2014-19 tariff period in the debt-equity ratio of 70:30. The debt-equity ratio of 70:30 has been considered for ACE allowed during 2014-19 in accordance with Regulation 19 of the 2014 Tariff

Regulations. Accordingly, the details of the debt-equity ratio in respect of Combined Asset as on 1.4.2014 and 31.3.2019 are as follows:

Funding	Capital Cost (as on 1.4.2014) (₹ in lakh)	(in %)	ACE for 2014-19 period (₹ in lakh)	(in %)	Total Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)
Debt	109075.45	70.00	102.49	70.00	109177.94	70.00
Equity	46746.63	30.00	43.92	30.00	46790.55	30.00
Total	155822.08	100.00	146.42	100.00	155968.50	100.00

Depreciation

61. The depreciation has been worked as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. The Combined Asset shall complete 12 years during 2019-20 and, thus, depreciation up to the 2014-19 period has been allowed based on Straight Line Method at the rates specified in the 2014 Tariff Regulations.

62. Further, depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD at Annexure-I has been worked out after taking into account the depreciation rates of the assets as specified in the 2014 Tariff Regulations and the trued-up depreciation allowed for the 2014-19 period in respect of Combined Asset is as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	155822.08	155997.68	156021.26	155840.23	155922.12
Additional Capitalisation	175.60	23.58	-181.03	81.89	46.38
Closing Gross Block	155997.68	156021.26	155840.23	155922.12	155968.50
Average Gross Block	155909.88	156009.47	155930.74	155881.17	155945.31
Weighted Average Rate of Depreciation (WAROD) (in %)	5.2354	5.2346	5.2337	5.2337	5.2337
Balance useful life of the asset at the beginning of the year (Year)	28	27	26	25	24
Lapsed life of the asset at the beginning of the year	7	8	9	10	11



(Year)					
Aggregated Depreciable Value	140200.64	140268.16	140174.69	140129.57	140187.28
Depreciation during the year	8162.45	8166.41	8160.93	8158.28	8161.67
Cumulative Depreciation (at the end of the year)	68774.69	76863.59	84595.19	92731.89	100840.65
Remaining Aggregated Depreciable Value (at the beginning of the Year)	79555.37	71493.46	63311.10	55534.38	47455.39

63. Depreciation allowed vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No.515/TT/2014 and Petition No.516/TT/2014 respectively, as claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

Particulars	(₹ in lakh)				
	15-2014	16-2015	2016-17	2017-18	2018-19
Allowed vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition Nos. 514/TT/2014, 515/TT/2014 and 516/TT/2014 respectively	8160.73	8163.63	8163.63	8163.63	8163.63
Claimed by the Petitioner in the instant petition	8201.65	8257.16	8568.46	8197.62	8220.52
Approved after true-up in this order	8162.45	8166.41	8160.93	8158.28	8161.67

Interest on Loan (IoL)

64. The Petitioner has submitted that since it has refinanced the original loan, in terms of Regulation 26(7) of the 2014 Tariff Regulations, it is required to pass on 2/3rd of net savings after recovering cost of refinancing from beneficiaries. However, it could not do so due to following difficulties:

- a) The funding for construction of a project through loan starts after financial closure with the financial institution as per the terms agreed in the Original Loan Agreement (Original Loan Terms). Once the project gets commissioned, the Commission determines the tariff based on Original Loan Terms and issues the Tariff Order for the project approving the annual transmission charges (ATC) applicable for the corresponding Tariff Period. This approved ATC also includes IoL as a component, which is determined at the



interest rate applicable as per Original Loan Terms and with normative loan as prescribed in the relevant Tariff Regulations.

b) Once the Tariff period is over, the project developer is required to file a true up petition based on the audited expenses for the past Tariff Period, including interest expenses at actual refinanced rates. As per Regulation 26(5) of the 2014 Tariff Regulations, IoL shall be computed at a rate of interest that shall be WAROI calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized.

c) WAROI is to be computed by considering the actual loan portfolio i.e. actual loans and their repayments with corresponding durations for each level of individual loan during the concerned year and there is no prescription as to what rate of interest is to be applied on this actual loan schedule. In a case where there is no refinancing or until the date of refinancing, the applicable rate can be nothing other than the rate applicable as per Original Loan Terms.

d) Therefore, during true-up, corrections in IoL would be warranted only to the extent of variations in actual interest rates *vis-a-vis* the projected/ approved interest rate. The projected weighted average interest rates need to be replaced with actual weighted average interest rates. However, in case of refinancing, this simplistic approach of replacing projected interest rates with actual interest rates cannot be applied. The same can be examined in two cases as follows:

- i. Refinancing takes place after issuance of Tariff Order and;
- ii. Refinancing takes place before issuance of Tariff Order and IoL is approved at refinanced rate.

65. In the first case involving refinancing after issuance of Tariff Order:

a) Assuming that the project developer gets its loan refinanced at lower than approved interest rates somewhere in the middle of the Tariff Period, post such refinancing, it will recover tariff at approved interest cost whereas it will actually incur lesser interest cost.

b) In such a scenario, the developer is supposed to share a portion of the net savings with the beneficiaries at the stipulated ratio in the corresponding Tariff Regulations, i.e. 2:1 as per Regulation 26(7) of the 2014 Tariff Regulations.

c) At the time of true-up, in case the said simplistic approach of replacing projected interest rate with actual interest rate is applied, the true-up interest cost would be lower than approved cost and the project developer would be



required to refund the excess interest charges recovered along with carrying cost to the beneficiaries.

d) This would lead to an anomalous situation that on one hand the Project Developer would have already shared the benefit of 66% of savings in interest cost with beneficiaries and on the other hand, it is required to refund the extra amount recovered (due to reduction in ATC due to actual lowered interest rates post re-financing) along with carrying cost in terms of Regulation 26(7) of the 2014 Tariff Regulations. In effect, the developer would end up paying 166% of interest savings and carrying cost to beneficiaries and instead of getting 33% as share of savings for efforts made, it would end up paying 66% of savings along with carrying cost to the beneficiaries.

66. In the second case involving refinancing before issuance of Tariff Order:

a) Tariff Order itself approves IoL at refinanced/ lower interest rates, applying the same approach of replacing projected with actual interest rates again results in an anomaly.

b) In case, the refinancing was done prior to issuance of Tariff Order in any Tariff Period and during the initial approval itself, a lower interest rate at refinanced rate is approved on a projection basis, then by adopting the actual refinanced lower interest rate during truing up will result in making only corrections for projected interest rates with actual interest rates similar to the case when no refinancing is done.

c) Thus, the Project developer shall not be getting any benefit of its earlier refinancing efforts, which is contrary to what is envisaged in the 2014 Tariff Regulations whereas the beneficiaries get 100% savings from re-financing.

67. The Petitioner has submitted that in the case where refinancing is done after issuance of Tariff Order, it results into a situation that not only the entire benefit of refinancing gets passed onto the beneficiaries during true up, the project developer also ends up paying an additional amount to the beneficiaries in the form of the amount to be shared due to such refinancing. On the other hand, in the case where refinancing is done after issuance of Tariff Order, despite making all efforts for refinancing, the developer does not get any share in savings. The Petitioner has



submitted that this was not the intention of the Regulations and its mechanical application leads to anomalous/ unjust result. The purpose or intention of Regulation 26(7) of the 2014 Tariff Regulations is clearly to share benefit of savings between the developer and the beneficiaries as has been brought out in SOR (Statement of Objects and Reasons) for the 2009 Tariff Regulations when sharing of savings was allowed for the first time.

68. The Petitioner has submitted that in order to give effect to the intention behind the Regulation, it is necessary that, both at the time making projections for next control period as well as at the time of truing up, the interest rates as per Original Loan Terms are considered so that benefit of savings in interest rates can be shared between the project developer and beneficiaries during the entire period of normative loan as these savings would not have arisen had the developer not taken appropriate steps at the right time.

69. The Petitioner has submitted that in case of refinancing, correct application of Regulation 26(5) of the 2014 Tariff Regulations would require computation of WAROI using actual loan portfolio/ schedule along with interest rate that would have been applicable at Original Loan Terms. In case, the normative loan is not exhausted till the Original Loan tenure, the proviso to above stipulates that last available WAROI, i.e. for last year of Original Loan tenure, has to be considered till the normative loan is fully repaid. In fact, this approach can be followed even if there are multiple refinancing with the base always being the interest rate as per Original Loan terms and savings computed with reference to actual interest rates post each refinancing.

70. The Petitioner has submitted that it is settled principle of interpretation of law that an interpretation that leads to an unjust result has to be discarded and purposive interpretation needs to be given to the provisions. Thus, in such cases, harmonious interpretation of the two provisions has to be done such that both the provisions can be



effected to without doing violence with any of them. The Hon'ble Supreme Court, in the case of Bhag Mal vs. Ch. Parbhu Ram, (1985) 1 SCC 61, has affirmed the aforesaid principle.

71. In view of the above, to give effect to the true intention of Regulations, the Petitioner has requested that instead of considering projected or actual applicable rates of Interest during tariff determination and true-up process, it would be appropriate to consider the rate of interest applicable as per the initial contract entered into at the time of first financing of the Project along with the effects of market forces on such interest rates as per terms of the said contract over the entire initially contracted period of the loan. Any gain of refinancing thereafter should not be considered at the time of true up as the gain out of refinancing would have already been shared with the beneficiaries as per the approved ratio from time to time in terms of the above regulations. Such gain of refinancing should be computed from the date of refinancing and by comparing the refinanced rate with the rate approved in the tariff order as per initial contract and shared directly with the beneficiaries in terms of Regulations 26(7) and 26(9) of the 2014 Tariff Regulations.

72. On the basis of above submissions, the Petitioner has prayed that IoL may be allowed at interest rates as per Original terms.

73. The Petitioner has submitted that the proposed approach is also supported by proviso to Regulation 38(i)(h) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 wherein the entire gain or loss due to swapping of loan was to be borne by the developer.

74. The Petitioner has submitted that Regulation 26(7) of the 2014 Tariff Regulations has an inbuilt safeguard for beneficiaries so that any increase in interest cost due to poor or wrong decision of project developer is not passed on the beneficiaries. The said Regulation mandates sharing the net savings in interest cost,



after meeting the cost of refinancing, only when refinancing results in net savings. This implies that the project developer must be able to show that over the balance life of the loan to be used for tariff computation (in this case normative loan), the Net Present Value (NPV) of the costs of refinancing and the yearly savings in interest cost over this period would be positive.

75. The Petitioner has submitted that since the yearly savings may last even beyond the Original Loan tenure, it should suffice to show that savings up to the Original Loan tenure have positive NPV as savings on normative loan beyond this period shall further increase NPV. Therefore, once NPV up to Original Loan tenure is shown to be positive, yearly net savings may be shared in the stipulated proportion between the project developer and the beneficiary. Since this NPV is computed on projection basis, its value will keep on changing when each of the projection year gets over. There might be a situation in future that the refinanced rate (if either original loan or refinanced loan or both have floating rates) become higher than original interest rate, which may result in loss rather than saving in that year. The test will still be the NPV up to that year and in case it is still positive, i.e. there is still net saving, the loss in that year will have to be shared in the given ratio as savings have already been shared earlier. No loss can be shared once NPV becomes negative, i.e. there is no net saving and, hence, entire loss shall be borne by project developer thereafter. Accordingly, the Petitioner has proposed to consider interest rate of original loan for computation of interest for 2014-19 period during true-up.

76. The Petitioner has submitted that since the interest savings considering the re-financing would be there only if the Commission approves the proposed methodology for computation of IoL, the Petitioner will be in a position to share the savings after recovery of refinancing cost post as per approval under Regulation 26(7) of the 2014 Tariff Regulations.



77. We have considered the submissions of the Petitioner. The issue related to refinancing of loan has been dealt in later part of this order. We have calculated IoL based on actual interest rates in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out based on the following:

- a) Gross amount of loan, repayment of instalments and WAROI on actual average loan.
- b) The repayment for the 2014-19 tariff period considered to be equal to the depreciation allowed during that period.
- c) In the loan portfolio, the Petitioner has indicated the additional loan to meet out ACE during 2014-15 and in this petition, it has submitted that ACE incurred during 2014-15 has been funded through internal resources. The additional loan from the loan portfolio to arrive at the WAROI during 2014-15 has been excluded.

78. Accordingly, the trued-up IoL allowed in respect of Combined Asset is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	109075.45	109198.37	109214.88	109088.15	109145.48
Cumulative Repayments up to Previous Year	60664.90	68827.35	76993.77	85154.70	93312.98
Net Loan-Opening	48410.55	40371.02	32221.11	23933.46	15832.50
Addition due to Additional Capitalization	122.92	16.50	-126.72	57.33	32.46
Repayment during the year	8162.45	8166.41	8160.93	8158.28	8161.67
Net Loan-Closing	40371.02	32221.11	23933.46	15832.50	7703.29
Average Loan	44390.79	36296.07	28077.28	19882.98	11767.90
Weighted Average Rate of Interest on Loan (%)	9.500	9.497	9.389	9.367	9.354
Interest on Loan	4216.91	3447.05	2636.18	1862.35	1100.81

79. IoL allowed vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No.515/TT/2014 and Petition No.516/TT/2014 respectively, as claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. Petition No. 514/TT/2014, Petition No. 515/TT/2014 and Petition No. 516/TT/2014, respectively	4191.44	3424.84	2654.31	1881.66	1110.7
Claimed by the Petitioner in the instant petition	4218.68	3454.87	2679.77	1940.69	1185.38
Approved after true-up in this order	4216.91	3447.05	2636.18	1862.35	1100.81

Return on Equity

80. The Petitioner has submitted RoE (Pre-Tax) as allowed by the Commission vide order dated 20.4.2017, 31.3.2017 and 18.04.2017 in Petition No. 514/TT/2014, Petition No.515/TT/2014 and Petition No.516/TT/2014 respectively.

81. The Petitioner has submitted that it is currently under MAT regime and while submitting Petition No. 514/TT/2014, it had grossed-up post-tax RoE by estimated MAT rate of 20.96%. However, the actual MAT Rate during the 2014-19 tariff period has varied significantly from 20.96% to 21.55%. Accordingly, the Petitioner has, in compliance with Regulation 25(3) of the 2014 Tariff Regulations, considered such actual MAT Rates applicable during the 2014-19 tariff period while computing pre-tax RoE for the purpose of truing-up.

82. The Petitioner has submitted that the opening equity base during the 2014-19 period has been arrived at corresponding to the closing equity as on 31.3.2014. Further, due to change in capitalization schedule and other additional capitalization during the 2014-19 period, changed/ proposed RoE has been computed. The Petitioner has submitted the detailed computation of proposed RoE (pre-tax) for true-up for the 2014-19 period in this petition.

Additional Tax on Income due to Change in Law

83. The Petitioner has submitted that in exercise of the powers conferred by section 133 read with section 469 of the Companies Act, 2013 and sub-section (1) of section 210A of the Companies Act, 1956, the Central Government, in consultation with the



National Advisory Committee on Accounting Standards had notified Companies (Indian Accounting Standards) Rules, 2015 (Rules) on 16.2.2015 which had come into force on 1.4.2015. Further, under Rule 4(1)(ii) of these Rules, the companies and their auditors covered by this Rule (including the Petitioner) are required to comply with the Indian Accounting Standards (Ind AS) specified in Annexure to these Rules in preparation of their financial statements and audit.

84. In line with above, the Petitioner had applied Ind AS w.e.f. 1.4.2016 with comparatives. Also, the Central Board of Direct Taxes (CBDT) constituted a committee in June 2015 for suggesting the framework for computation of Minimum Alternate Tax (MAT) liability under section 115JB of the Income Tax Act, 1961 (the 1961 Act) for Ind AS compliant companies in the year of adoption and thereafter. The Committee has given its final report on 22.12.2016. Consequently, Finance Act, 2017 had amended Section 115JB of the 1961 Act in order to incorporate provisions with respect to Ind AS compliant companies. Thus, in addition to existing provisions for computation of book profit, for Ind AS compliant companies on which MAT is applicable, including the Petitioner, the book profit was required to be further increased or decreased by one-fifth of the transition amount for year of convergence i.e. 2016-17 and the subsequent four years i.e. 2017-21. Transition amount has been defined as the amount or the aggregate of the amounts adjusted in the other equity (excluding capital reserve and securities premium reserve) on the convergence date.

85. The Petitioner has submitted that the above enactments/ amendments in the 1961 Act fall under the ambit of Change in Law as per Regulation 2(9)(a) and (b) and is required to be factored in the true-up of ATC for the 2014-19 tariff period as per Regulation 8(5)(ii) of the 2014 Tariff Regulations being an uncontrollable factor and beyond the control of the Petitioner.



86. The Petitioner has submitted that similar provisions also exist in the 2019 Tariff Regulations and, hence, same relief is available to the Petitioner during the 2019-24 tariff period. Further, MAT has been applicable during the 2014-19 period and is also expected to be applicable during the 2019-24 period and the book profit and tax liability thereon has increased due to the said Change in Law. Thus, the Petitioner is entitled to recovery of additional tax payable due to this Change in Law for the applicable Years 2016-17, 2017-18, 2018-19 in the 2014-19 tariff period and for years 2019-20 and 2020-21 in the 2019-24 tariff period.

87. The Petitioner has prayed to consider the said provisions of the aforementioned Rules and the 1961 Act as Change in Law under the 2014 Tariff Regulations. Further, as the basic principle of Change in Law is the principle of restitution i.e. to bring back the Petitioner to same economic position as it would have been had Change in Law not taken place, the Petitioner has proposed to recover this additional tax separately over and above ATC as per the provisions of the Regulations other than Change in Law provisions and not as part of ATC.

88. The Petitioner has submitted that the above would also avoid unwarranted increase in TMF and Incentives payable to the Petitioner that are linked to and are a percentage of ATC. However, since this additional tax recovery adds to book profit and attracts further tax on it, the net recovery would not fully compensate the Petitioner for increased tax. Therefore, in order to place the Petitioner to the same economic position, this additional tax recovery needs to be grossed up by the applicable MAT rate for the relevant year and allowed to be recovered separately from the beneficiaries.

89. The Petitioner has submitted that in furtherance to the above amendments in the 1961 Act and to clarify the mechanism of computation of additional book profit, CBDT issued Circular Number 24/2017 dated 25.7.2017 giving clarifications on



computation of book profit for the purposes of levy of MAT under section 115JB of the 1961 Act for Ind AS compliant companies.

90. The Petitioner has submitted the comparative statement for the Transition Year i.e. 2016-17 in its audited statement of accounts and has submitted the effect of transition to Ind AS as on 31.3.2016 in this petition. The Petitioner has submitted that in terms of the plain reading of the definition of Transition Amount, increase in other equity, which is the difference between Net Increase in Total Assets and Net Increase in Total Liabilities, should qualify as Transition Amount.

91. The Petitioner has submitted that as per clarifications given by CBDT, the effects of proposed dividends and deferred tax liability shall not form part of the Transition Amount. As such, the effect of these two items on other equity needs to be removed by adding back these two items in this amount of other equity to arrive at Transition Amount to be used for taxation purposes. Accordingly, the Petitioner has submitted Transition Amount as ₹28094.55 lakh.

92. The Petitioner has submitted that in view of section 115JB (2C) of the 1961 Act, it had/ will have to increase its book profits for the year of convergence i.e. 2016-17 and four subsequent years i.e. 2017-18, 2018-19, 2019-20 and 2020-21 by 1/5th of the transition amount each year and had/has to consequently paid/ pay additional MAT on that.

93. The Petitioner has submitted that since the five years of this additional tax liability due to Change in Law falls partly in the 2014-19 tariff period and partly in the 2019-24 tariff period, the Petitioner has prayed to allow the same in the respective tariff periods. The additional tax liability to be recovered along with and over and above transmission charges proposed for the 2014-19 and 2019-24 tariff periods as submitted in this petition is as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Additional Book Profit (1/5 th of Transition Amount) (A)	0.00	0.00	5636.56	5618.91	5618.75	16874.22
MAT Rate (%) (B)	20.96	20.96	21.34	21.34	21.55	-
Additional Tax on Book Profit due to CIL (C)=(AxB)	0.00	0.00	1202.93	1199.17	1210.88	3612.98
Grossed up Additional Tax for Combined Asset (D)=(C)/(1-B)	0.00	0.00	1529.31	1524.52	1543.35	4597.18

94. We have considered the submissions of the Petitioner. The Petitioner has informed that in addition to the existing provisions for computation of book profit, for Ind AS compliant companies on which MAT is applicable, including the Petitioner company, due to amendment in section 115JB of the 1961 Act, the book profit was required to be further increased or decreased by one-fifth of the transition amount for year of convergence i.e. 2016-17 and the subsequent four years i.e. 2017-2021 and is required to consequently pay additional MAT on that.

95. We note that the Petitioner has proposed to recover the additional tax separately over and above ATC as per the provisions of the Regulations other than Change in Law provisions and not as part of ATC. Further, we note that the Petitioner has proposed to recover the additional tax liability over and above ATC of 2014-19 to avoid its cascading effect on TMF and Incentive as the TMF and incentive are a percentage of ATC. Since this additional tax recovery adds to book profit and attracts further tax on it, the Petitioner has submitted that the net recovery would not fully compensate the Petitioner for increased tax. Therefore, in order to place the Petitioner to the same economic position, the Petitioner has proposed this additional tax recovery to be grossed up by the applicable MAT rate for the relevant year and allowed to be recovered separately from the beneficiaries.



96. We observe that the Petitioner company comes under MAT regime and has been paying Income Tax as per applicable MAT rates. Even after the implementation of Ind AS, the Petitioner company has not been deprived of the MAT benefits and the said additional tax required to be paid appears to be a notional one. As such, we are not inclined to allow the Petitioner to gross-up the additional tax by the applicable MAT rate. As the Petitioner has requested for “in order to place the Petitioner back to the same economic position”, the Petitioner may file a separate petition before the Commission, covering this aspect.

97. We are conscious that the entities covered under MAT regime are paying income tax as per MAT rate notified for respective financial year under the 1961 Act, which is levied on the book profit of the entity computed as per section 115JB of the 1961 Act. Section 115JB(2) of the 1961 Act 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 1961 Act. Since the Petitioner has been paying income tax on income computed under section 115JB of the 1961 Act 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 considered for the purpose of grossing up of rate of RoE. Any under-recovery or over-recovery of grossed up rate on RoE 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.



98. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of rate of RoE:

Year	Notified MAT rates (%) (inclusive of surcharge & cess)	Effective tax (%)	Base Rate of RoE (%)	Grossed up RoE (%) [(Base Rate)/(1-t)]
2014-15	20.961	20.961	15.50	19.610
2015-16	21.342	21.342	15.50	19.705
2016-17	21.342	21.342	15.50	19.705
2017-18	21.342	21.342	15.50	19.705
2018-19	21.549	21.549	15.50	19.758

99. Accordingly, RoE allowed for Combined Asset is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	46746.63	46799.31	46806.38	46752.07	46776.64
Addition due to Additional Capitalization	52.68	7.07	-54.31	24.57	13.91
Closing Equity	46799.31	46806.38	46752.07	46776.64	46790.55
Average Equity	46772.97	46802.84	46779.23	46764.36	46783.60
Return on Equity (Base Rate) (in %)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (in %)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax)	9172.18	9222.50	9217.85	9214.92	9243.50

100. RoE allowed vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No.515/TT/2014 and Petition No.516/TT/2014 respectively, as claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

Particulars	(₹ in lakh)				
	15-2014	16-2015	2016-17	2017-18	2018-19
Allowed vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No.515/TT/2014 and Petition No.516/TT/2014, respectively	9170.25	9174.98	9176.46	9176.46	9176.46
Claimed by the Petitioner in the instant petition	9172.19	9178.11	9221.94	9225.05	9256.26
Approved after true-up in this order	9172.18	9222.50	9217.85	9214.92	9243.50

Operation and Maintenance Expenses (O&M Expenses)

101. The total O&M Expenses as claimed by the Petitioner for Combined Asset are as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Norms for AC and HVDC Lines					
Double Circuit (Single Sub-Conductor) - 24 KM	0.303	0.313	0.324	0.334	0.346
Double Circuit (Twin and Triple sub-Conductors) - 481.95 KM	0.707	0.731	0.755	0.780	0.806
Double Circuit (four or more sub-Conductors) - 659 KM	1.062	1.097	1.133	1.171	1.210

102. The O&M Expenses are allowed in respect of the different elements under Combined Asset as per Regulation 29(4)(a) of the 2014 Tariff Regulations and are as follows:

(₹ in lakh)

Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Asset A-1:160 km	169.92	175.52	181.28	187.36	193.60
Asset A-2: 239 km	253.82	262.18	270.79	279.87	289.19
Asset A-3: 260 km	276.12	285.22	294.58	304.46	314.60
Asset A-4: 246 km	173.92	179.83	185.73	191.88	198.28
Asset A-5: 236 km	166.82	172.48	178.14	184.04	190.18
Asset A-6: 24 km	7.27	7.51	7.78	8.02	8.30
Total	1047.87	1082.74	1118.30	1155.63	1194.15

103. O&M Expenses allowed vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No.515/TT/2014 and Petition No.516/TT/2014 respectively, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No.515/TT/2014 and Petition No.516/TT/2014 respectively	873.95	902.91	932.57	960.75	995.87
Claimed by the Petitioner in the instant petition	1047.87	1082.74	1118.30	1155.63	1194.15
Approved after true-up in this order	1047.87	1082.74	1118.30	1155.63	1194.15



Interest on Working Capital

104. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations. The components of the working capital and the Petitioner's entitlement to interest thereon is as follows:

a) Maintenance spares:

Maintenance spares @ 15% of O&M Expenses as specified in Regulation 28 of the 2014 Tariff Regulations.

b) O&M Expenses:

O&M Expenses have been considered for one month of the allowed O&M Expenses.

c) Receivables:

The receivables have been worked out on the basis of 2 months of ATC worked out as above.

d) Rate of IWC:

Rate of IWC is considered on normative basis in accordance with Regulation 28 of the 2014 Tariff Regulations.

105. The trued-up IWC approved in respect of Combined Asset for the 2014-19 period are as follows:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares (15% of O&M Expenses)	157.18	162.41	167.75	173.34	179.12
O&M expenses (O&M Expenses for 1 month)	87.32	90.23	93.19	96.30	99.51
Receivables (Equivalent to 2 months of annual fixed cost)	3858.89	3743.02	3609.29	3482.96	3365.34
Total Working Capital	4103.40	3995.66	3870.23	3752.61	3643.98
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	553.96	539.41	522.48	506.60	491.94

106. IWC allowed vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No.515/TT/2014 and Petition No.516/TT/2014 respectively, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition Nos. 514/TT/2014, 515/TT/2014 and 516/TT/2014 respectively,	553.29	537.74	522.02	505.95	490.67
Claimed by the Petitioner in the instant petition	554.90	540.66	532.96	509.54	495.53
Approved after true-up in this order	553.96	539.41	522.48	506.60	491.94

107. The Petitioner has submitted other claims for the 2014-19 tariff period for the consideration of the Commission along with justification and the Commission's findings related thereto are as follows:

Un-recovered Depreciation on De-capitalisation

108. The Petitioner has submitted that as per provisions of the 2014 Tariff Regulations and the 2019 Tariff Regulations, it is allowed to recover 90% of the value of the transmission asset in form of depreciation and balance 10% is recognized as residual value (except for IT assets on which 100% recovery is allowed in the form of depreciation with 'nil' residual value). Further, de-capitalisation of the assets is undertaken owing to factors as follows:

- a) Technical or commercial obsolescence arising due to non-availability of the spares to maintain the equipment, arrival of better technology and rising cost of services in wake of reduced market demand for products.
- b) Rapid wear and tear of Assets due to events completely beyond control of the Petitioner and for *force majeure* conditions. And
- c) The useful life of the assets itself is considerably lower and is not commensurate with the useful life of plant i.e. 35 years as defined in the 2014 or 2019 Tariff Regulations.

109. In view of above, the Petitioner has submitted as follows:

- a) In the events where de-capitalisation of assets have to be carried out in the initial years of its useful life itself, for reasons as listed above, there would be significant loan outstanding on account of such assets which, necessarily, will have to be serviced till end of loan tenure.



- b) Post de-capitalisation, since neither depreciation nor interest is available on such assets, the actual loan outstanding for such assets will have to be serviced from revenue allowed for meeting other expenses.
- c) Even in cases where 70% or more depreciation has been recovered and loans have been serviced through tariff, the balance unrecovered depreciation out of total of 90% allowed under Tariff Regulations is a hit on the transmission licensee's equity.
- d) The above puts the Petitioner under financial hardship as it falls short from meeting expenses/ return from assets which are already approved by the Commission.
- e) The above circumstances, which led to shortfall for an approved asset addition are entirely beyond the control of the Petitioner and is akin to *force majeure* conditions.
- f) In fact, the derecognition principle of Ind AS, also mandates that while on one hand, the carrying cost (original cost) of assets removed has to be derecognized, on the other hand, the loss or gain, if any, from sale of such assets has to be booked under Profit & Loss Account. The relevant provisions of the Ind AS in respect of decapitalization/ derecognition of assets have been submitted in this petition.

110. The Petitioner has submitted that since the Commission has been allowing the normative salvage value of 10% of assets without any adjustment for any loss or gain after sale of assets with reference to the said normative value, the loss, if any, due to under-recovery of unrecovered part of depreciation below 90% needs to be allowed as expense in Tariff and in view of foregoing, the Petitioner has prayed to allow recovery of the unrecovered depreciation (i.e. allowed depreciation of 90 % of the Asset Value – Depreciation recovered in tariff till date of decapitalization) to compensate for the losses which it incurs and must also reflect in books. In this context, the Petitioner proposes to separately recover the losses towards unrecovered depreciation as additional depreciation over and above the specified norms in the 2014 Tariff Regulations.



111. The details of additional depreciation due to unrecovered depreciation for truing up during 2014-19 period are as follows:

		(₹ in lakh)				
Particulars		2014-15	2015-16	2016-17	2017-18	2018-19
De-capitalization	A	84.88	199.18	1103.12	55.45	135.94
Accumulated Depreciation	B	37.20	88.59	599.75	33.57	86.73
Allowable Depreciation on amount de-capitalized	C=90% of A	76.40	179.27	992.81	49.91	122.35
Un-recovered Depreciation	D=C-B	39.19	90.67	393.06	16.33	35.61

112. We have considered the submissions of the Petitioner. The Petitioner has sought to recover of losses towards unrecovered depreciation as additional depreciation. It is observed that the 2014 Tariff Regulations provides for servicing the funds infused in the admitted capitalised expenditure by way of allowing RoE and IoL capital as the components of annual fixed cost. The equity and loan for this purpose are determined in accordance with Regulation 19 of the 2014 Tariff Regulations, which provides as under:

“19. Debt-Equity Ratio:

(1) For a project declared under commercial operation on or after 1.4.2014, the debt equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan: Provided that:

(i) where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:

(ii) the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

(iii) any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.

.....

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, debt equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.”

113. Therefore, the Regulations provide for servicing the debt capital in the form of IoL on the amount of loan arrived at by applying the debt-equity ratio as per Regulation 19 the 2014 Tariff Regulations on the capital cost allowed and not on the actual loan.



Similarly, in case of repayment of loan, not the actual loan repayment but the depreciation allowed for the corresponding year/ period is considered as the repayment of the loan in line with Regulation 26(3) of the 2014 Tariff Regulations which provides as follows:

“26. Interest on loan capital: ...

...

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period.....”

114. In view of the above, the prayer of the Petitioner to allow recovery of the unrecovered depreciation is not in line with the Regulations. Hence, the same is not tenable. Accordingly, we are not inclined to allow recovery of losses towards unrecovered depreciation as additional depreciation.

Interest on Loan and Sharing of Savings due to Refinancing

115. The submissions of the Petitioner pertaining to IoL and sharing of savings due to refinancing have already been noted above in the relevant paragraphs of this order. In addition, the Petitioner has submitted the summary of sharing of gain due to refinancing of loan as follows:

	(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Interest on Loan as per original loan terms (A)	4218.68	3454.87	2679.77	1940.69	1185.38	13479.40
Interest on Loan as per refinancing (B)	4218.68	3454.87	2430.94	1740.89	1066.75	12912.12
Gain from Refinancing (C)=(A-B)	0.00	0.00	248.84	199.80	118.64	567.27
Cost of Refinancing (D)	0.00	0.00	62.91	0.00	0.00	62.91
Net Gain from Refinancing (E)=(C-D)	0.00	0.00	185.93	199.80	118.64	504.36
Gain to be shared with beneficiaries (F=2/3rd of E)	0.00	0.00	123.95	133.20	79.09	336.24



116. We have considered the submissions of the Petitioner. The Petitioner has carried out refinancing of loan as per Regulations 26(7) and 26(8) of the 2014 Tariff Regulations which provide as follows:

“26. Interest on loan capital: ...

...

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

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

117. The contentions of the Petitioner regarding refinancing of loan tantamount to amendment in provisions of regulations which is not allowed through a petition. In our view, there is no ambiguity in provisions of the Regulations 26(7) and 26(8) of the 2014 Tariff Regulations and these Regulations clearly provide for treatment of refinancing of existing loan. The Petitioner is required to abide by the provisions of Regulations 26(7) and 26(8) of the 2014 Tariff Regulations and share the gain on account of refinancing of loan between the beneficiaries and the Petitioner in the ratio of 2:1. We are not inclined to allow any deviation in this matter regarding treatment of refinancing of loan. However, in the event of any dispute amongst the Petitioner and the Respondents, the Petitioner may approach the Commission for its resolution. As such, we have considered the actual Loan Portfolio with revised rates of interest.

Sales Tax Liability on the Petitioner

118. The Petitioner has submitted that Sales Tax Department of the Government of Uttar Pradesh has levied an amount of ₹26.44 crore (between 2004-05 to 2008-09) by way of demand, equivalent to the Differential Tax, i.e., 12% tax to be paid less 4% Concessional Tax paid by way of issuance of Form C. Accordingly, the above amount



has been treated as a Contingent Liability in Books of Accounts of the Petitioner and an Appeal has been filed at Allahabad High Court, Lucknow.

119. The Petitioner has submitted that the Commission vide order dated 20.4.2017 in Petition No. 514/TT/2014 had held as follows:

“74. We have considered the submissions of the Petitioner. We are not expressing view as to whether the claim for reimbursement of Differentiate Tax shall be admissible in tariff or not. If the Petitioner approaches the Commission after the disposal of the appeal by the Hon’ble High Court of Allahabad, it’s request will be considered in accordance with law.”

120. The Petitioner has sought liberty to separately approach the Commission on the issue of capitalization of such Sales Tax amount and recovery of the transmission charges along with accrued interest pertaining to the corresponding capitalization once the liability/ expenditure is incurred by the Petitioner.

121. We have considered the submissions of the Petitioner. The Petitioner has submitted that the Sales Tax Department of the Government of Uttar Pradesh is of the view that the Petitioner being in the transmission business is not entitled to issue Form C and has raised Sales Tax demand amounting to ₹26.44 crore equivalent to the Differential Tax, i.e., 12% Tax to be paid less 4% Concessional Tax paid by way of issuance of Form C. The Company has contested the demand by an appeal against the order before the first appellate authority. It has been submitted that the Petitioner has not yet made payment in this regard. Accordingly, the above amount has been treated as a Contingent Liability in Books of Accounts of the Petitioner and an Appeal has been filed at Allahabad High Court, Lucknow as per following details:

Total Sales Tax Demand Raised by Sales Tax Department (₹ in Crore)

Financial Year	Amount
2004-05	11.73
2005-06	12.56
2006-07	0.63
2007-08	0.03
2008-09	1.49
Total	26.44



122. The Petitioner has already preferred an appeal before the Hon'ble High Court of Allahabad. We have already expressed our views in the order dated 20.4.2017 in Petition No. 514/TT/2014 and held that if the Petitioner approaches the Commission after the disposal of the appeal by the Hon'ble High Court of Allahabad, its request will be considered in accordance with law. Therefore, no further action is warranted at this stage.

Incentive (Pre-Tax)

123. The Petitioner has submitted that in terms of the provisions of Regulation 33 of the 2014 Tariff Regulations along with the Commission's directions pertaining to Incentive in order dated 20.4.2017 in Petition No. 514/TT/2014, the Petitioner has recovered the incentive (pre-tax) based on the actual availability of the transmission system on approved Annual Fixed Charges (including Majoration Charges). However, due to revision in various components of ATC proposed for truing-up as above, the computation of the incentive based on actual performance during the 2014-19 period and actual availability, the incentive needs to be revised and the differential between revised and billed incentive needs to be recovered as follows:

(₹ in lakh)						
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Annual Fixed Charges (including Majoration Charges) at Normative Availability	25514.82	24764.89	24333.57	23131.38	22387.02	120131.68
Normative Availability (NATAF) (in %)	98.50	98.50	98.50	98.50	98.50	-
Actual Availability during the year (TAFY) (in %)	99.78	99.40	99.69	99.89	99.93	-
Annual Fixed Charges including Incentive (Pre-Tax)	25838.62	24992.25	24626.49	23424.92	22671.12	121553.4
Revised Incentive (Pre-Tax)	323.79	227.35	292.91	293.55	284.10	1421.7
Incentive Billed	278.93	221.26	261.11	277.11	258.77	1297.18
Differential	44.86	6.09	31.80	16.44	25.33	124.52



124. The Petitioner has submitted that the above Differential Incentive shall be different in case the approved ATC after truing up are different from the proposed ATC. The Petitioner has requested to approve the recovery of the Differential Incentive (Pre-Tax) for the 2014-19 period based on the actual performance and availability computed as per methodology based on the approved ATC after true-up.

125. The Petitioner has submitted that during the 2019-24 period, the Petitioner is entitled to bill the Incentive as per corresponding Regulations 46, 48 and 51 of the 2019 Tariff Regulations, which also allows the Petitioner to calculate and bill Incentive on similar lines as in the 2014 Tariff Regulations. The Petitioner has requested to allow it to bill the Incentive during this period as per these Regulations.

126. We have considered the submissions of the Petitioner. The Commission vide order dated 20.4.2017 in Petition No. 514/TT/2014 had directed as follows:

"Incentive

71. The petitioner has claimed the "Incentive" (pre-tax) based on the estimated/projected availability during 2014-19 on Annual Fixed Charges (including Majoration Charges) under Regulation 33 of the 2014 Tariff Regulations. Accordingly, the Petitioner is allowed to calculate and bill incentive as provided under Regulation 35(1) read with Regulation 38 of the 2014 Tariff Regulations."

127. In pursuance of the above, the Petitioner has recovered the Incentive (Pre-Tax) based on the actual availability of the transmission system on approved Annual Fixed Charges (including Majoration Charges). However, due to revision in various components of ATC proposed for truing-up as discussed above, the computation of the Incentive based on actual performance during the 2014-19 period and actual availability, the incentive needs to be revised.

128. We have already expressed our views in the order dated 20.4.2017 in Petition No. 514/TT/2014 wherein we have held that the Petitioner is allowed to calculate and bill incentive as provided under Regulations 33 and 35(1) read with Regulation 38 of the 2014 Tariff Regulations. Incentives are worked out based on the applicable



Regulations and the availability is certified by the concerned RPCs and thereafter the billing is done by CTUIL (Central Transmission Utility of India Limited). Therefore, no further directions are needed in the matter.

APPROVED ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

129. The trued-up Annual Fixed Charges (AFC) in respect of Combined Asset during the 2014-19 tariff period are as follows:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	8162.45	8166.41	8160.93	8158.28	8161.67
Interest on Loan	4216.91	3447.05	2636.18	1862.35	1100.81
Return on Equity	9172.18	9222.50	9217.85	9214.92	9243.50
Interest on Working Capital	553.96	539.41	522.48	506.60	491.94
O&M Expenses	1047.87	1082.74	1118.30	1155.63	1194.15
Total	23153.37	22458.12	21655.74	20897.79	20192.07
Add: Transmission Majoration Factor @10% of above	2315.34	2245.81	2165.57	2089.78	2019.21
Total	25468.71	24703.93	23821.31	22987.57	22211.28

130. AFC allowed vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No.515/TT/2014 and Petition No.516/TT/2014 respectively, claimed by the Petitioner in the instant Petition and trued-up in the instant order (including TMF) is as follows:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 20.4.2017, 31.3.2017 and 18.4.2017 in Petition No. 514/TT/2014, Petition No. 515/TT/2014 and Petition No.516/TT/2014, respectively.	25435.94	24622.33	23798.19	22965.10	22149.17
Claimed by the Petitioner in the instant petition	25514.82	24764.89	24333.57	23131.38	22387.02
Approved after true-up in this order	25468.71	24703.93	23821.31	22987.57	22211.28

DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD

131. The Petitioner has claimed the transmission charges for Combined Asset for the 2019-24 tariff period as follows:



(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	2181.64	2190.51	2205.23	2212.08	2212.08
Interest on Loan	719.18	537.18	341.55	134.94	15.74
Return on Equity	8811.59	8830.95	8839.52	8839.52	8839.52
Interest on Working Capital	233.00	233.21	232.68	231.82	231.69
O&M Expenses	1304.85	1350.44	1397.80	1447.02	1497.35
Total	13250.26	13142.28	13016.78	12865.38	12796.37
Add: Transmission Majoration Factor @10% of above	1325.03	1314.23	1301.68	1286.54	1279.64
Total	14575.29	14456.51	14318.46	14151.91	14076.01

132. The Petitioner has claimed IWC for Combined Asset for the 2019-24 tariff period as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	195.73	202.57	209.67	217.05	224.60
Maintenance Spares	108.74	112.54	116.48	120.58	124.78
Receivables	1629.13	1620.28	1604.81	1586.14	1573.32
Total Working Capital	1933.59	1935.38	1930.96	1923.78	1922.71
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	233.00	233.21	232.68	231.82	231.69

Capital Cost

133. Regulation 19 of the 2019 Tariff Regulations provides 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-firing;*
 - (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
 - (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
 - (n) *Expenditure on account of change in law and force majeure events; and*
 - (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries*
- (3) *The Capital cost of an existing project shall include the following:*
- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019.*
 - (b) *Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations.*
 - (c) *Capital expenditure on account of 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 up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
 - (f) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) *cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*

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

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

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

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

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

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

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

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

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

134. The trued-up capital cost of ₹155968.50 lakh as on 31.3.2019 as admitted in this order is considered as opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure

135. Regulation 25 of the 2019 Tariff Regulations provides as follows:

“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.”

136. The Petitioner has submitted that ACE has been arrived at by subtracting un-discharged liability from GFA on 31st March of each Financial Year. Since the Petitioner has not taken any loan for funding ACE during the 2019-24 tariff period, the same have been funded entirely through internal resources.

137. The Petitioner has claimed total ACE of ₹686.97 lakh (including normative IDC of ₹9.97 lakh on ACE) for the 2019-24 period. Accordingly, the details of combined cost including ACE as claimed by the Petitioner in this petition for the 2019-24 period is as follows:

Particulars						(₹ in lakh)
	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Opening Capital Cost	156144.92	156527.47	156831.89	156831.89	156831.89	156144.92
Additional Capitalisation	382.55	304.42	0.00	0.00	0.00	686.97
Closing Capital Cost	156527.47	156831.89	156831.89	156831.89	156831.89	156831.89

138. The submissions and justifications in support of ACE claimed during the 2019-24 tariff period have already been enumerated above in the relevant paragraphs of this order and are not being reproduced here for the sake of brevity. The said ACE details as submitted in this petition are as follows:



a) Tower Footing Protection Work

- i. The tower footing protection work was required at locations Tower Location No. 444 of Asset A-1, Tower Location No. 441 (DD+0) of 400 kV D/C (Quad) Kishanganj-Purnea and Tower Location Nos. 336 and 348 of Asset A-2.
- ii. The Petitioner has requested to allow ACE amounting to ₹45.00 lakh (excluding normative IDC) in 2019-20 towards the tower footing work under Regulation 25(2)(b) of the 2019 Tariff Regulations.

b) Pile Foundation

- i. The Commission vide order dated 17.3.2011 in Petition No. 288/2009 allowed ACE of ₹298.83 lakh for the 2004-09 tariff period pertaining to the Pile Foundation required for shifting of Tower.
- ii. The Petitioner has requested to allow the pile foundation work for estimated ACE amounting to ₹632.00 lakh (excluding normative IDC) in 2019-20 and 2020-21 under Regulation 25(2)(b) of the 2019 Tariff Regulations.

139. We have considered the submissions of the Petitioner. ACE claimed for 2019-20 and 2020-2021 are beyond cut-off date and the same are covered under Regulation 25(2)(b) of the 2019 Tariff Regulations. The Petitioner has claimed the projected ACE for the 2019-24 tariff period and submitted Auditor's Certificate in support of the same. The Petitioner has submitted that ACE claimed for the period from 1.4.2019 to 31.3.2021 is on estimated basis for Tower Footing Protection and Pile Foundation works covered under Regulations 25(2)(b) of the 2019 Tariff Regulations. The Petitioner has claimed the projected ACE of ₹377.00 lakh and ₹300.00 lakh for 2019-20 and 2020-21, respectively, totalling to ₹677.00 lakh. The Petitioner has submitted that ACE has been arrived at by subtracting undischarged liability from GFA on 31st March of each Financial Year. Since the Petitioner has not taken any loan for funding ACE during the 2019-24 tariff period, the same have been funded entirely through internal resources. The issue of allowing additional IDC due to internal funding by the Petitioner shall be dealt in relevant para pertaining to IDC.



140. The Petitioner has claimed ACE of ₹45.00 lakh on account of tower footing protection work under Regulation 25(2)(b) of the 2019 Tariff Regulations during the 2019-24 tariff period and has submitted that the same was required for tower strengthening at Tower Location Nos. 441 and 444 of asset A-1 and Tower Location Nos. 336 and 348 of Asset A-2 in Bihar. In line with allowing these claims for 2014-19 period, we allow ACE during 2014-19 period due to change in the river course.

141. Similarly, the Petitioner has claimed ACE of ₹632.00 lakh on account of Pile Foundation work under Regulation 25(2)(b) of the 2019 Tariff Regulations during the 2019-24 tariff period and has submitted that the same was required in order to safeguard tower foundation from erosion of the soil caused by change in course of the river Parman at Tower Location No. 365 of Asset A-1.

142. Regulation 25(2)(b) provides for ACE within the original scope and after cut-off date if 'The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions'. It is felt that the Tower Footing Protection and Pile Foundation work had become necessary due to change in river course and flooding of the tower footings and holds merit to be covered under the provisions of Regulation 25(2)(b) of the 2019 Tariff Regulations.

143. Accordingly, ACE allowed after cut-off date under the provisions of Regulation 25(2)(b) of the 2019 Tariff Regulations for the purpose of tariff calculations of the 2019-24 tariff period, subject to truing up, is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Tower Footing Protection Work	45.00	0.00	0.00	0.00	0.00	45.00
Pile Foundation	332.00	300.00	0.00	0.00	0.00	632.00
Total	377.00	300.00	0.00	0.00	0.00	677.00

Normative IDC on ACE (for the 2019-24 tariff period)

144. The Petitioner has claimed the normative IDC on 70% of the average funds deployed during the year for the additional capitalization claimed in the present petition as follows:

(₹ in lakh)						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Pile Foundation	4.89	4.42	0.00	0.00	0.00	9.31
Tower Footing Protection	0.66	0.00	0.00	0.00	0.00	0.66
Total	5.55	4.42	0.00	0.00	0.00	9.97

145. The detailed submissions of the Petitioner regarding this issue have already been enumerated above in the relevant paragraphs of this order and are not being reproduced here for the sake of brevity.

146. We have considered the submissions of the Petitioner. In the absence of required information, we have worked out the Normative IDC based on the assumptions as follows:

- a) Infusion of funds has been assumed to be at the beginning of the year of additional capital expenditure incurred.
- b) Date of Commercial Operation of the Additional Capital Expenditure assumed to be at the mid of the year; and
- c) WAROI on actual loan of respective years have been applied in calculation of Normative IDC of respective years.

147. Further, the normative IDC on ACE has been worked out by applying WAROI on actual loan of the particular years on Average Normative Loan for the respective year applied for the half a year of the time span.

148. The details of normative IDC on ACE allowed for the 2019-24 tariff period are as follows:

(₹ in lakh)						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Tower Footing Protection	5.41	4.89	0.00	0.00	0.00	10.30
Way Leave Charges	0.73	0.00	0.00	0.00	0.00	0.73
Total	6.14	4.89	0.00	0.00	0.00	11.03



149. Resultantly, the details of ACE allowed after cut-off date under the provisions of Regulation 14(3)(ix) of the 2014 Tariff Regulations after considering normative IDC for the purpose of tariff calculations during truing up of the 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Pile Foundation	337.41	304.89	0.00	0.00	0.00	642.30
Tower Footing Protection	45.73	0.00	0.00	0.00	0.00	45.73
Total	383.14	304.89	0.00	0.00	0.00	688.03

150. The details of element-wise net ACE allowed after adjustment of normative IDC for Combined Asset are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	0.00	0.00	0.00	0.00	0.00	0.00
Transmission Line	383.14	304.89	0.00	0.00	0.00	688.03
Sub-Station Equipment	0.00	0.00	0.00	0.00	0.00	0.00
PLCC	0.00	0.00	0.00	0.00	0.00	0.00
Total	383.14	304.89	0.00	0.00	0.00	688.03

Capital Cost for the 2019-24 tariff period

151. In view of the above, the capital cost allowed as on 31.3.2019 after adjustment of normative IDC for tariff purpose at the time of truing up for Combined Asset, subject to true-up, is as follows:

(₹ in lakh)

Capital Cost allowed (as on 1.4.2019)	ACE allowed (2019-24)	Total Completion Cost allowed (as on 31.3.2024)
155968.50	688.03	156656.53

Debt-Equity Ratio

152. 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.”*

153. The debt-equity ratio for the 2019-24 tariff period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The debt-equity considered for the purpose of computation tariff for the 2019-24 tariff period is as follows:

Funding	Capital cost (as on 1.4.2019) (₹ in lakh)	(in %)	ACE (2019-24) (₹ in lakh)	(in %)	Total Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	109177.95	70.00	481.62	70.00	109659.57	70.00
Equity	46790.55	30.00	206.41	30.00	46996.96	30.00
Total	155968.49	100.00	688.03	100.00	156656.53	100.00



Depreciation

154. Regulations 33(2), 33(5) and 33(6) of the 2019 Tariff Regulations provide as follows:

“33. Depreciation:

.....
(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of 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.”
.....

“(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 up to 31.3.2019 from the gross depreciable value of the assets.”

155. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. WAROD at Annexure-II has been worked out after taking into account the depreciation rates specified in the 2019 Tariff Regulations. The Combined Asset has already completed 12 years of life as on 31.3.2019, the remaining depreciable value of ₹39703.41 lakh has been spread across the balance useful life of 23 years in accordance with Regulation 33(5) of the 2019 Tariff Regulations. The depreciation allowed for the Combined Asset for the 2019-24 tariff period, subject to true up, is as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	155968.50	156351.64	156656.53	156656.53	156656.53
Additional Capitalisation	383.14	304.89	0.00	0.00	0.00
Closing Gross Block	156351.64	156656.53	156656.53	156656.53	156656.53
Average Gross Block	156160.07	156504.08	156656.53	156656.53	156656.53
Weighted Average Rate of Depreciation (WAROD) (in %)	1.1054	1.1030	1.1019	1.1019	1.1019
Balance useful life of the asset at the beginning of the	23	22	21	20	19



year (Year)					
Lapsed life of the asset at the beginning of the year (Year)	12	13	14	15	16
Aggregated Depreciable Value	140544.06	140853.68	140990.87	140990.87	140990.87
Depreciation during the year	1726.24	1740.31	1746.84	1746.84	1746.84
Cumulative Depreciation at the end of the year	102566.89	104293.12	106019.36	107745.59	109471.83
Remaining Aggregated Depreciable Value at the beginning of the Year	39703.41	38286.79	36683.68	34936.84	33189.99

Interest on Loan

156. Regulation 32 of the 2019 Tariff Regulations provide 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 asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.*

(4) *Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*

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

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

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

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

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

157. The Petitioner has submitted that IoL has been computed by taking depreciation as the deemed principle repayment. The weighted average rate has been



considered equal to WAROI for 2018-19, which is the last available rate in terms of proviso to Regulation 32(5) of the 2019 Tariff Regulations.

158. The Petitioner has submitted that WAROI for 2018-19 is based on actual loan portfolio during the year and the interest rate as per Original Loan Terms. On similar reasons, for the purposes of sharing interest savings due to refinancing, the Petitioner has proposed to consider difference between this WAROI and WAROI at actual refinanced rate during the same year i.e. 2018-19. The Petitioner has furnished detailed computation of WAROI on loan in Tariff Application Form 9C annexed with this petition.

159. In terms of the above, IoL for the 2019-24 period has been computed by applying Rate of Interest on Average Loan for the year which has been arrived at after considering opening balance for the year, debt component of ACE, deemed repayment of loan (Annual Depreciation) and closing balance derived thereof. The Petitioner has submitted the proposed IoL during the 2019-24 period in this petition and has requested for its approval.

160. We have considered the submissions of the Petitioner. IoL considered for Combined Asset, subject to true up, is as follows:

Particular	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	109177.94	109446.14	109659.57	109659.57	109659.57
Cumulative Repayments up to Previous Year	101474.65	103200.88	104941.19	106688.03	108434.88
Net Loan-Opening	7703.29	6245.26	4718.37	2971.53	1224.69
Addition due to additional capitalisation	268.20	213.42	0.00	0.00	0.00
Repayment during the year	1726.24	1740.31	1746.84	1746.84	1224.69
Net Loan-Closing	6245.26	4718.37	2971.53	1224.69	0.00
Average Loan	6974.28	5481.82	3844.95	2098.11	612.34
Weighted Average Rate of Interest on Loan (in %)	9.310	9.310	9.310	9.310	9.310
Interest on Loan	649.32	510.37	357.97	195.34	57.01

Return on Equity

161. 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 due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

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

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

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

- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:*

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

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



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

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

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:

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

(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.”

162. The Petitioner has submitted that based on the above Regulations, the opening equity base during the 2019-24 period pertaining to the transmission assets has been arrived at corresponding to the closing equity as on 31.3.2019 and after considering yearly equity additions, RoE has been computed during the 2019-24 period.

163. The Petitioner has submitted that it is currently paying MAT and the same has been considered as effective tax rate for the purpose of grossing-up of RoE during the 2019-24 period. Since benefit of Section 80 of the 1961 Act shall be available to the



Petitioner only up to year 2021-22, there may be a possibility of the Petitioner coming under Corporate Tax Rate thereafter.

164. Accordingly, the Petitioner has prayed to allow it to claim RoE based on actual tax rate applicable to it during the 2019-24 period at the time of true-up in terms of Regulation 31(3) of the 2019 Tariff Regulations. Also, based on ACE during the 2019-24 period, computation of proposed RoE (Pre-Tax) during the 2019-24 period pertaining to the transmission assets has been submitted by the Petitioner in this petition.

165. The Petitioner's submissions regarding Additional Tax Liability due to Change in Law have already been enumerated above in the relevant paragraphs of this order and are not being repeated here for the sake of brevity and further the Petitioner has also proposed to recover the said liability on account of applicability of Ind AS during years 2019-20 and 2020-21 separately and over and above the proposed ATC (as submitted in this petition).

166. We have considered the submissions of the Petitioner. Regulations 30 and 31 of the 2019 Tariff Regulations provides for grossing up of ROE with the effective tax rate for the purpose of RoE. Further, these Regulations provide that in case the generating company or transmission licensee is paying MAT, MAT rate including surcharge and cess will be considered for the grossing up of RoE. Accordingly, MAT rate applicable during 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. Accordingly, RoE allowed for Combined Asset, subject to true up, is as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	46790.55	46905.49	46996.96	46996.96	46996.96
Addition due to addl. capitalisation	114.94	91.47	0.00	0.00	0.00
Closing Equity	46905.49	46996.96	46996.96	46996.96	46996.96
Average Equity	46848.02	46951.23	46996.96	46996.96	46996.96



Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	8799.00	8818.38	8826.97	8826.97	8826.97

Operation and Maintenance Expenses

167. The O&M Expenses claimed by the Petitioner for Combined Asset for the 2019-24 tariff period are as follows:

(₹ in lakh)				
2019-20	2020-21	2021-22	2022-23	2023-24
1304.85	1350.44	1397.80	1447.02	1497.35

168. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:

“35. Operation and Maintenance Expenses (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
Norms for sub-station Bays (₹ Lakh per bay)					
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
Norms for Transformers (₹ Lakh per MVA)					
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
Norms for AC and HVDC lines (₹ Lakh per km)					
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
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834.00	864.00	894.00	925.00	958.00
Gazuwaka HVDC Back-to-Back	1,666.00	1,725.00	1,785.00	1,848.00	1,913.00



Particulars	2019- 20	2020-21	2021-22	2022-23	2023- 24
station (₹ Lakh per 500 MW)					
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252.00	2,331.00	2,413.00	2,498.00	2,586.00
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468.00	2,555.00	2,645.00	2,738.00	2,834.00
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696.00	1,756.00	1,817.00	1,881.00	1,947.00
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563.0	2,653	2,746.00	2,842.00	2,942.00

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 Talcher-Kolar HVDC bi-pole scheme (2000 MW);*
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
- v. the O&M expenses of ±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 ±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.

169. We have considered the submissions of the Petitioner. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and



are allowed in respect of the various elements included in Combined Asset for the 2019-24 tariff period as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses Calculation (Transmission Line)					
Line: Double Circuit (Bundled conductor with four or more sub-conductors):					
Line Length (km)	659.00	659.00	659.00	659.00	659.00
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
Line: D/C Twin & Triple Conductor:					
Line Length (km)	481.95	481.95	481.95	481.95	481.95
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
Line: D/C Single Conductor:					
Line Length (km)	24.00	24.00	24.00	24.00	24.00
Norms (₹ lakh/km)	0.377	0.391	0.404	0.419	0.433
O&M Calculated for Lines (₹ lakh)	1304.85	1350.44	1397.80	1447.02	1497.35
Allowed in this order (₹ lakh)	1304.85	1350.44	1397.80	1447.02	1497.35

Interest on Working Capital

170. Regulations 34(1)(c), 34(3), 34(4) and 3(7) of the 2019 Tariff Regulations provide 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 fixed cost;*
- ii. *Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*
- iii. *Operation and maintenance expenses, including security expenses for one month”*

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

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

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

“3.Definitions ...



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

171. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of 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, for 2020-21 onwards has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points), whereas, from 2021-22 onwards has been considered as 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Maintenance Spares (Maintenance Spares @15% of O&M Expenses)	195.73	202.57	209.67	217.05	224.60
O&M Expenses (O&M Expenses for one month)	108.74	112.54	116.48	120.59	124.78
Receivables (Receivables equivalent to 45 days of annual fixed cost)	1566.35	1557.14	1544.30	1530.28	1519.45
Total Working Capital	1,870.81	1,872.24	1,870.45	1,867.92	1,868.83
Rate of Interest on Working Capital (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	225.43	210.63	196.40	196.13	196.23

Approval of TMF (for the 2014-19 and 2019-24 Tariff Periods)

172. The Petitioner has submitted that TMF was introduced by the Commission vide Regulation 4.10A of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001 (the 2001 Tariff Regulations) and the Commission vide order dated 1.7.2004 in the Petition 51/2004 had allowed TMF to the Petitioner. In furtherance of the Commission's directions in order dated 20.4.2017 in Petition No. 514/TT/2014 regarding TMF and after following the due process, the Commission vide Second Amendment to the 2019 Tariff Regulations inserted a new



Regulation (49A) in the 2019 Tariff Regulations, the provisions of which along with that of Regulation 75 of the 2019 Tariff Regulations regarding TMF have been submitted by the Petitioner.

173. Based on above, the Petitioner has computed TMF for 2014-19 period for the purpose of truing-up of ATC of the 2014-19 period and for the estimated ATC of the 2019-24 period. Further, the Petitioner has requested to approve the same as part of ATC and the details of the same have been furnished in this petition.

174. The Petitioner has submitted that although the original Regulation 4.10A of the 2001 Tariff Regulations stipulated that TMF shall be available for entire life of the transmission assets, some of the subsequent orders and the latest amendment in regulations have restricted it to the license period of 25 years. In this case, the license was obtained on 13.11.2003, whereas the transmission assets were commissioned from 1.9.2006 onwards. Hence, the Petitioner would not be able to claim TMF beyond 22 years even though the life of transmission assets may not have expired.

175. The Petitioner has sought liberty to file a separate Petition on TMF as discussed and has submitted that the submissions pertaining to TMF made herein are without prejudice to the rights of the Petitioner.

176. We have considered the submissions of the Petitioner. Regulation 4.10A of the 2001 Tariff Regulations stipulates that TMF shall be available for entire life of transmission assets. However, as per Regulation 75 of the 2019 Tariff Regulations, the TMF shall be available for a period of 25 years from the date of issue of the transmission license. In this case, the license was obtained on 13.11.2003, whereas the transmission assets were put into commercial operation from 1.5.2006 onwards. Hence, the Petitioner would not be able to claim TMF beyond 22 years even though the life of transmission assets may not have expired. Accordingly, we have allowed TMF during the 2014-19 tariff period. As 22 years after first COD of 1.5.2006 will occur



beyond 2019-24 period, the TMF will be allowable during the 2019-24 tariff period also.

177. The Petitioner has computed and claimed the TMF for the 2019-24 period as per the Regulation 75 of the 2019 Tariff Regulations and the same is allowed based on the findings of the Commission in this regard already given above.

ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD

178. The transmission charges allowed for Combined Asset for the 2019-24 tariff period are as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1726.24	1740.31	1746.84	1746.84	1746.84
Interest on Loan	649.32	510.37	357.97	195.34	57.01
Return on Equity	8799.00	8818.38	8826.97	8826.97	8826.97
O&M Expenses	1304.85	1350.44	1397.80	1447.02	1497.35
Interest on Working Capital	225.43	210.63	196.40	196.13	196.23
Total	12704.83	12630.12	12525.98	12412.30	12324.40
Transmission Majoration Factor @10% of above	1270.48	1263.01	1252.60	1241.23	1232.44
Total	13975.32	13893.14	13778.58	13653.53	13556.84

Tariff Application Fees and Publication Expenses

179. The Petitioner has submitted the provisions of Regulation 3 of the Central Electricity Regulatory Commission (Payment of Fees) Regulations, 2012 (the 2012 Payment of Fees Regulations) pertaining to tariff application fees. The Petitioner has also submitted the provisions of Regulation 52 of the 2014 Tariff Regulations pertaining to recovery of Tariff Application Fees and Publication Expenses directly from the beneficiaries through monthly billing.

180. The Petitioner has also submitted the vide order dated 20.4.2017 in Petition No. 514/TT/2014 the Commission had allowed the recovery of application fee and publication expenses directly from the beneficiaries. The details of the said Application Fees and Publication Expenses have been submitted in this petition.



181. We have considered the submissions of the Petitioner. 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.

License fee and RLDC Fees and Charges

182. The Petitioner has submitted the provisions of Regulation 7 of the 2012 Payment of Fees Regulations pertaining to transmission license fees. The Petitioner has also submitted the provisions of Regulation 52(a) and 52(b) of the 2014 Tariff Regulations pertaining to recovery of RLDC Fee and Charges and License Fee directly from the beneficiaries in proportion to their share.

183. The Petitioner has also submitted the vide order dated 20.4.2017 in Petition No. 514/TT/2014 the Commission had allowed the recovery of License fees and RLDC fees and charges directly from the beneficiaries. The details of the said License Fees and RLDC fees and charges have been submitted in this petition.

184. We have considered the submissions of the Petitioner. The Petitioner shall be entitled for reimbursement of license fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 period. The Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulation 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

Goods and Services Tax

185. The Petitioner has submitted that for O&M of the transmission line, it has different site offices in three States and one corporate office in Delhi. Since the Petitioner was previously registered under VAT in Delhi, West Bengal, Bihar and UP, on implementation of GST, it was automatically considered as a taxable entity under GST and had to get itself registered under GST in each of the aforesaid States separately. The Petitioner is getting revenue from PGCIL as Transmission Service



Charges (TSC) which is in accordance with the tariff orders passed by the Commission for the transmission of electricity. As TSC are exempted under GST, the Petitioner is not availing any input tax credit.

186. The Petitioner has submitted that it has total seven stores in the above-mentioned three States wherein various transmission line inventory, tools and plants and capital inventory/ equipment are kept which are required for O&M of transmission line. Movement of materials (line inventory, T&P and capital inventory/ equipment) can happen within the State or inter-State as per requirement. As per Schedule 1 (Section 7) of CGST Act, 2017 ("GST Act"), applicable from 1.7.2017, movement of goods or services within the same company with different GSTNs would be considered as supply even if without consideration. Hence, movement of assets/ material from one State to another State within the same company attracts GST. Earlier VAT/ Service tax was not applicable on such transactions. This is the additional cost i.e. over and above the normal cost that the Petitioner has to bear after implementation of GST Act. Under earlier regime of State VAT/Service Tax, no tax was applicable within the company transfer of material and services from one State to another State. Therefore, the additional cost incurred squarely falls under Change in Law as per Regulation 2(9)(a) of the 2014 Tariff Regulations and is allowable as per Regulation 8(5)(ii) of the 2014 Tariff Regulations.

187. The Petitioner has submitted that its corporate office in Delhi has to incur expenditure on common services which are in the nature of audit fee, software expenses, legal expenses etc. Delhi Office is also required to cross-charge such common services to all other distinct entities (i.e. West Bengal, Uttar Pradesh and Bihar), which now attracts GST and is covered under Change in Law as per Regulations 2(9)(a) and 8(5)(ii) of the 2014 Tariff Regulations. Further, Regulation



8(5)(ii) of the 2014 Tariff Regulations allows the transmission licensee to true up the tariff based on performance of uncontrollable parameter 'Change in Law'.

188. The Petitioner has submitted that since GST paid is due to Change in Law during the 2014-19 tariff period which was not included in the O&M norms, the same may be allowed as Additional O&M Expenses over and above normative O&M Expenses. The Petitioner has submitted the Management Certificate on incurring of such expenses along with the summary of such additional cost due to GST amounting to ₹33.18 lakh (₹10.96 lakh in 2017-18 and ₹22.22 lakh in 2018-19) under Cross Charge and Transfer of Goods during the 2014-19 period in this petition.

189. The Petitioner has submitted that the basic principle of Change in Law is the principle of restitution i.e. to bring back the Petitioner to same economic position as it would have been, had Change in Law not taken place. Accordingly, the Petitioner has proposed to recover this additional O&M Expenses separately over and above the ATC as per the provisions of the extant Regulations and not as part of ATC. Further, the aforesaid approach will also avoid unwarranted increase in TMF and Incentives payable to the Petitioner that are linked to and are a percentage of ATC.

190. In view of the above, the Petitioner has prayed to allow the afore-mentioned GST on cross charges and movement of capital goods as additional O&M expenses over and above ATC during the 2014-19 period.

191. We have considered the submissions of the Petitioner. The Petitioner has requested to allow the aforementioned GST on cross charges and movement of capital goods as additional O&M expenses over and above the transmission charges for 2014-19 tariff period. The Petitioner has proposed to recover the additional O&M over and above ATC of 2014-19 to avoid its cascading effect of TMF and Incentive. The Petitioner has submitted that GST paid is due to 'Change in Law' during 2014-19 tariff period which was not included in the O&M norms. We are not allowing the



claimed expenditure as of now. However, we are of the view that the issue raised by the Petitioner requires deliberation on merit as the Petitioner has claimed the relief under the provisions of Change in Law. Hence, the Petitioner is given the liberty to approach the Commission through a separate petition along with relevant details and documents in support of its claim, for deciding the issue.

Sharing of Transmission Charges

192. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. However, with effect from 1.11.2020, the 2010 Sharing Regulations has been repealed and sharing is governed by the provisions of 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 Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

193. To summarise:

- a) The trued-up AFC approved for the Combined Asset for the 2014-19 tariff period is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	23153.37	22458.12	21655.74	20897.79	20192.07
Transmission Majoration Factor @10% of AFC	2315.34	2245.81	2165.57	2089.78	2019.21
Total	25468.71	24703.93	23821.31	22987.57	22211.28

- b) AFC allowed for Combined Asset for the 2019-24 tariff period in this order is as follows:



Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	12704.83	12630.12	12525.98	12412.30	12324.40
Transmission Majoration Factor @10% of AFC	1270.48	1263.01	1252.60	1241.23	1232.44
Total	13975.32	13893.14	13778.58	13653.53	13556.84

194. Annexure-I and Annexure-II given hereinafter shall form part of this order.

195. This order disposes of Petition No. 588/TT/2020 in terms of the above discussions and findings.

sd/
(P. K. Singh)
Member

sd/
(I. S. Jha)
Member

sd/
(P. K. Pujari)
Chairperson



ANNEXURE-I

DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION (WAROD) FOR THE 2014-19 TARIFF PERIOD

Combined Asset 2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations					
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)	
Freehold Land	131.39	0.00	49.14	1.11	0.02	0.00	181.66	0.00%	0.00	0.00	0.00	0.00	0.00	
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	
Building & Other Civil Works	3229.45	0.00	0.00	0.00	0.00	0.00	3229.45	3.34%	107.86	107.86	107.86	107.86	107.86	
Transmission Line	152461.24	63.63	-25.56	-182.14	81.87	46.38	152445.42	5.28%	8051.63	8052.64	8047.15	8044.51	8047.89	
Sub-Station Equipments	0.00	111.97	0.00	0.00	0.00	0.00	111.97	5.28%	2.96	5.91	5.91	5.91	5.91	
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	0.00	
TOTAL	155822.08	175.60	23.58	-181.03	81.89	46.38	155968.50		8162.45	8166.41	8160.93	8158.28	8161.67	
									Average Gross Block (₹ in lakh)	155909.88	156009.47	155930.74	155881.17	155945.31
									Weighted Average Rate of Depreciation (WAROD) (%)	5.23537	5.23456	5.23369	5.23366	5.23367

ANNEXURE-II

DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION (WAROD) FOR THE 2019-24 TARIFF PERIOD

Combined Asset 2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations				
		2019-20	2020-21	2021-22	2022-23	2023-24			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Freehold Land	181.66	0.00	0.00	0.00	0.00	0.00	181.66	0.00%	SPREADING				
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%					
Building & Other Civil Works	3229.45	0.00	0.00	0.00	0.00	0.00	3229.45	3.34%					
Transmission Line	152445.42	383.14	304.89	0.00	0.00	0.00	153133.45	5.28%					
Sub-Station Equipments	111.97	0.00	0.00	0.00	0.00	0.00	111.97	5.28%					
PLCC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33%					
TOTAL	155968.50	383.14	304.89	0.00	0.00	0.00	156656.53		1726.24	1726.24	1726.24	1726.24	1726.24
							Average Gross Block (₹ in lakh)		156160.07	156504.08	156656.53	156656.53	156656.53
							Weighted Average Rate of Depreciation (WAROD) (%)		1.1054	1.1030	1.1019	1.1019	1.1019