# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## **Petition No. 383/TT/2019**

Coram:

Shri P. K. Pujari, Chairperson Shri I. S. Jha, Member Shri Arun Goyal, Member

Date of Order: 03.09.2021

#### In the Matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2019 for Transmission system constructed, maintained and operated by Torrent Power Grid Limited *vide* License No. 2/Transmission/CERC dated 16.5.2007.

#### And in the matter of:

Torrent Power Grid Limited (TPGL), "Samanvay", 600, Tapovan, Ambawadi, Ahmedabad-380 015

.... Petitioner

#### **Versus**

- 1. Torrent Power Limited (TPL), "Samanvay", 600, Tapovan, Ambawadi, Ahmedabad -380 015.
- 2. Power Grid Corporation of India Limited, "Saudamini", Plot No.2, Sector-29, Gurgaon -122 001.
- Western Regional Power Committee, F-3, MIDC Area, Marol, Opp. SEEPZ, Central Road, Andheri (East), Mumbai - 400 093.
- PTC India Limited,
   2nd Floor, NBCC Tower, 15, Bhikaji Cama Place,
   New Delhi 110 066.
- 5. Madhya Pradesh Power Management Company Limited, Shakti Bhawan, Rampur, Jabalpur - 482 008.

- Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara - 390 007.
- 7. Maharashtra State Electricity Distribution Company Limited, 5<sup>th</sup> floor, Prakashgad, Bandra (East), Mumbai 400 051.
- Chhattisgarh State Power Transmission Company Limited,
   P.O. Sunder Nagar, Dangania,
   Raipur 492 013.
- 9. Goa Electricity Department, Government of Goa, Vidyut Bhawan, 3<sup>rd</sup> floor, Panaii, Goa - 403 001
- Electricity Department,
   Administration of Dadra Nagar Haveli U.T.,
   Silvassa 396 230.
- Electricity Department,
   Administration of Daman & Diu,
   Moti Daman 396 210.

...Respondent

For Petitioner: Shri Chetan Bundela, Advocate, TPGL

For Respondents: None

#### **ORDER**

The instant petition has been filed by Torrent Power Grid Limited (TPGL) for truing up of the tariff of the 2014-19 tariff period under Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of tariff of the 2019-24 tariff period under Regulation 8 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the transmission asset consisting of LILO of Vapi-Jhanore, 400 kV D/C Line from SUGEN to a point near Gandhar with LILO of one circuit of existing Gandhar -Dehgam 400 kV D/C Line, 400 kV line from LILO Point on Jhanore (Gandhar)-Dehgam line to 400 kV Sub-station of PGCIL at

Pirana (Kamod) and opening of LILO Point near Gandhar under Transmission system (hereinafter referred as "transmission system") constructed, maintained and operated by Torrent Power Grid Limited.

- 2. The Petitioner has made the following prayers:
  - "1) Admit petition for truing up of the control period 2014-19 and determination of tariff for the control period 2019-24 as submitted herewith.
  - 2) Approve the transmission tariff for the asset covered under this petition, as per para F above.
  - 3) Allow additions/ alterations/ changes/ modifications to the petition at a future date.
  - 4) Condone any inadvertent omissions/ errors/ rounding off difference/ shortcomings.
  - 5) Pass such other relief as the Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."

#### Background

- 3. The brief facts of the case are as follows:
  - a) The Petitioner, a joint venture company between Torrent Power Grid Limited (TPGL), a Torrent Group Company, and Power Grid Corporation of India Limited (PGCIL), is an inter-State transmission licensee. The Petitioner was granted inter-State transmission license on 16.5.2007, to build, own and operate the transmission system for evacuation of power from SUGEN CCPP. On obtaining the inter-State transmission licence, the implementation of the transmission system associated with SUGEN CCPP was undertaken by the Petitioner. Subsequently, the licence was amended by the Commission *vide* order dated 1.12.2010 in Petition No. 10/2010.
  - b) The Investment Approval (IA) for the transmission system was accorded by the Board of Directors of the Petitioner company in the meeting held on 21.8.2007 at an estimated cost of ₹36400 lakh. However, while granting the transmission licence to the Petitioner, the Commission *vide* its order dated 16.5.2007 in Petition No. 97/2006 approved an amount of ₹35800 lakh for the whole project.
  - c) The transmission system is executed in three phases as detailed hereunder:

- (i) **Phase 1:** 400 kV Loop in Loop out (LILO) at SUGEN bus on one circuit of the Gandhar (Jhanor)-Vapi Line of PGCIL.
- (ii) **Phase 2**: 400 kV D/C line from SUGEN to the point near Gandhar and LILO on one circuit of the Gandhar (Jhanor)-Dehgam Line of PGCIL near Gandhar.
- (iii) Phase 3: Extending 400 kV D/C line from LILO point on Jhanor (Gandhar)-Dehgam line to 400 kV Sub-station of PGCIL at Pirana (Kamod) with two number of 400 kV line bays and LILO at 400 kV Pirana Substation of Torrent Power Ltd along with opening of LILO point near Gandhar.
- d) Phase-1, Phase-2 and Phase-3 of the transmission system were put into commercial operation on 1.3.2009, 1.4.2010 and 1.4.2011, respectively. The Commission had determined the tariff for Phase-1 in Petition No. 275/2009 vide order dated 11.7.2011 for 2004-2009 period and in Petition No 159/2009 vide order dated 19.7.2011 for 2009-14 period. Tariff for Phase-2 was approved vide order dated 22.4.2013 in Petition No. 318/2010 for the period from COD to 31.3.2014. Tariff for Phase-3 was determined by the Commission in Petition No. 106/TT/2012 vide order dated 15.1.2015 from the period from COD to 31.3.2014. The time over-run of one month and 8 months in case of Phase-1 and Phase-2 respectively was disallowed and consequently, IDC and IEDC for the said period of time over-run was disallowed.
- e) The transmission tariff for the 2009-14 period was trued up and transmission tariff for the period from 1.4.2014 to 31.3.2019 was determined vide order dated 19.9.2016 in Petition No. 134/TT/2015 for the transmission system as a whole. The Petitioner had filed Petition No. 56/RP/2016 seeking review of the order dated 19.9.2016 in Petition No. 134/TT/2015 on the ground that there were apparent errors in consideration of liquidated damages, treatment of IDC, debt-equity ratio, rates of interest on loan and RoE considered for Phase-3 of the transmission system. The Commission *vide* order dated 31.7.2017 in Petition No. 56/RP/2016 revised the trued-up tariff for 2009-14 tariff period and the tariff of the 2014-19 tariff period.
- f) Apportioned approved cost of ₹2402.00 lakh, ₹11542.00 lakh and ₹24695.76 lakh was approved by the Commission for Phase-1, Phase-2 and

Phase-3, respectively in Petition No. 159/2009, Petition No. 318/2010 and Petition No. 106/TT/2012 in its orders dated 19.7.2011, 22.4.2013 and 9.1.2015 respectively, totalling to capital cost of ₹38639.76 lakh. Hence, total approved cost of ₹38639.76 lakh was allowed, which is higher than the cost of ₹35800.00 lakh approved at the time of granting licence.

- g) GMDCL agreed that one third (1/3<sup>rd</sup>) of the capital cost will be borne by GMDCL. Accordingly, only 2/3<sup>rd</sup> of the capital cost actually incurred as per the Auditor's Certificate has been considered for the transmission system.
- h) The transmission tariff allowed for the Combined Asset for the 2014-19 tariff period *vide* order dated 19.9.2016 in Petition No. 134/TT/2015 and revised *vide* order dated 31.7.2017 in Petition No. 56/RP/2016 and the trued-up tariff claimed by the Petitioner in the instant petition is as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier <i>vide</i> order dated 19.9.2016 in Petition No. 134/TT/2015 and order dated 31.7.2017 in Review Petition No. 56/RP/2016	5437.51	5303.52	5043.39	4893.22	4744.56
As claimed by the Petitioner	5420.66	5290.17	5014.65	4778.51	4613.15

- 4. The respondents are Distribution Licensees and Power Departments, who are procuring transmission service from the Petitioner, mainly beneficiaries of Western Region.
- 5. The Petitioner has served the petition on the Respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. Shri Sameer Chandrakant Walekar has filed his objections on 6.2.2020 to the instant petition and it is regarding sharing of transmission charges of the Combined Asset. MPPMCL, Respondent No. 5 has submitted reply *vide* affidavit dated 29.11.2019, wherein mainly the issue of additional capitalisation, porcelain insulator failure and its replacement with polymeric insulators and maintaining replaced porcelain insulators as spares etc. has been raised. TPL, Respondent no.1,

vide affidavit dated 6.7.2020 has submitted its reply in the matter, wherein the issue of sharing of transmission charges of the transmission assets has been raised. In response, the Petitioner has submitted its rejoinder vide affidavit dated 4.3.2020. However, the Petitioner has not submitted any rejoinder to the reply of TPL. The issues raised by the objector, MPPMCL and TPL and the clarifications given by the Petitioner are dealt with in relevant paragraphs of this order.

- 6. This order is issued considering the main petition dated 1.10.2019, the Petitioner's affidavits dated 19.10.2019, 4.3.2020, 10.8.2020 and 21.9.2020, reply of MPPMCL *vide* affidavit dated 29.11.2019 and reply of TPL *vide* affidavit dated 6.7.2020.
- 7. The hearing in this matter was held on 13.7.2020 and 28.8.2020 through video conference and the order was reserved.
- 8. Having heard the representatives of the Petitioner and having careful perusal of the materials on record, we proceed to dispose of the petition.

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

- 9. The Commission had trued up asset-wise tariff of the transmission assets in Phase-1, Phase-2 and Phase-3 for 2009-14 period *vide* order dated 19.9.2016 in Petition No. 134/TT/2015. The transmission assets were combined and the tariff for Combined Asset was approved by the Commission while approving the tariff of 2014-19 period *vide* order dated 19.9.2016 in Petition No. 134/TT/2015. The Commission *vide* order dated 31.7.2017 in Petition No. 56/RP/2016 revised the trued-up tariff for 2009-14 period and tariff of 2014-19 tariff period.
- 10. As provided under Regulation 8(1) of the 2014 Tariff Regulations, the tariff allowed for the period from 1.4.2014 to 31.3.2019 is trued-up and the tariff for the

2019-24 period is determined under Regulation 8 of the 2019 Tariff Regulations. Accordingly, we are proceeding with truing up of 2014-19 tariff period in respect of Combined Asset as on 1.4.2014.

11. The details of the tariff approved for 2014-19 tariff period for Combined Asset by the Commission vide order dated 31.7.2017 in Review Petition No. 56/RP/2016 in Petition No.134/TT/2015 is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1542.85	1592.17	1592.17	1592.17	1592.17
Interest on Loan	1753.31	1507.93	1243.40	1085.96	929.63
Return on Equity	1718.39	1773.34	1773.34	1773.34	1773.34
Interest on Working Capital	131.52	128.82	123.28	120.22	117.22
O&M Expenses	291.44	301.25	311.20	321.51	332.19
Total	5437.51	5303.52	5043.39	4893.22	4744.56

- 12. The Petitioner has submitted the information as required under the 2014 Tariff Regulations for truing up of annual fixed charges for 2014-19 period. The tariff for 2014-19 period has been trued up as discussed in the subsequent paragraphs.
- 13. The details of the trued-up transmission charges claimed by the Petitioner for the Combined Asset is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1546.37	1597.94	1596.94	1596.94	1596.94
Interest on Loan	1729.83	1483.14	1216.26	954.48	777.01
Return on Equity	1721.87	1779.32	1766.62	1787.94	1792.75
Interest on Working Capital	131.15	128.52	122.63	117.64	114.26
O&M Expenses	291.44	301.25	311.20	321.51	332.19
Total	5420.66	5290.17	5014.65	4778.51	4613.15

14. The details of the trued-up interest on working capital (IWC) claimed by the Petitioner are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	24.29	25.10	25.93	26.79	27.68
O&M expenses	43.72	45.19	46.68	48.23	49.83
Receivables	903.44	881.70	835.78	796.42	768.86
Total	971.45	951.99	908.39	871.44	846.37
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	131.15	128.52	122.63	117.64	114.26

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

15. The Commission had approved E-COD of the Combined Asset as 2.11.2010 *vide* order dated 19.9.2016 in Petition No.134/TT/2015 and the same has been used to determine the lapsed life of project as on 1.4.2014 as 3 years (i.e. the number of completed year as on 1.4.2014 from E-COD).

### Weighted Average Life (WAL) of the Assets

- 16. The Commission *vide* order dated 19.9.2016 in Petition No. 134/TT/2015 determined WAL of the transmission system based on the admitted capital cost of individual phases of the transmission system as on 31.3.2014 and the useful life of respective elements as stipulated in Regulation 3(67) of 2014 Tariff Regulations. Accordingly, WAL of the transmission system as a whole has been worked out as 34 years.
- 17. Considering E-COD of 2.11.2010 and WAL of Combined Asset as 34 years, the remaining useful life of the combined asset as on 1.4.2014 is 31 years.

#### **Capital Cost**

18. The capital cost of the transmission project has been dealt in accordance with the Regulation 9(3) of 2014 Tariff Regulations. Based on the admitted capital cost of ₹28275.20 lakh as on 31.3.2014 and projected additional capital expenditure during 2014-19 period, the Commission *vide* order dated 19.9.2016 in Petition No.

134/TT/2015 and its subsequent revision vide order dated 31.7.2017 in Petition No. 56/RP/2016 for the Combined Asset, determined the tariff for 2014-19 tariff period.

Capital cost admitted as on 31.3.2014 as per true up orders dated 19.9.2016 in Petition No. 134/TT/2015 and dated 31.7.2017 in Review Petition No. 56/RP/2016

| Additional Capital Expenditure allowed for 2014-19 period as on 31.3.2019

| 28275.20 | 1868.36 | 30143.56 |

19. The Petitioner has claimed the following capital cost as on 1.4.2014, sans any supporting document, and additional capital expenditure during 2014-19 for the Combined Asset:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	28291.91	30245.18	30245.18	30245.18	30245.18
Additional Capitalisation	1953.27	0.00	0.00	0.00	0.00
Closing Capital Cost	30245.18	30245.18	30245.18	30245.18	30245.18

- 20. The Petitioner has submitted that the capital cost approved by the Commission as on 31.3.2014 *vide* order dated 31.7.2017 in Petition No.56/RP/2016 is ₹28275 lakh as against actual capital cost of ₹28292 lakh and that the differential amount of ₹17 lakh gets adjusted as part of the total payment of the cost of the transmission system and does not result in excess cost. Citing this, the Petitioner has requested to consider the actual capital cost of ₹28292 lakh at the time of truing-up of 2014-19 period.
- 21. MPPMCL has submitted that the amount may not be allowed to be added to capital cost without any justification, just because it does not result in excess cost of the transmission system.
- 22. In response, the Petitioner *vide* affidavit dated 4.3.2020 has submitted that this is not an 'additional amount' being claimed as has been contested by MPPMCL. The Petitioner has further stated that the details of payment have been duly submitted in

the tariff forms with the Petition and that the payment of ₹17 lakh was not considered for tariff of 2009-14 period by the Commission. While emphasizing that ₹17 lakh was not claimed for 2009-14 tariff period, the Petitioner has requested to consider the actual capital cost of ₹28292 lakh, including ₹17 lakh as submitted in the petition, and to approve trued-up tariff for 2014-19 tariff period in accordance with the cost of the transmission system that it has incurred.

23. We have considered the submissions made by the Petitioner and MPPMCL. Against the earlier admitted capital cost of ₹28275.20 lakh as on 31.3.2014, the Petitioner has claimed an amount of ₹28291.91 lakh as on 31.3.2014. Thus, there is an increase of ₹16.71 lakh. The Petitioner has submitted that this additional amount gets adjusted as part of the total payment of the cost of the transmission system and does not result in excess cost. MPPMCL has submitted that this amount, without any justification, cannot be allowed to be added in capital cost just because it does not result in excess cost. In the absence of any detailed explanation, we are not inclined to allow the amount of ₹16.71 lakh to be added in the capital cost. Accordingly, the capital cost as admitted by the Commission *vide* order dated 19.9.2016 in Petition No. 134/TT/2015 of ₹28275.20 lakh is being considered as on 1.4.2014 for tariff purpose in this Petition.

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

- 24. The Petitioner has submitted the following reasons for claiming additional capital expenditure in 2014-19 tariff period:
  - (a) Total undischarged liability of ₹1953.27 lakh has been paid in the control period 2014-19 against outstanding undischarged liability of ₹2041 lakh as on 31.3.2014. The Petitioner has requested to admit the same under Regulation 14(3)(v) of the 2014 Tariff Regulations towards adjustment of unpaid liabilities under item 'Preliminary Investigation, ROW, Forest clearance, PTCC, General civil works etc.'

- (b) Out of ₹1953 lakh, the Commission in order dated 31.7.2017 had deemed ₹85 lakh as excess paid liability and considered only ₹1868 lakh towards additional capitalisation in 2014-15, while approving tariff. The entire payment of ₹1953 lakh has been made towards the outstanding undischarged liability under the aforementioned head. Further, it is within the limits of undischarged liability when considered in totality along with the amount of Liquidated Damages (LD) received. Break-up of the same is provided in Form-5.
- (c) Total payment does not result in excess cost of the transmission system. Further, the amount of LD is not reduced from capital cost considered for tariff as the Commission has already disallowed IDC and IEDC, higher than the amount of LD, while approving the capital cost as on 31.3.2014 *vide* order dated 31.7.2017.
- (d) Balance undischarged liability of ₹88 lakh (₹2041- ₹1953) has been written back in the books of accounts. Hence, the same has not been considered for tariff for 2014-19 tariff period.
- (e) The Petitioner has requested to consider the payments made in totality and accordingly approve the capital cost of ₹30245.18 lakh as on 31.3.2019.
- 25. The Commission vide RoP of hearing dated 13.7.2020 sought clarifications on the Petitioner's submission that the total outstanding undischarged liability as on 31.3.2014 was ₹2041 lakh, out of which ₹1953.27 lakh was discharged during period 2014-19 tariff period and that the remaining undischarged liability of ₹87.39 lakh was written back in 2017-18, as indicated in Form-5. In response, the Petitioner *vide* affidavit dated 10.8.2020 has submitted that provision of ₹87.39 lakh was made towards payment of Right of Way for tree cutting as per the requirements of forest department. Despite continuous efforts, the issue stood pending for more than three years. Hence, Petitioner decided to write back the said provision and the same was not considered for tariff. The Petitioner has submitted Auditor certified statement dated 18.9.2019 wherein break-up of actual project cost as on 31<sup>st</sup> March of every

year of the tariff block 2014- 19 has been indicated. Further, the Auditor's Certificate dated 14.3.2016 depicts that in the capital cost incurred as on 31.3.2014, the undischarged liability was ₹2040.65 lakh. On perusal of Form-5 and Form-7, it is observed that the Petitioner has submitted statement of additional capitalisation of ₹1953.27 lakh incurred after COD as follows:

(₹ in lakh)

Year	Work/ Equipment proposed to be added after COD upto cut-off date/ beyond cut-off date	Amount capitalised/ proposed to be capitalised	Justification	Regulation under which covered
FY 2014-15	Preliminary works	526.80	The owner of the trees did not allow cutting of trees due to the issues over-compensation and had filed the cases in the high court. The matter was sub- judice. Further, due to pendency of approval of forest dept. same work was pending. Upon getting the necessary approval and execution of the work, the entire payment has been made.	Regulation 14(3)(v) of the 2014 Tariff
	Taxes & Duties	42.70	Incidental cost due to execution of the work and payments.	Regulations
	Construction & pre-commissioning expenses	3.70	Overall provision was significantly reduced for Engineering Consultancy. Necessary payment made towards execution of pending work.	
	Transmission Lines Material	1380.07	The payment towards EPC work was on hold. Upon finalization, the payment has been made in the month of May, 2014 to Gammon India Ltd. after settlement of all outstanding issues related to project work.	

26. We have considered the submissions of the Petitioner. Clause (3) of Regulation 14 of the 2014 Tariff Regulations provide as follows:

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

- i. Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law:
- ii. Change in law or compliance of any existing law;
- iii. Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies or statutory authorities responsible for national security/ internal security;
- iv. Deferred works relating to ash pond or ash handling system in the original scope of work:
- v. Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;
- vi. Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; xxxxxxx"
- 27. Against the earlier admitted additional capital expenditure of ₹1868.36 lakh for 2014-15, the Petitioner has now claimed additional capital expenditure of ₹1953.27 lakh under Regulation 14(3)(v) of the 2014 Tariff Regulations. The Petitioner has submitted that out of ₹1953.27 lakh, the Commission in order dated 31.7.2017 had deemed ₹85 lakh as excess paid liability and considered ₹1868 lakh towards ACE in 2014-15 while approving tariff. Now, the entire payment of ₹1953.27 lakh has been made towards adjustment of unpaid liabilities under item 'Preliminary Investigation, ROW, Forest clearance, PTCC, General civil works etc.' and break-up of the same is provided in Form-5. Further, the Petitioner has submitted that balance undischarged liability of ₹88 lakh (₹2041-₹1953) has been written back in the books of accounts. Hence, the same has duly not been considered for tariff for 2014-19 control period.
- 28. Regulation 14(3)(v) of the 2014 Tariff Regulations provides for any liability for works after the cut-off date to the extent of discharge of such liabilities by actual payments. The cut-off date for Phase-I, Phase-II and Phase-III is 31.3.2012, 31.3.2013 and 31.3.2014, respectively. The Petitioner has made actual payment of ₹1953.27 lakh for period 2014-15 as depicted in Form-7, after the cut-off date to the extent of discharge of such liabilities by actual payments. Therefore, ACE amounting to ₹1953.27 lakh in 2014-15 period is allowed under Regulation 14(3)(v) of 2014 Tariff Regulations.

29. Accordingly, the capital cost admitted for the purpose of true up of 2014-19 tariff period is as follows:

(₹ in lakh)

Capital Cost as on	Addi	Additional Capital Expenditure (ACE) during FY						
1.4.2014	2014-15	2015-16	2016-17	2017-18	2018-19	as on		
						31.3.2019		
28275.20	1953.27	0.00	0.00	0.00	0.00	30228.47		

# **Debt-Equity Ratio**

30. The debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations. As per Regulation 19(3) of the 2014 Tariff Regulations, the debt-equity ratio allowed by the Commission for determination of tariff for the period ending on 31.3.2014 shall be considered. The Petitioner has claimed debt-equity ratio as on 31.3.2014 as approved by the Commission in its order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 31.7.2017 in Review Petition No. 56/RP/2016. The same has been considered as opening debt-equity ratio as on 1.4.2014. The details of the debt-equity ratio considered are as follows:

Particulars	Amount (₹ in lakh)	(%)
Debt	19792.64	70.00
Equity	8482.56	30.00
Total	28275.20	100.00

31. The Petitioner has claimed ACE for the 2014-19 tariff period in the debt-equity ratio of 70:30 and submitted Form-7A. The debt-equity ratio of 70:30 has been considered for ACE allowed during 2014-19 period in accordance with Regulation 19(3) of the 2014 Tariff Regulations. Accordingly, the details of the debt-equity ratio considered on 1.4.2014 and 31.3.2019 of the Combined Asset is as follows:

Funding	Capital cost as on 1.4.2014 (₹ in lakh)	%	ACE for the 2014-19 period (₹ in lakh)	%	Total capital cost as on 31.3.2019 (₹ in lakh)	%
Debt	19792.64	70.00	1367.29	70.00	21159.93	70.00
Equity	8482.56	30.00	585.98	30.00	9068.54	30.00

Total	28275.20	100.00	1953.27	100 00	30228.47	100.00
IOlai	20213.20	100.00	1333.21	100.00	JULLU.TI	100.00

## **Interest on Loan (IOL)**

- 32. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. The change in interest rate is due to floating rate of interest to be claimed/ adjusted over a period of 5 years directly from the beneficiaries.
- 33. We have considered the submissions of the Petitioner. We observe that there is a downwards revision in the weighted average rate of interest on loan. Accordingly, we have calculated IoL based on actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as below: -
  - (i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.
  - (ii) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period.
- 34. The details of trued-up IoL approved for Combined Asset for 2014-19 tariff period is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	19792.64	21159.93	21159.93	21159.93	21159.93
Cumulative Repayment up to previous Year	5003.07	6547.57	8143.63	9739.69	11335.76
Net Loan-Opening	14789.57	14612.36	13016.30	11420.24	9824.17
Addition due to Additional Capitalization	1367.29	0.00	0.00	0.00	0.00
Repayment during the year	1544.50	1596.06	1596.06	1596.06	1596.06
Net Loan-Closing	14612.36	13016.30	11420.24	9824.17	8228.11
Average Loan	14700.97	13814.33	12218.27	10622.20	9026.14
Weighted Average Rate of Interest on Loan (%)	11.760%	10.730%	9.950%	8.980%	8.600%
Interest on Loan	1728.83	1482.28	1215.72	953.87	776.25

35. The details of IoL approved vide order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 31.7.2017 in Petition No. 56/RP/2016 for the

Combined Asset, IoL claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

Particulars (IOL)	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 31.7.2017 in Petition No. 56/RP/2016	1753.31	1507.93	1243.40	1085.96	929.63
Claimed by the Petitioner in the instant petition	1729.83	1483.14	1216.26	954.48	777.01
Allowed after true-up in this order	1728.83	1482.28	1215.72	953.87	776.25

# **Return on Equity (ROE)**

36. The Petitioner has claimed RoE for the Combined Asset in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it has availed tax holiday under Section 80IA and has paid tax on the following MAT rates during 2014-19 tariff period:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
MAT Rate	20.96%	21.34%	20.39%	21.34%	21.55%

- 37. To arrive at the Effective Tax Percentage for the 2014-19 tariff period, the Petitioner was directed vide RoP of hearing dated 13.7.2020 to submit the details (Section-wise of Income Tax Act, 1961) of 'Total Tax & Interest paid', 'Assessed MAT Income' and 'Refund of Tax and interest recovered thereon or additional payment of tax and penalty for short deposited tax' duly certified by the Auditor in accordance with applicable Auditing Standard and Implementation Guideline and to submit the information separately for 'Tariff Income' and 'Non-Tariff Income' duly reconciled with Books of Accounts.
- 38. In response, the Petitioner *vide* affidavit dated 10.8.2020 has submitted the following details duly certified by the Auditor.

# (A) Assessed Minimum Alternate Tax (MAT) Income

(₹ in lakh)

SI.	Particular	2014-15	2015-16	2016-17	2017-18	2018-19
No.						
1	Assessed MAT Income	2198.88	2094.70	902.34	3713.30	2134.48
	Total Assessed MAT	2198.88	2094.70	902.34	3713.30	2134.48
	Income					

# (B) Total Tax paid and Interest paid thereon

(₹ in lakh)

SI. No.	Particular	2014-15	2015-16	2016-17	2017-18	2018-19
1	Tax paid including Advance Tax, Self Assessment Tax and Tax Deducted at Source receivable	465.21	456.45	204.00	792.87	465.15
2	Interest paid	-	-	-	3.25	0.41
	Total Tax paid and Interest paid thereon	465.21	456.45	204.00	796.12	465.56

## (C) Refund of Tax received

(₹ in lakh)

SI.	Particular	2014-15	2015-16	2016-17	2017-18	2018-19
No.						
1	Refund Received	-	-	3.96	9.41	-
	Total Refund of Tax	-	-	3.96	9.41	-
	Received					

(₹ in lakh)

(D)	Net Tax paid (B-C)	465.21	456.45	200.04	786.71	465.56
(E)	Effective Tax paid (%) (D/A)	21.16%	21.79%	22.17%	21.19%	21.81%
(F)	Enacted MAT Rate (%)	20.96%	21.34%	20.39%	21.34%	21.55%

39. We have considered the submissions of the Petitioner. The entities covered under MAT regime are paying income tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions

and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Penalty (for default on the part of the Assesse) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on 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.

40. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of the rate of RoE for truing up of the tariff of the 2014-19 period in terms of the provisions of the 2014 Tariff Regulations as under:

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

41. Accordingly, the trued-up RoE allowed for the Combined Asset for the 2014-19 tariff period is as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	8482.56	9068.54	9068.54	9068.54	9068.54
Addition due to Additional Capitalization	585.98	0.00	0.00	0.00	0.00
Closing Equity	9068.54	9068.54	9068.54	9068.54	9068.54
Average Equity	8775.55	9068.54	9068.54	9068.54	9068.54
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT rate for the Respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (%)	19.610	19.705	19.705	19.705	19.758

Return on Equity (Pre-tax)	1720.89	1786.96	1786.96	1786.96	1791.76

42. The details of RoE approved for Combined Asset *vide* order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 31.7.2017 in Petition No. 56/RP/2016, RoE claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

Particulars (ROE)	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 31.7.2017 in Petition No. 56/RP/2016	1718.39	1773.34	1773.34	1773.34	1773.34
Claimed by the Petitioner in the instant petition	1721.87	1779.32	1766.62	1787.94	1792.75
Allowed after true-up in this order	1720.89	1786.96	1786.96	1786.96	1791.76

## **Depreciation**

- 43. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed for the transmission asset *vide* order dated 19.9.2016 in Petition No. 134/TT/2015 and revised *vide* order dated 31.7.2017 in Petition No. 56/RP/2016. The Petitioner did not claim any capital expenditure towards "IT Equipment" in Petition No. 134/TT/2015 where tariff for the Combined Asset for the 2014-19 period was allowed, even though there is a clear provision in the 2014 Tariff Regulations providing depreciation @15% for IT Equipment. The Petitioner has neither given any justification for claiming higher depreciation than that was allowed *vide* order dated 19.9.2016 in Petition No. 134/TT/2015 and revised *vide* order dated 31.7.2017 in Petition No. 56/RP/2016 nor made any specific prayer for allowing higher depreciation in this petition. Similar issue as regards IT Equipment had come up in Petition No. 19/TT/2020 wherein the Commission *vide* order dated 9.5.2020 decided as under:
  - "31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012 and 9.5.2013 in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009-

14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014-19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15%for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations(the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to "IT Equipment". The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred up to 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the sub-station up to 31.3.2019while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."

44. Same methodology as in the above-quoted order has been applied for the instant case. The depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is given in Annexure-1. The depreciation for the 2014-19 period is trued-up for the Combined Asset as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations and it is as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	28275.20	30228.47	30228.47	30228.47	30228.47
Additional Capitalisation	1953.27	0.00	0.00	0.00	0.00
Closing Gross Block	30228.47	30228.47	30228.47	30228.47	30228.47
Average Gross Block	29251.84	30228.47	30228.47	30228.47	30228.47
Freehold Land	0.00	0.00	0.00	0.00	0.00

Weighted Average Rate of Depreciation (WAROD) (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year (Year)	31	30	29	28	27
Elapsed life at the beginning of the year (Year)	3	4	5	6	7
Aggregated Depreciable Value	26326.65	27205.62	27205.62	27205.62	27205.62
Combined Depreciation during the year	1544.50	1596.06	1596.06	1596.06	1596.06
Cumulative Depreciation at the end of the year	6538.93	8134.99	9731.05	11327.12	12923.18
Remaining Aggregated Depreciable Value	21332.22	20666.70	19070.63	17474.57	15878.51

45. The details of depreciation approved *vide* order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 31.7.2017 in Petition No. 56/RP/2016 for Combined Asset for 2014-19 tariff period, depreciation claimed by the Petitioner in the instant petition and as trued up in the instant order is as follows:

(₹ in lakh)

Particulars (Depreciation)	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 31.7.2017 in Petition No. 56/RP/2016	1542.85	1592.17	1592.17	1592.17	1592.17
Claimed by the Petitioner in the instant petition	1546.37	1597.94	1597.94	1596.94	1596.94
Allowed after true-up in this order	1544.50	1596.06	1596.06	1596.06	1596.06

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

46. The details of the O&M Expenses claimed by the Petitioner for the transmission assets are as per provisions of Regulation 29(4)(a) of the 2014 Tariff Regulations and the same has been approved and it is as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Norms for sub-stations					
400 kV	60.30	62.30	64.37	66.51	68.71
Norms for AC and HVDC Lines					
Single Circuit (Two and Three Conductor) - 28.77 km	0.404	0.418	0.432	0.446	0.461
Double Circuit (Two and Three Conductor) - 225.152 km	0.707	0.731	0.755	0.780	0.806

47. Accordingly, O&M Expenses approved *vide* order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 19.9.2016 in Petition No. 134TT/2015 for the Combined Asset for the 2014-19 tariff period, O&M Expenses claimed by the Petitioner in the instant petition and trued up O&M Expenses allowed in the instant order are as follows:

(₹ in lakh)

Particulars (O&M)	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 19.9.2016 in Petition No. 134/TT/2015	291.44	301.25	311.20	321.51	332.19
Claimed by the Petitioner in the instant petition	291.44	301.25	311.20	321.51	332.19
Allowed after true-up in this order	291.44	301.25	311.20	321.51	332.19

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

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

#### a) Maintenance spares:

Maintenance spares @ 15% of Operation and maintenance expenses specified in Regulation 28 of the 2014 Tariff Regulations.

## b) O & M Expenses:

Operation and maintenance 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 annual transmission charges as worked out above.

## d) Rate of IWC:

Rate of interest on working capital is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

49. The trued-up IWC approved for the Combined Asset are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
WC for O&M expenses	24.29	25.10	25.93	26.79	27.68
(O&M Expenses for 1 month)	21.20	20.10	20.00	20.70	27.00
WC for Maintenance Spares	43.72	45.19	46.68	48.23	49.83
(15% of O&M Expenses)	43.72	45.19	40.00	40.23	49.03
WC for Receivables					
(Equivalent to 2 months of	902.79	882.53	838.83	796.00	768.41
annual fixed cost)					
Total Working Capital	970.79	952.82	911.44	871.02	845.92
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	131.06	128.63	123.04	117.59	114.20

50. The details of IWC of approved for Combined Asset *vide* order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 31.7.2017 in Petition No. 56/RP/2016, trued-up IWC claimed by the Petitioner in the instant petition and as trued up in the instant order is shown in the table that follows:

(₹ in lakh)

Particulars (IWC)	2014-15	2015-16	2016-17	2017-18	2018-19
Approved in order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 31.7.2017 in Petition No. 56/RP/2016	131.52	128.82	123.28	120.22	117.22
Claimed by the Petitioner in the instant petition	131.15	128.52	122.63	117.64	114.26
Allowed after true-up in this order	131.06	128.63	123.04	117.59	114.20

# Approved Annual Fixed Charges (AFC) for 2014-19 Tariff Period

51. The trued-up annual transmission charges approved for the 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	1544.50	1596.06	1596.06	1596.06	1596.06
Interest on Loan	1728.83	1482.28	1215.72	953.87	776.25
Return on Equity	1720.89	1786.96	1786.96	1786.96	1791.76
Interest on Working Capital	131.06	128.63	123.04	117.59	114.20
O&M Expenses	291.44	301.25	311.20	321.51	332.19
Total	5416.71	5295.18	5032.98	4775.99	4610.46

52. The details of AFC of approved for Combined Asset *vide* order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 31.7.2017 in Petition No.

56/RP/2016 for 2014-15 tariff period, AFC 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
Approved in order dated 19.9.2016 in Petition No. 134/TT/2015 read with order dated 31.7.2017 in Petition No. 56/RP/2016	5437.51	5303.52	5043.39	4893.22	4744.56
Claimed by the Petitioner in the instant	5420.66	5290.17	5014.65	4778.51	4613.15
Allowed after true-up in this order	5416.71	5295.18	5032.98	4775.99	4610.46

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

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1599.59	1604.07	1607.27	1607.27	360.01
Interest on Loan	667.57	530.78	391.30	247.45	159.42
Return on Equity	1706.31	1712.22	1716.03	1716.03	1716.03
Interest on Working Capital	71.83	70.53	68.97	67.26	47.48
O&M Expenses	277.17	286.93	297.00	307.39	318.13
Total	4322.47	4204.54	4080.57	3945.40	2601.07

54. The details of the IWC claimed by the Petitioner for the Combined Asset for the 2019-24 tariff period are as follows:-

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	23.10	23.91	24.75	25.62	26.51
Maintenance Spares	41.58	43.04	44.55	46.11	47.72
Receivables	531.45	518.37	503.08	486.42	319.80
Total Working Capital	596.12	585.32	572.38	558.14	394.03
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	71.83	70.53	68.97	67.26	47.48

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

## **Capital Cost**

56. Regulation 19 of the 2019 Tariff Regulations provides as follows: -

- "(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;
  - (I) 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."
- 57. The Petitioner has claimed capital cost of ₹30245.18 lakh as on 31.3.2019 for the instant asset. The Commission has admitted trued-up capital cost of ₹30228.47 lakh as on 31.3.2019 and the same has been considered as the 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 (ACE)**

58. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as follows:

## "24. Additional Capitalisation within the original scope and upto the cut-off date

- (1) The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
- (a) Undischarged liabilities recognized to be payable at a future date;
- (b) Works deferred for execution;
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
- (e) Change in law or compliance of any existing law; and
- (f) Force Majeure events:

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

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

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

- (1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:
- (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
- (b) Change in law or compliance of any existing law;
- (c) Deferred works relating to ash pond or ash handling system in the original scope of work:
- (d) Liability for works executed prior to the cut-off date;
- (e) Force Majeure events;
- (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
- (g) Raising of ash dyke as a part of ash disposal system.



- (2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
- (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
- (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."
- 59. The Petitioner has claimed the following Additional Capital Expenditure during 2019-24 tariff period:

				(₹ in lakh)
2019-20	2020-21	2021-22	2022-23	2023-24
75.00	135.00	0.00	0.00	0.00

- 60. The Petitioner has submitted following justification in support of claim of ACE during 2019-24:
  - (a) The project was commissioned with porcelain as well as polymeric insulators. Over the period, there were repeated failures of porcelain insulators which resulted in conductor snapping, causing major outages. The Petitioner has stated that the Commission has already approved replacement of such insulators to PGCIL for number of transmission lines. Accordingly, in order to ensure reliability, the Petitioner has proposed additional capital expenditure during the next control period 2019-24 for replacement of porcelain insulators with polymer Insulators.
  - (b) The replacement of porcelain insulator with polymer insulators, which has become necessary for successful and efficient operation of transmission system and qualifies under Regulation 25(2)(d) of the 2019 Tariff Regulations, may be admitted. It is proposed to replace identified 81 tension towers having porcelain insulator with 160 KN polymeric insulator string. Number of strings required for the purpose would be about 1416 having estimated cost of ₹210 lakh.

- (c) The Petitioner has further submitted that considering the fact that there are no Initial Spares for transmission line, it would be able to utilize the insulators available as a result of the exercise for balance towers having porcelain insulators.
- 61. MPPMCL, vide affidavit dated 29.11.2019 has submitted as follows:
  - (a) The Petitioner has submitted that over the period, there were repeated failures of porcelain insulators resulting in conductor snapping causing major outages. Additional CAPEX has been proposed during the control period 2019-24 for replacement of porcelain insulators with polymer insulators. The Petitioner has taken a plea that the Commission has already approved replacement of such insulators to PGCIL for number of transmission lines.
  - (b) The Petitioner has not given any data regarding repeated failure of porcelain insulators resulting in conductor snapping causing major outages location wise. Further, no data has been submitted showing year-wise failure of porcelain insulators in respect of total number of insulators since COD. Further, it has not been submitted under which circumstances, the Commission had permitted replacement of insulators to PGCIL. In the absence of such data, it is not possible to calculate the expected replacement of insulators for the 2019-24 control period.
  - (c) The Petitioner has failed to submit how 81 tension towers have been selected for replacement of porcelain insulators with 160 KN polymer insulators costing ₹210 lakh. It has also not been submitted whether the replacement has already been made and in how many number of locations during previous year due to repeated failure of insulators, as stated by the Petitioner, and what is the performance thereof.
  - (d) The Petitioner has proposed to utilize these insulators (taken out due to replacement) for balance towers. It is not clear that when the balance towers already have good insulators why these insulators are being kept as initial spares for replacement. It is also not clear as to how the Petitioner has calculated the expected failure of such insulators in the years to come. It is also not understood that on one hand the Petitioner is proposing replacement of

porcelain insulators by polymer insulators for better stability while on the other hand is proposing replacement of porcelain insulators with porcelain insulators.

- (e) The Petitioner has failed to justify the need for replacement and formation of spare bank of porcelain insulators is of no use. The Petitioner has also not supported it with relevant details. Therefore, the claim of the Petitioner be rejected and may be considered in true up on actuals, if supported by relevant details and documents.
- 62. In response, the Petitioner *vide* affidavit dated 4.3.2020 has submitted as follows:
  - (a) The lines were put into commercial operation using porcelain as well as polymeric insulators as per the then available details and maturity of technology. Since COD, there were 15 occasions of porcelain insulator failure causing total down time of approximately 187 hours. Over the period, there were repeated failures of insulators resulting in conductor snapping and major outages.
  - (b) Regarding the contention of MPPMCL about the relevance of present case with the PGCIL projects, wherein such approval has been granted by the Commission, the execution of the project has been done in consultation with PGCIL as the project is a JV with PGCIL and approval for replacement of porcelain insulators with polymeric insulators was granted by the Commission earlier.
  - (c) Since there are no Initial Spares for transmission line, the Petitioner would be able to utilize the spare porcelain insulators (caused due to replacement with polymer insulators) for remaining towers having porcelain insulators. This is also prudent considering the fact that porcelain insulators are having higher incidents of failure and requires adequate number of spares.
- 63. The Commission *vide* ROP of hearing dated 13.7.2020 directed the Petitioner to submit the gross value and cumulative depreciation till the date of de-capitalisation of porcelain insulators line-wise, which are proposed to be replaced with polymer

insulators during 2019-24 period. In response, the Petitioner *vide* affidavit dated 10.8.2020 has reiterated the submissions made in the petition.

64. We have considered the submissions of the Petitioner and MPPMCL. The Petitioner has claimed the additional capital expenditure under Regulation 25(2)(d) of the 2019 Tariff Regulations, which is extracted as under:

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

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(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:

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- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."
- 65. The Petitioner has claimed the projected ACE for the 2019-24 tariff period and has submitted the Tariff Forms 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 replacement of porcelain insulators with polymer insulators covered under Regulation 25(2)(d) of the 2019 Tariff Regulations. The Petitioner has claimed the projected ACE of ₹75 lakh and ₹135 lakh in 2019-20 and 2020-21, respectively, totalling to ₹210 lakh. The Commission vide order dated 7.2.2013 in Petition No. 305/2010 has approved replacement of insulators in fog and pollution affected stretches of existing transmission lines in NCR, surrounding areas and other polluted stretches by polymer (composite long rod) insulators in Northern Region. The relevant portion of the order dated 7.2.2013 is extracted hereunder:
  - "2. ------ As a result of higher pollution level, frequent trippings of Northern Regional transmission lines, especially those passing through polluted areas have been observed under foggy conditions during winter season. The petitioner submitted that despite taking regular maintenance measures including cleaning of insulators in critical stretches every year before winter season, trippings in some of the transmission lines were a matter of concern. On 7.3.2008 and 9.3.2008, a large number of trippings of 400 kV transmission lines took place in the Northern Region affecting power to Delhi and its adjoining areas, as well as the Railways. An emergency meeting was convened by Secretary (Power) to take stock of the situation and to plan for corrective actions to be taken, which was attended by Member (Electrical), Railways, Chairman, CEA,

Secretary (Power), Government of Haryana, CMD of NTPC, Director (Projects) of Power Grid and CMD of Delhi Transco Ltd. After detailed deliberations, the following remedial measures among others were decided:-

- (a) Physical cleaning of insulators to be undertaken on 17 identified critical power transmission lines.
- (b) Complete replacement of conventional insulators by polymer insulators in all vulnerable areas in the NCR before November, 2008.
- (c) Chairman, CEA to convene a meeting of the Northern Region to address various issues related to replacement of insulators.

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23. We have considered the submission of the petitioner and the respondents on the formula suggested by the Commission during the hearing on 30.8.2012. In our view, the formula suggested will protect the interest of the petitioner as well as the beneficiaries. While the polymer insulators shall be capitalized as they have been put to use and are rendering services to the beneficiaries, the porcelain insulators which have been taken out of the service shall be kept as spares to be used in the other lines of the petitioner. The porcelain insulators shall be de-capitalized from the date of their replacement and shall be capitalized when they are put to use in new lines. During the period between de-capitalization and subsequent capitalization of the porcelain insulators, there will be no depreciation. The de-capitalized porcelain insulators shall be allowed only carrying cost on the written down value of the assets at weighted average rate of interest on loans availed by the petitioner till the insulators are put to use and capitalized.

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- 29. The porcelain insulators which have been taken out of service shall be decapitalized and the polymer insulators which have been put into service in their place shall be capitalized in accordance with the 2009 Tariff Regulations. Accordingly, the expenditure incurred during the period 2009-10 to 2011-12 has been considered towards additional capitalization along with the corresponding IDC and IEDC. Similarly, the gross block of the porcelain insulators being removed has been considered towards de-capitalisation. -----"
- 66. We understand that failure of insulators would lead to conductor snapping and major outages and there were 15 such occasions of failure of porcelain insulator causing total down time of approximately 187 hours. To avoid such outages, we find it appropriate to allow the ACE claimed towards replacement of porcelain insulators with polymer insulators in 2019-20 and 2020-2021 under Regulation 25(2)(d) of the 2019 Tariff Regulations, subject to review of the actual expenditure and performance of the polymer insulators at the time of truing up.
- 67. Accordingly, projected ACE of ₹75 lakh and ₹135 lakh in 2019-20 and 2020-21, respectively, totalling to ₹210 lakh is allowed, subject to review at the time of truing up. Regarding de-capitalisation of porcelain insulators, we are of the view that

the porcelain insulators shall be de-capitalized from the date of their replacement and polymer insulators shall be capitalized when they are put to use in new lines.

68. Petitioner shall provide all details regarding decapitalization of porcelain insulators and capitalization of polymer insulators at the time of truing up. In addition, the Petitioner shall also submit at the time of truing up the details of the dismantled insulators used in other transmission lines, if any, along with dates of their utilization.

## Capital Cost for the 2019-24 Tariff Period

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

(₹ in lakh)

Capital cost as per FR	Capital cost allowed as on 1.4.2019	ACE allowed for 2019-24 Tariff Period	Total Estimated Completion capital cost allowed as on 31.3.2024
	Α	В	C=A+B
38639.76	30228.47	210.00	30438.47

## **Debt-Equity Ratio**

- 70. Regulation 18 of the 2019 Tariff Regulations provides as under:-
  - **"18. Debt-Equity Ratio:** (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

#### Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt-equity ratio.
- 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."
- 71. The debt-equity ratio for the 2019-24 period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The details of the debt-equity ratio considered for the purpose of determination of tariff for 2019-24 tariff period is as follows:-

Funding	Capital cost as on 1.4.2019 (₹ in lakh)	%	ACE for the 2019-24 period (₹ in lakh)	%	Total capital cost as on 31.3.2024 (₹ in lakh)	%
Debt	21159.93	70.00	147.00	70.00	21306.93	70.00
Equity	9068.54	30.00	63.00	30.00	9131.54	30.00
Total	30228.47	100.00	210.00	100.00	30438.47	100.00

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

- 72. 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 runof river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

#### Provided further that:

- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation(FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;
- iii. in case of a thermal generating station, with effect from 1.4.2020:
- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

Rate of pre-tax return on equity = Base rate /(1-t)

Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rate basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

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

- 73. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. The pre-tax rate of RoE has been worked out as 18.782% after grossing up the RoE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12%. + Cess 4%) based on the formula given at regulation 31 (2) of the 2019 Tariff Regulations.
- 74. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE approved for the Combined Asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	9068.54	9091.04	9131.54	9131.54	9131.54
Addition due to	22.50	40.50	0.00	0.00	0.00
Additional Capitalization					
Closing Equity	9091.04	9131.54	9131.54	9131.54	9131.54
Average Equity	9079.79	9111.29	9131.54	9131.54	9131.54
Return on Equity	15.50%	15.50%	15.50%	15.50%	15.50%
(Base Rate) (%)					
MAT rate for respective	17.472%	17.472%	17.472%	17.472%	17.472%
(%)					
Rate of Return on	18.782%	18.782%	18.782%	18.782%	18.782%
Equity (Pre-tax) (%)					
Return on Equity	1705.37	1711.28	1715.09	1715.09	1715.09
(Pre-tax)					

## Interest on Loan (IoL)

- 75. Regulation 32 of the 2019 Tariff Regulations provides as follows:
  - **"32. Interest on loan capital:** (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.
  - (2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.
  - (3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.
  - (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

- (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized: Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered; Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.
- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing."
- 76. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL of Combined Asset has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	21159.93	21212.43	21306.93	21306.93	21306.93
Cumulative Repayment up	12931.82	14530.45	16134.62	17742.35	19350.09
to previous Year					
Net Loan-Opening	8228.11	6681.98	5172.31	3564.58	1956.84
Addition due to ACE	52.50	94.50	0.00	0.00	0.00
Repayment during the year	1598.63	1604.17	1607.73	1607.73	366.08
Net Loan-Closing	6681.98	5172.31	3564.58	1956.84	1590.76
Average Loan	7455.05	5927.15	4368.45	2760.71	1773.80
Weighted Av. ROI on Loan	8.950%	8.950%	8.950%	8.950%	8.950%
(in %)					
Interest on Loan	667.23	530.48	390.98	247.08	158.76

## **Depreciation**

- 77. Regulation 33 of the 2019 Tariff Regulations provide as follows:-
  - **"33. Depreciation:** (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

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

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

station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

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

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

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

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

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

- (4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:

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

- (6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.
- (7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.
- (8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services."
- 78. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The transmission asset shall complete 12 years of life as on 31.3.2023. Therefore, the remaining depreciable value of ₹8052.94 lakh as on 31.3.2023 has been spread across the balance useful life of 22 years in accordance with Regulation 27(5) of the 2014 Tariff Regulations and Regulation 33(5) of the 2019 Tariff Regulations. The

annual depreciation from the year 2023-24 and onwards is ₹366.08 lakh. The IT equipment has been considered as part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). WAROD has been worked out (as placed in Annexure-2) after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered as nil, i.e. IT asset has been considered as 100 per cent depreciable. The depreciation allowed for the Combined Asset for the 2019-24 period is as follows:

(₹ in lakh)

					(₹ in iakn)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	30228.47	30303.47	30438.47	30438.47	30438.47
Projected ACE	75.00	135.00	0.00	0.00	0.00
Closing Gross Block	30303.47	30438.47	30438.47	30438.47	30438.47
Average Gross Block	30265.97	30370.97	30438.47	30438.47	30438.47
** Average Gross Block of 90% Depreciable assets	30259.97	30364.97	30432.47	30432.47	30432.47
** Average Gross Block of 100% Depreciable assets	6.00	6.00	6.00	6.00	6.00
Weighted Average Rate of Depreciation (WAROD) (%)	5.2819%	5.2819%	5.2819%	5.2819%	5.2819%
Balance useful life of the asset at the beginning of the year (Year)	26	25	24	23	22
Lapsed life of the asset at the beginning of the year (Year)	8	9	10	11	12
Depreciable Value (excluding IT equipment and softwares)	27233.97	27328.47	27389.22	27389.22	27389.22
Depreciable value of IT equipment and softwares	6.00	6.00	6.00	6.00	6.00
Total Depreciable Value	27239.97	27334.47	27395.22	27395.22	27395.22
Combined Depreciation during	1598.63	1604.17	1607.73	1607.73	366.08
the Year					
Cumulative Depreciation	14521.81	16125.98	17733.71	19341.45	19707.53
Remaining Aggregate Depreciable Value	14316.79	12812.67	11269.25	9661.51	8053.78

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

79. Regulation 35(3)(a) of the 2019 Tariff Regulations specifies the norms for the O&M Expenses for the transmission system and it is as follows:-

**"(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 (₹ La	kh per bay	<i>'</i> )			

765 kV	.45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
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 k	m)			
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 station (₹ Lakh per 500 MW)	.1,666.00	.1,725.00	1,785.00	.1,848.00	1,913.00
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.

- (4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up."
- 80. The O&M Expenses claimed by the Petitioner for the Combined Asset for the tariff period 2019-24 are as follows:

				(₹ in lakh)
2019-20	2020-21	2021-22	2022-23	2023-24
277.17	286.93	297.00	307.39	318.13

81. We have considered the submission of the Petitioner. The O&M Expenses allowed for the Combined Asset is as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses Calculation					
400 kV sub-station:					
No. of Bays	2	2	2	2	2
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
O&M Calculated for Bays (₹ lakh)(A)	64.30	66.56	68.90	71.32	73.82
Line: D/C Twin &Triple Conductor:					
Line Length (km)	225.20	225.20	225.20	225.20	225.20

Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
Line: S/C Twin & Triple Conductor:					
Line Length (km)	28.77	28.77	28.77	28.77	28.77
Norms (₹ lakh/km)	0.503	0.521	0.539	0.558	0.578
O&M Calculated for Lines (₹ lakh)(B)	212.87	220.37	228.10	236.07	244.31
Total O&M Calculated (C)=(A)+(B)	277.17	286.93	297.00	307.39	318.13
Claimed by Petitioner (₹ lakh)	277.17	286.93	297.00	307.39	318.13
Allowed after true-up in this order (₹ lakh)	277.17	286.93	297.00	307.39	318.13

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

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

### "34. Interest on Working Capital:

- (1) .....
- (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
  - 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"
- (2) .....
- (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;"
- 83. 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%. The IWC is worked out in accordance

with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) on working capital considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, ROI 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, ROI for 2021-22 onwards has been considered as 10.50% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.00% plus 350 basis points). The components of the working capital and interest thereon approved for the Combined Asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

					( III Idikii)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses	23.10	23.91	24.75	25.62	26.51
(O&M Expenses for one month)			 		
WC for Maintenance Spares	41.58	43.04	44.55	46.11	47.72
(Maintenance Spares @15% of			l [		
O&M Expenses)					
WC for Receivables	532.65	517.64	502.41	485.75	320.86
(Receivables equivalent to 45			! 		
days of annual fixed cost)					
Total Working Capital	597.32	584.59	571.71		395.09
Total Working Capital			l 	557.48	
Rate of Interest on working	12.05	11.25	11.25	11.25	11.25
capital (%)					
Interest on Working Capital	71.98	65.77	64.32		44.45
interest on working capital			l Í	62.72	

# **Approved Annual Transmission Charges for 2019-24 Tariff Period**

84. The transmission charges allowed for the 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	1598.63	1604.17	1607.73	1607.73	366.08
Interest on Loan	667.23	530.48	390.98	247.08	158.76
Return on Equity	1705.37	1711.28	1715.09	1715.09	1715.09
Interest on Working	71.98				
Capital		65.77	64.32	62.72	44.45
O&M Expenses	277.17	286.93	297.00	307.39	318.13
Total	4320.37	4198.63	4075.11	3940.01	2602.50

### Filing Fee and Publication Expenses

85. The Petitioner has submitted that the tariff claimed is exclusive of filing fee and the same shall be recovered by 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.

# **Sharing of Transmission Charges**

- 86. Shri Sameer Chandrakant Walekar, the objector has submitted that the Combined Asset is dedicated in nature and, therefore, the transmission charges of the Combined Asset should not be charged from the beneficiaries of ISTS. He has submitted that the SUGEN-TPL Pirana line is connected to the generator switchyard at one end while the other end is connected to distribution licensee of the same company and is meant for evacuation of power to TPL (Torrent Power Ltd.) Ahmedabad. Therefore, the transmission charges should be borne by the beneficiaries of TPL Ahmedabad and should not be recovered from the constituents of ISTS. The objector has further submitted that the principle of sharing of transmission charges of such dedicated transmission system has been laid down by the Commission in order dated 29.7.2013 in Petition No.44/TL/2012. The Objector has also submitted that the instant transmission line is primarily constructed for TPL Ahmedabad and it should be declared as a dedicated line and that TPL Ahmedabad should bear the entire transmission charges of TPGL for evacuation of power as per the principle laid down by the Commission in order dated 29.7.2013.
- 87. No response has been received from the Petitioner on the objections raised by the objector. However, TPL, Respondent No. 1, *vide* affidavit dated 6.7.2020, has made the following submissions on the comments of the objector:

- a) The objector has submitted that the transmission line of the Petitioner is dedicated in nature for the distribution area of TPL and should not be charged from other beneficiaries of ISTS. The objector has contended that the transmission charges of the transmission system should be borne by TPL.
- b) The transmission system was created for transmission of power from SUGEN Power Plant to distribution area of TPL at Ahmedabad and also for sale of inter-State power. While granting open access to SUGEN Power Plant for sale of inter-State power, the transmission system was designed/ approved by CTU taking into consideration inputs from all the stakeholders. Accordingly, the transmission system has been created and being operated based on the instructions of the system operators.
- c) The transmission charges of the transmission system should not be pooled and it should be borne by only TPL Ahmedabad. In support, the Objector has cited the order of the Commission dated 29.7.2013 in Petition No. 44/TL/2012. The Commission in order dated 29.7.2013 has clarified that transmission charges for the PPA capacity of 1424 MW with Haryana Utilities shall be borne by Adani Power Ltd. (i.e. the Petitioner in the said petition) as the transmission charges of the dedicated transmission system has to be borne by the beneficiaries of the generating station, since it is directly connected to the Distribution Licensee (Haryana) under the PPA. The Transmission System under consideration in the present petition and Petition No. 44/TL/2012 is identically placed. In other words, there is no ISTS/ InSTS network involved between the generator and distributor other than the network of TPGL.
- d) Therefore, transmission charges of TPGL shall be applicable in future for the power to be scheduled from SUGEN to distribution area of TPL Ahmedabad as per order dated 29.7.2013 in Petition No. 44/TL/2012.
- e) TPL Ahmedabad being a Distribution Licensee in the area of Ahmedabad is revenue neutral. However, any revision of mechanism of transmission charges of TPGL will have bearing on the tariff of its end consumers.

88. We have considered the submission of the Petitioner, the objector and TPL. The objector has submitted that the transmission line of the Petitioner is dedicated in nature for distribution area of TPL and should not be charged from other beneficiaries of ISTS and should be borne by TPL. This has been seconded by the Respondent TPL while no response has been filed by the Petitioner. As regards contention of TPL that the transmission line of the Petitioner is dedicated in nature for use of TPL Ahmedabad and that transmission charges should not be claimed from other beneficiaries of ISTS and should be levied only on it (TPL Ahmedabad), the Commission vide order dated 22.4.2013 in Petition No. 318/2010 held as under:

#### "SHARING OF TRANSMISSION CHARGES

47. The Commission while granting the provisional tariff for the subject transmission line, vide order dated 8.12.2011 had directed that the provisional transmission charges shall be recovered on monthly basis in accordance with Regulations 23 and shared by the beneficiaries in accordance with Regulation 33 of 2009 Tariff Regulations upto 30.6.2011 and with effect from 1.7.2011, the billing, collection and distribution of the transmission charges shall be governed by the provisions of Central Electricity Regulatory Commission (sharing of inter-State transmission charges and losses) Regulations, 2010 and Removal of difficulty order issued thereunder. The petitioner had filed Review Petition No. 8/RP/2012 praying that it should be exempted from the pooling of the transmission charges under the Regulation 23 of 2009 Tariff Regulation and sharing regulations, since the cost of the transmission charges would be entirely borne by the SUGEN beneficiaries and not by the constituents of the Western Region. The Commission in its order dated 23.8.2012 had rejected the prayer of the petitioner for review of the provisional tariff order and observed that the issue regarding sharing of the transmission charges would be considered at the time of issuing the order for final tariff.

48. After issuance of the provisional tariff order, the petitioner in its letter dated 27.12.2011 addressed to the Secretary of the Commission has submitted that the transmission charges of TPGL would be borne by the SUGEN beneficiaries only and not by all the constituents of the Western Region. In this connection, the petitioner has referred to its submission in Petition No. 275/2009 and the reply of MPPTCL in Petition no. 275/2009. In its reply to the petition, MPPTCL has not recorded any objection regarding the sharing of transmission charges of the transmission system by the Western Region beneficiaries. GUVNL in its reply dated 18.6.2012 has submitted that the transmission tariff of the transmission should be borne by M/s Torrent Power Limited, Ahmedabad both under the pre-PoC regime as well as the post-PoC regime. 49. We have considered the submission of the petitioner and the objections of the respondents. The petitioner has not made any specific prayer regarding the sharing of transmission charges of the transmission system in the main petition. However, in para 2.2 of the petition, the petitioner has submitted that the transmission system will connect SUGEN Power Project to Western Region and will be utilised to transfer power to its beneficiaries of Ahmedabad and outside the State. Therefore, by its own submission, the transmission system will be used by beneficiaries of the Western Region in addition to the SUGEN beneficiaries. Since, the transmission assets form part of the inter-State Transmission System for which transmission licence has been granted

by the Commission, the transmission charges of the transmission assets of the petitioner being a part of the ISTS shall be shared in accordance with Regulation 23 of the 2009 Tariff Regulations up to 30.6.2011. With effect from 1.7.2011, the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 came into force. As per Regulation 2(2) of the Sharing Regulations, the regulations are applicable to all designated ISTS customers, inter-State licensees, etc. Since the petitioner is an inter-State transmission licensee, the sharing of transmission charges and losses of the petitioner shall be governed by the provisions of the Sharing Regulations.

89. Subsequently, the Commission vide order dated 9.1.2015 in Petition No.

#### 106/TT/2012 held as under:

"60. We have already considered the issue regarding sharing of transmission charges while granting transmission tariff for Phase-II in order dated 22.4.2013 in Petition No.318/2010. The relevant extract of the said order is as follows:-

SHARING OF TRANSMISSION CHARGES

"47. The Commission while granting the provisional tariff for the subject transmission line, vide order dated 8.12.2011 had directed that the provisional transmission charges shall be recovered on monthly basis in accordance with Regulations 23 and shared by the beneficiaries in accordance with Regulation 33 of 2009 Tariff Regulations up to 30.6.2011 and with effect from 1.7.2011, the billing, collection and distribution of the transmission charges shall be governed by the provisions of Central Electricity Regulatory Commission (sharing of inter-State transmission charges and losses) Regulations, 2010 and Removal of difficulty order issued there under. The petitioner had filed Review Petition No. 8/RP/2012 praying that it should be exempted from the pooling of the transmission charges under the Regulation 23 of 2009 Tariff Regulation and sharing regulations, since the cost of the transmission charges would be entirely borne by the SUGEN beneficiaries and not by the constituents of the Western Region. The Commission in its order dated 23.8.2012 had rejected the prayer of the petitioner for review of the provisional tariff order and observed that the issue regarding sharing of the transmission charges would be considered at the time of issuing the order for final tariff. 48. After issuance of the provisional tariff order, the petitioner in its letter dated 27.12.2011 addressed to the Secretary of the Commission has submitted that the transmission charges of TPGL would be borne by the SUGEN beneficiaries only and not by all the constituents of the Western Region. In this connection, the petitioner has referred to its submission in Petition No. 275/2009 and the reply of MPPTCL in Petition no. 275/2009. In its reply to the petition, MPPTCL has not recorded any objection regarding the sharing of transmission charges of the transmission system by the Western Region beneficiaries. GUVNL in its reply dated 18.6.2012 has submitted that the transmission tariff of the transmission should be borne by M/s Torrent Power Limited, Ahmedabad both under the pre-PoC regime as well as the post-PoC regime

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49. We have considered the submission of the petitioner and the objections of the respondents. The petitioner has not made any specific prayer regarding the sharing of transmission charges of the transmission system in the main petition. However, in para 2.2 of the petition, the petitioner has submitted that the transmission system will connect SUGEN Power Project to Western Region and will be utilised to transfer power to its beneficiaries of Ahmedabad and outside the State. Therefore, by its own submission, the transmission system will be used by beneficiaries of the Western Region in addition to the SUGEN beneficiaries. Since, the transmission assets form part of the inter-State Transmission System

for which transmission licence has been granted by the Commission, the transmission charges of the transmission assets of the petitioner being a part of the ISTS shall be shared in accordance with Regulation 23 of the 2009 Tariff Regulations up to 30.6.2011. With effect from 1.7.2011, the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 came into force. As per Regulation 2(2) of the Sharing Regulations, the regulations are applicable to all designated ISTS customers, inter-State licensees, etc. Since the petitioner is an inter-State transmission licensee, the sharing of transmission charges and losses of the petitioner shall be governed by the provisions of the Sharing Regulations."

- 61. We have considered the submissions of GUVNL and the petitioner. The petitioner was granted transmission license, vide order dated 16.5.2007 in Petition No.97/2006 and the petitioner is an inter-State transmission licensee. The transmission line of the petitioner is connected to the ISTS and it is utilized to carry power outside the State through LTA. As such, the transmission charges for the instant transmission assets shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondents in accordance with Regulation 33 of the 2009 Tariff Regulations from the date of commercial operation, i.e. 1.4.2011 upto 30.6.2011. With effect from 1.7.2011, billing, collection and disbursement of the transmission charges approved shall be governed by Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time."
- 90. While truing up the tariff of 2009-14 period and determining the tariff for the 2014-19 period, the Commission vide order dated 19.9.2016 in petition No 134/TT/2015 is held as under:

"Sharing of Transmission Charges

98. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time, as provided in Regulation 33 and Regulation 43 of the 2009 tariff Regulations and 2014 Tariff Regulations respectively."

- 91. From the above, it is observed that the Commission has already rejected the contention of Objector and TPL that the transmission system i.e. the 400 kV D/C transmission system from SUGEN to LILO near Gandhar and from LILO near Gandhar to 400 kV Pirana Sub-station should be treated as dedicated transmission system. The issue has already been decided and is no longer res integra. The decisions have been reiterated in several petitions as quoted in above paragraphs.
- 92. With effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and

Losses) Regulations, 2020 (in short "the 2020 Sharing Regulations"). Accordingly, the liabilities of the DICs for arrears of the transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of transmission charges for subsequent period shall be recovered in terms of the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

#### 93. To summarise:

a) The trued-up Annual Fixed Charges allowed for the Combined Asset for the 2014-19 tariff period are as follows:

(₹ in lakh) 7-18 | 2018-19 |

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	5416.71	5295.18	5032.98	4775.99	4610.46

b) The Annual Fixed Charges allowed for the Combined Asset for the 2019-24 tariff period in this order are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	4320.37	4198.63	4075.11	3940.01	2602.50

- 94. Annexure-1 and Annexure-2 enclosed hereinafter form part of the instant order.
- 95. This order disposes of Petition No. 383/TT/2019 in terms of the above discussions and findings.

sd/-(Arun Goyal) Member sd/-(I. S. Jha) Member

sd/-(P. K. Pujari) Chairperson

# **ANNEXURE-1**

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

2014-19	Admitted Capital Cost	Projected Additional Capitalisation	Admitted Capital Cost	Rate of Depreciation as per	4	Annual Depreciation as per Regulations	ciation as per	r Regulations	
Capital Expenditure	as on 1.4.2014	during tariff period 2014-19	as on 31.3.2019	Regulations	2014-15	2015-16	2016-17	2017-18	2018-19
Land-Freehold	0.00	00:0	00.0	%00.0	0.00	0.00	0.00	0.00	00.00
Land-Lease hold	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Building, Civil Works & Colony	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Transmission Line	26837.00	1953.27	28790.27	2.28%	1468.56	1520.13	1520.13	1520.13	1520.13
Substation	1438.20	00:0	1438.20	5.28%	75.94	75.94	75.94	75.94	75.94
PLCC	0.00	00:0	00.00	6.33%	0.00	0.00	0.00	0.00	00.00
IT Equipment (Incl. Software)	0.00	0.00	0.00	15.00%	0.00	0.00	0.00	0.00	0.00
Total	28275.80	1953.27	30228.47	Total	1544.50	1596.06	1596.06	1596.06	1596.06
	Average G	Average Gross Block (₹ in lakh)	lakh)		29251.84	30228.47	30228.47	30228.47	30228.47
Weighte	ed Average F	Weighted Average Rate of Depreciation (WAROD)	ation (WAR	(ac	5.28%	5.28%	5.28%	5.28%	5.28%

# **ANNEXURE-2**

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

2019-24	Admitted Capital Cost as on	Projected Additional Capitalisation	Admitted Capital Cost as on	Rate of Depreciation as per	Annual Depreciation as per Regulations				
Capital Expenditure	1.4.2019	during tariff period 2019-24	31.3.2024	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
Land-Freehold	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
Land-Lease hold	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	Spreading
Building, Civil Works & Colony	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	
Transmission Line	28790.27	210.00	29000.27	5.28%	1522.11	1527.65	1531.21	1531.21	
Substation	1432.20	0.00	1432.20	5.28%	75.62	75.62	75.62	75.62	
PLCC	0.00	0.00	0.00	6.33%	0.00	0.00	0.00	0.00	
IT Equipment (Incl. Software)	6.00	0.00	6.00	15.00%	0.09	0.09	0.09	0.09	
Total	30228.47	210.00	30438.47	Total	1598.63	1604.17	1607.73	1607.73	366.08
Average Gross Block (₹ in lakh)					30265.97	30370.97	30438.47	30438.47	30438.47
Weighted Average Rate of Depreciation (WAROD)					5.28%	5.28%	5.28%	5.28%	Spreading