

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 691/TT/2020

Coram:

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

Date of Order : 30.11.2021

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and revision of transmission tariff of the 2004-09 and 2009-14 tariff periods and truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Combined Asset-I consisting of (i): 765 kV S/C Bina-Gwalior Transmission Line; (ii) 315 MVA, 400/220/33 kV ICT-I along with associated bays at Gwalior Sub-station; (iii): LILO of 400 kV S/C Korba-Raipur line at Bhatapara Sub-station along with associated bays; (iv): 400 kV Khandwa Rajgarh Circuit-II along with associated bays and 765/400 kV ICT-III at Seoni Sub-station; (v): 400 kV Khandwa-Rajgarh Circuit-I along with associated bays and 63 MVAR Bus Reactor at Bina Sub-station, Asset-II: 400 kV ICT-II at Gwalior Sub-station; and Asset-III: 400/220 kV ICT-II at Bhatapara Sub-station under Sipat-II Transmission System in the Western Region.

And in the matter of:

Power Grid Corporation of India Limited,
'SAUDAMINI', Plot No-2, Sector-29,
Gurgaon-122001 (Haryana).

.....Petitioner

Versus

1. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur, Jabalpur-482008.
2. Madhya Pradesh Power Transmission Company Limited,
Shakti Bhawan, Rampur, Jabalpur-482008.
3. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited,
3/ 54, Press Complex, Agra-Bombay Road, Indore-452008.
4. Maharashtra State Electricity Distribution Company Limited,
Hongkong Bank Building, 3rd Floor, M.G. Road, Fort, Mumbai-400001.
5. Maharashtra State Electricity Transmission Company Limited,



Prakashganga, 6th Floor, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (East) Mumbai-400051.

6. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara-390007.
7. Gujarat Energy Transmission Corporation Limited,
Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara-390007.
8. Electricity Department,
Government of Goa,
Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa-403001.
9. Electricity Department,
Administration of Daman & Diu,
Daman-396210.
10. Electricity Department,
Administration of Dadra Nagar Haveli,
U.T., Silvassa-396230.
11. Chhattisgarh State Electricity Board,
P. O. Sunder Nagar, Dangania,
Raipur, Chhattisgarh-492013.
12. Chhattisgarh State Power Transmission Company Limited,
State Load Despatch Building, Dangania, Raipur-492013.
13. Chhattisgarh State Power Distribution Company Limited,
P. O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492013.

.....Respondent(s)

For Petitioner : Shri S. S. Raju, PGCIL
Shri D. K. Biswal, PGCIL
Shri V. P. Rastogi, PGCIL
Shri Amit Yadav, PGCIL

For Respondents : Shri Anindya Khare, MPPMCL

ORDER

The Petitioner, Power Grid Corporation of India Limited, has filed the instant petition for revision of transmission tariff of the 2004-09 and 2009-14 tariff periods; truing up of the transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014



(hereinafter referred to as “the 2014 Tariff Regulations”); and determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of seven transmission assets under Sipat-II Transmission System in Western Region (hereinafter referred to as “the transmission system”):

Combined Asset-I comprising of:

Asset-1: 765 kV S/C Bina-Gwalior Transmission Line;

Asset-2: 315 MVA, 400/220/33 kV ICT-I along with associated bays at Gwalior Sub-station;

Asset-3: LILO of 400 kV S/C Korba-Raipur line at Bhatapara Sub-station along with associated bays;

Asset-4: 400 kV Khandwa Rajgarh Circuit-II along with associated bays and 765/400 kV ICT-III at Seoni Sub-station;

Asset-5: 400 kV Khandwa Rajgarh Circuit-I along with associated bays and 63 MVAR Bus Reactor at Bina Sub-station;

Asset-II: 400 kV ICT-II at Gwalior Sub-station; and

Asset-III: 400/220 kV ICT-II at Bhatapara Sub-station (Asset-1, Asset-2, Asset-3, Asset-4, Asset-5, Asset-II and Asset-III have been collectively referred to as the “transmission assets” for the 2004-09 tariff period. The subject Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5 have been combined during the 2009-14 tariff period and have been collectively referred to as “the Combined Asset-I” for 2009-14 tariff period. The Combined Asset-I, Asset-II and Asset-III have been combined during the 2014-19 tariff period and have been collectively referred to as “the Combined Asset” for 2014-19 and 2019-24 periods).



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

- “1) Approve the revised Transmission Tariff for 2004-09 block and transmission tariff for 2009-14 block for the assets covered under this petition, as per para 8 above.
- 2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9 and 10 above.
- 3) a) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 9 and 10 above for respective block.

b) Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long term transmission customers /Dlc as the case may be, as and when materialized as per regulation 49 of 2014 and regulation 67 of 2019 tariff regulation. The petitioner may be allowed to recover the deferred tax liability materialised directly without making any application before the commission as provided in the regulation.
- 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
- 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.
- 7) Allow the petitioner to file a separate petition before Hon’ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.5 above.
- 8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

and pass such other relief as Hon’ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice”



3. **Backdrop of the case**

- a) The Investment Approval (I.A.) for the transmission system was accorded by the Ministry of Power *vide* letter dated 23.8.2004 at an estimated cost of ₹60190.00 lakh, which included IDC of ₹4199.00 lakh (based on 1st Quarter, 2004 Price Level).
- b) Details of the transmission assets under the transmission system, their CODs, etc. are as under:

Assets		Description	COD	E-COD of the Combined Asset with effect from 1.4.2014
Combined Asset-I	Asset-1	765 kV S/C Bina-Gwalior Transmission Line	1.4.2007	5.5.2008
	Asset-2	315 MVA, 400/220/33 kV ICT-I along with associated bays at Gwalior Sub-station	1.5.2007	
	Asset-3	LILO of 400kV S/C Korba-Raipur line at Bhatapara Sub-station along with associated bays	1.12.2007	
	Asset-4	400 kV Khandwa Rajgarh Circuit-II along with associated bays and 765/400 kV ICT-III at Seoni Sub-station	1.4.2008	
	Asset-5	400 kV Khandwa Rajgarh Circuit-I along with associated bays and 63 MVAR Bus Reactor at Bina Sub-station	1.5.2008	
Asset-II		400 kV ICT-II at Gwalior Sub-station	1.4.2008	
Asset-III		400/220 kV ICT-II at Bhatapara Sub-station	1.1.2009	

- c) The transmission tariff for Asset-1, Asset-2 and Asset-3 from COD to 31.3.2009 was determined *vide* order dated 15.6.2009 in Petition No.3/2009. The transmission tariff for Asset-1, Asset-2 and Asset-3 for the 2008-09 period was further revised on account of Additional Capital Expenditure (ACE) during the 2008-09 period *vide* order dated 10.5.2010 in Petition No. 330/2009.
- d) The transmission tariff for Asset-4, Asset-5 and Asset-II from COD to 31.3.2009 was determined *vide* order dated 19.5.2010 in Petition No. 166/2009.
- e) The transmission tariff for Asset-III from COD to 31.3.2009 was determined *vide* order dated 18.6.2010 in Petition No. 242/2009. The Petitioner filed a Review Petition No. 213/2010 in Petition No. 242/2009 and the



Commission dismissed the Review Petition *vide* order dated 3.2.2012. In light of the judgement of the Appellate Tribunal for Electricity (hereinafter referred to as “APTEL”) dated 3.5.2013 in Appeal No. 118 of 2012, the transmission tariff for Asset-III was further revised *vide* order dated 5.1.2015 in Petition No. 242/2009 read with corrigendum dated 5.1.2015.

f) The Petitioner had combined Asset-1, Asset-2, Asset-3, Asset-4 and Asset-5 covered in the transmission project into one single Combined Asset-I during 2009-14 tariff period. Accordingly, the transmission tariff for Combined Asset-I and Asset-II for the period from 1.4.2009 to 31.3.2014 was determined *vide* order dated 19.4.2011 in Petition No. 291/2010.

g) The transmission tariff for the 2009-14 period for Asset-III was determined *vide* order dated 18.10.2012 in Petition No. 130/2012.

h) The transmission tariff for Combined Asset-I, Asset-II and Asset-III for the 2009-14 period was trued up *vide* order dated 29.2.2016 in Petition No. 225/TT/2015. The Commission *vide* order dated 29.2.2016 in Petition no. 225/TT/2015 had restricted capital cost of Asset-II to apportioned approved cost (RCE-I). Subsequently, the Petitioner filed Review Petition No. 37/RP/2017 along with IA No. 66/IA/2017 for review and modification of the said order and also *vide* affidavit dated 4.9.2017 has submitted RCE-II apportionment for Asset-II. The Review Petition No. 37/RP/2017 was rejected due to non-compliance of time limits for filing the review petition. However, the Commission *vide* order dated 27.3.2018 in Review Petition No. 37/RP/2017 held that the Review Petitioner may submit the RCE at the time of truing up of the 2014-19 tariff which will be dealt with in accordance with law. The relevant extracts of the Order dated 27.3.2018 are as follows:

“7. As the review petition is disallowed on the ground of non-compliance with the statutory time limit for filing the review petition, we are not expressing any opinion on the merit of the review petition. The Review Petitioner may submit the RCE dated 1.6.2016 for consideration of the Commission at the time of truing up of the 2014-19 tariff which will be dealt with in accordance with law.”

i) The Petitioner had claimed the tariff for 2014-19 tariff period in respect of the single Combined Asset comprising of Combined Asset-I, Asset-II and Asset-



III covered in the transmission project. Accordingly, the transmission tariff for the period from 1.4.2014 to 31.3.2019 in respect of the single Combined Asset was determined vide order dated 29.2.2016 in Petition No. 225/TT/2015.

j) The entire scope of work is complete as per I.A. and is covered in this petition.

k) The Petitioner has prayed for revision of transmission tariff allowed for the 2004-09 tariff on account of change in Interest on Loan (IoL) and Interest on Working Capital (IWC) to the extent of revision in IoL and in Maintenance Spares in terms of the judgments of the APTEL dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and 13.6.2007 in Appeal No. 139 of 2006 and batch matters respectively; consequential revision of transmission tariff approved for the 2009-14 tariff period; truing up of tariff of the 2014-19 tariff period; and determination of transmission tariff of the 2019-24 tariff period for Combined Asset-I.

l) The APTEL in judgment dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters pertaining to generating stations of NTPC Limited had considered 04 (four) issues. The issues considered by the APTEL and its decisions/directions are as follows:

Sr. No.	Issue	APTEL's decisions/ directions
1	Whether APTEL can enquire into the validity of Regulations framed by the Commission	Challenge to the validity of Regulations framed by the Commission falls outside the purview of APTEL
2	Computation of IoL	In view of the order of APTEL dated 14.11.2016 in Appeal Nos. 94 and 96 of 2005 and order dated 24.1.2007 passed in Appeal Nos. 81 to 87, 89 to 93 of 2005, computation of loan has to be based on loan repayment on normative basis. The Commission is required to recalculate the loan outstanding as on 31.3.2004 based on loan repayment on normative basis
3(a)	O&M Expenses: Inadequate provision of employee costs as part of O&M Expenses due to variation in salary and wages	Commission's view upheld
3(b)	O&M Expenses: Non-inclusion of incentives and <i>ex-gratia</i> payment to employees	Commission's view upheld



4	Cost of spares for calculation of working capital	Commission's view upheld
---	---	--------------------------

m) The APTEL in its judgment dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters pertaining to generating stations of NTPC Limited had considered 09 (nine) issues. The issues considered and the decisions/ directions of the APTEL are as follows:

Sr. No.	Issue	APTEL's decisions/ directions
I	Computation of outstanding loan at the beginning of the tariff period i.e. 1.4.2004	The Commission is required to recalculate the loan outstanding as on 31.3.2004 based on loan repayment on normative basis
II	Consequence of refinance of loan	The Commission to consider the issue afresh
III	Treating depreciation available as deemed repayment of loan	The Commission to make a fresh computation of outstanding loan
IV	Admissibility of depreciation up to 90%	Commission to consider the issue afresh
V	Cost of Maintenance Spares	The Commission to consider the issue afresh
VI	Impact of de-capitalisation of the assets on cumulative repayment of loan	The cumulative repayment of the loan proportionate to the assets de-capitalised required to be reduced. The Commission to act accordingly
VII	Non-consideration of normative transit loss for coal import	The Commission to consider afresh the transit losses for coal imported from coal mines other than the dedicated ones
VIII	Foreign Exchange Rate Variation (FERV)	FERV has been kept as pass through to ensure that any liability or gain, if any, arising on account of any variation in foreign exchange rates is passed on to the beneficiary as held in order dated 4.10.2006 in Appeal Nos.135 to 140 of 2005. The Commission to act accordingly
IX	Computation of IoL in Singrauli Station	Net loan closing at the end of a year is reflected as net loan opening on the first day of the next year. The Commission shall re-compute the interest accordingly

n) The Commission and certain interested parties preferred Civil Appeals against the APTEL's judgments before the Hon'ble Supreme Court in 2007. The Appeals were admitted and initially stay was granted by the Hon'ble Supreme Court. Subsequently, on an assurance by NTPC Limited that the issues under Appeal would not be pressed for implementation during the pendency of the Appeals, the stay was vacated by the Hon'ble Supreme Court.



o) Based on the APTEL's judgments dated 22.1.2007 and 13.6.2007, the Petitioner had sought re-determination of transmission tariff of its transmission assets for the 2001-04 and 2004-09 tariff periods in Petition No. 121/2007. The Commission after taking into consideration the pendency of Appeals before the Hon'ble Supreme Court adjourned the said petition *sine die* and directed that the same be revived after the disposal of Civil Appeals by the Hon'ble Supreme Court.

p) The Hon'ble Supreme Court vide judgment dated 10.4.2018 dismissed the said Civil Appeals filed against the APTEL's said judgments. Thus, the said judgments of the APTEL have attained finality.

q) Consequent to the Hon'ble Supreme Court's judgment dated 10.4.2018 in NTPC Limited matter, Petition No. 121/2007 was listed for hearing on 8.1.2019. The Commission vide order dated 18.1.2019 in Petition No. 121/2007 directed the Petitioner to submit its claim separately for the assets at the time of filing of truing up of the petitions for the 2014-19 tariff period.

r) The instant petition was heard on 6.7.2021 and in view of the APTEL's judgments dated 22.1.2007 and 13.6.2007 and the judgment of the Hon'ble Supreme Court dated 10.4.2018, tariff is being revised. Period-wise transmission tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods and suitable assumptions have been made at certain places and applied, which are indicated.

4. The respondents are distribution licensees, power departments and transmission licensees which are procuring transmission services from the Petitioner, mainly beneficiaries of Western Region.

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspaper. Madhya Pradesh Power Management Company Limited (MPPMCL),



Respondent No. 1, has filed its reply vide affidavit dated 20.11.2020 and has raised the issues of revision of transmission tariff of the 2004-09 and 2009-14 tariff periods and effective income tax rates for grossing up of Return on Equity (RoE). The Petitioner vide affidavit dated 8.6.2021 has filed rejoinder to MPPMCL's reply.

6. It has been placed before us that MPPMCL has been raising the same issues in other petitions as well despite clear findings of the Commission rejecting the contentions of MPPMCL. The contentions of MPPMCL have been rejected by the Commission in other petitions including Petition No. 215/TT/2020. As MPPMCL has not challenged the findings, the same have attained finality. In view of these, the pleas raised by MPPMCL are rejected. Further, MPPMCL's submissions, Petitioner's clarifications thereto and the Commission's findings on the said issues have not been repeated herein for the sake of brevity.

Re: Interest on Loan

7. The APTEL while dealing with the issue of computation of IoL, in judgment dated 22.1.2007 observed that IoL for the period from 1.4.1998 to 31.3.2001 shall be computed only on normative loan repayment as per its judgment dated 14.11.2006 in Appeal Nos. 94 and 96 of 2005. The APTEL vide judgment dated 14.11.2006 had set aside the Commission's methodology of computation of loan on the actual repayment basis or normative repayment whichever is higher and held that the Commission is required to adopt normative debt repayment methodology for working out IoL liability for the period from 1.4.1998 to 31.3.2001. In view of the above, the interest allowed for the 2004-09 period is revised on the basis of the normative debt repayment methodology.

Re: Additional Capital Expenditure

8. The APTEL vide judgment dated 13.6.2007 in Appeal No.139 of 2006 and others held that ACE after COD should also be considered for computation of



maintenance spares. In view of the above, the maintenance spares to be considered for computation of working capital for the 2004-09 period are also required to be revised taking into consideration ACE after COD.

Re: Depreciation

9. As regards depreciation, the APTEL vide judgment dated 13.6.2007 in Appeal No.139 of 2006 observed that depreciation is an expense and it cannot be deployed for deemed repayment of loan and accordingly directed the Commission to compute the outstanding loan afresh. In view of the above, the outstanding loan allowed for the 2004-09 period is revised in the instant order.

10. The revision of transmission tariff allowed for the 2004-09 tariff period necessitates the revision of transmission tariff allowed for the 2009-14 tariff period, which is also being done in the present order. The implementation of the directions of the APTEL vide judgments dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters respectively was kept pending in case of the Petitioner awaiting the outcome of the Civil Appeals filed before the Hon'ble Supreme Court. Taking into consideration the facts of the case and keeping in view the interest of the consumers, we are of the view that the beneficiaries should not be burdened with the carrying cost for the difference in the tariff allowed earlier and allowed in the instant order for the 2004-09 and 2009-14 tariff periods. Therefore, we direct that the Petitioner will neither claim nor pay any carrying cost from or to the beneficiaries for the difference, if any, in the tariff allowed earlier and the tariff being allowed in the instant order. Further, the said difference in tariff shall be recovered/ paid over a period of six months from the date of issue of this order.



11. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 6.12.2019, MPPMCL's reply filed vide affidavit dated 20.11.2020, the Petitioner's affidavit dated 12.2.2021 filed in response to technical validation letter and the Petitioner's rejoinder filed vide affidavit dated 8.6.2021.

12. The hearing in this matter was held on 6.7.2021 through video conference and the order was reserved. Having heard the representatives of the Petitioner, MPPMCL and after perusal of the materials on record, we proceed to dispose of the petition.

REVISION OF TRANSMISSION CHARGES ALLOWED FOR THE 2004-09 AND 2009-14 TARIFF PERIODS

2004-09 Period

13. The Commission vide order dated 15.6.2009 in Petition No. 3/2009 had approved the final transmission tariff of Asset-1, Asset-2 and Asset-3 for the period from their respective COD to 31.3.2009 [after accounting for Additional Capital Expenditure (ACE) during 2007-08] which was subsequently revised on account of ACE during 2008-09 vide order dated 10.5.2010 in Petition No. 330/2009 as follows:

Asset-1

Particulars	(₹ in lakh)	
	2007-08	2008-09
Depreciation	838.29	917.75
Interest on Loan	1898.26	1996.19
Return on Equity	1336.19	1456.32
Advance against Depreciation	0.00	0.00
O&M Expenses	123.17	128.29
Interest on Working Capital	125.84	134.42
Total	4321.75	4632.98

Asset-2

Particulars	(₹ in lakh)	
	2007-08 (11 months)	2008-09
Depreciation	61.97	69.28
Interest on Loan	106.07	112.83
Return on Equity	72.30	80.83
Advance against Depreciation	0.00	0.00
O&M Expenses	173.97	197.40



Interest on Working Capital	12.58	14.10
Total	426.88	474.44

Asset-3

Particulars	(₹ in lakh)	
	2007-08 (4 months)	2008-09
Depreciation	58.30	193.19
Interest on Loan	101.99	348.03
Return on Equity	72.11	240.82
Advance against Depreciation	0.00	0.00
O&M Expenses	84.61	264.02
Interest on Working Capital	9.51	30.74
Total	326.52	1076.80

14. The Commission vide order dated 19.5.2010 in Petition No. 166/2009 had approved the final transmission tariff (after accounting for ACE during 2008-09) of Asset-4, Asset-5 and Asset-II for the period from their respective COD to 31.3.2009 as follows:

Asset-4

Particulars	(₹ in lakh)	
	2008-09	
Depreciation	594.15	
Interest on Loan	1278.16	
Return on Equity	867.63	
Advance against Depreciation	0.00	
O&M Expenses	190.27	
Interest on Working Capital	88.43	
Total	3018.63	

Asset-5

Particulars	(₹ in lakh)	
	2008-09 (11 months)	
Depreciation	166.68	
Interest on Loan	370.40	
Return on Equity	252.71	
Advance against Depreciation	0.00	
O&M Expenses	144.26	
Interest on Working Capital	28.44	
Total	962.48	



Asset-II

Particulars	(₹ in lakh)	
	2008-09	
Depreciation	43.70	
Interest on Loan	74.71	
Return on Equity	50.91	
Advance against Depreciation	0.00	
O&M Expenses	65.80	
Interest on Working Capital	7.10	
Total	242.23	

15. The Commission vide order 18.6.2010 in Petition No. 242/2009 had determined the final transmission tariff (after accounting for ACE during 2008-09) of Asset-III for the period from COD to 31.3.2009, which was revised vide revision order dated 5.1.2015 in Petition No. 242/2009. A corrigendum dated 10.2.2015 in Petition No. 242/2009 with respect to the said revision order was issued correcting the inadvertent typographical error. The transmission tariff as revised therein is as follows:

Asset-III

Particulars	(₹ in lakh)	
	2008-09 (3 months)	
Depreciation	13.61	
Interest on Loan	24.36	
Return on Equity	15.69	
Advance against Depreciation	0.00	
O&M Expenses	16.45	
Interest on Working Capital	2.10	
Total	72.20	

16. The Petitioner has claimed the revised transmission charges in respect of the transmission assets for the 2004-09 period in this petition as follows:

Asset-1

Particulars	(₹ in lakh)	
	2007-08	2008-09
Depreciation	838.29	917.75
Interest on Loan	1934.71	2107.53
Return on Equity	1336.19	1456.32
Advance against Depreciation	0.00	0.00
O&M Expenses	123.17	128.29
Interest on Working Capital	129.28	143.33
Total	4361.64	4753.22



Asset-2

(₹ in lakh)

Particulars	2007-08 (11 months)	2008-09
Depreciation	61.97	69.28
Interest on Loan	108.63	121.51
Return on Equity	72.30	80.83
Advance against Depreciation	0.00	0.00
O&M Expenses	173.97	197.40
Interest on Working Capital	12.65	14.38
Total	429.53	483.41

Asset-3

(₹ in lakh)

Particulars	2007-08 (4 months)	2008-09
Depreciation	58.30	193.19
Interest on Loan	102.77	362.07
Return on Equity	72.11	240.82
Advance against Depreciation	0.00	0.00
O&M Expenses	84.61	264.02
Interest on Working Capital	9.65	32.43
Total	327.44	1092.52

Asset-4

(₹ in lakh)

Particulars	2008-09
Depreciation	594.15
Interest on Loan	1304.34
Return on Equity	867.63
Advance against Depreciation	0.00
O&M Expenses	190.27
Interest on Working Capital	89.43
Total	3045.82

Asset-5

(₹ in lakh)

Particulars	2008-09 (11 months)
Depreciation	166.68
Interest on Loan	377.04
Return on Equity	252.71
Advance against Depreciation	0.00
O&M Expenses	144.26
Interest on Working Capital	28.63
Total	969.32



Asset-II

Particulars	(₹ in lakh)
	2008-09
Depreciation	43.70
Interest on Loan	76.70
Return on Equity	50.91
Advance against Depreciation	0.00
O&M Expenses	65.80
Interest on Working Capital	7.15
Total	244.26

Asset-III

Particulars	(₹ in lakh)
	2008-09 (3 months)
Depreciation	13.61
Interest on Loan	24.51
Return on Equity	15.69
Advance against Depreciation	0.00
O&M Expenses	16.45
Interest on Working Capital	2.10
Total	72.36

17. We have considered the submissions of the Petitioner. The transmission tariff is revised in respect of the transmission assets on the basis of the following:

- a) The admitted capital cost as on COD and ACE during 2007-08 and 2008-09 in respect of the transmission assets which is as follows:

Asset	Capital Cost as on COD	(₹ in lakh)	
		ACE	
		2007-08	2008-09
Asset-1	29668.65	4291.03	1429.19
Asset-2	1857.65	40.37	52.99
Asset-3	4849.81	602.52	563.61
Asset-4	20288.77	0.00	738.14
Asset-5	6515.33	0.00	99.04
Asset-II	1213.49	0.00	1.02
Asset-III	1480.06	0.00	29.01

- b) Weighted Average Rate of Interest (WAROI) on actual loan, Weighted Average Rate of Depreciation (WAROD), Rate of IWC and O&M Expenses for:

- Asset-1, Asset-2 and Asset-3 as per order dated 15.6.2009 and 10.5.2010 in Petition No. 3/2009 and Petition No. 330/2009 respectively;
- Asset-4, Asset-5 and Asset-II as per order dated 19.5.2010 in Petition No. 166/2009; and



- Asset-III as per order dated 18.6.2010, 5.1.2015 and 10.2.2015 in Petition No. 242/2009.

c) With respect to calculation of IoL, during the 2004-09 period moratorium period was availed by the Petitioner in respect of Asset-2, Asset-3, Asset-4, Asset-5, Asset-II and Asset-III and no actual repayment of loan was made. Earlier, the Commission vide order dated 15.6.2009 and 10.5.2010 in Petition No. 3/2009 and Petition No. 330/2009 respectively [for Asset-2, Asset-3]; vide order dated 19.5.2010 in Petition No. 166/2009 [for Asset-4, Asset-5 and Asset-II] and vide order dated 5.1.2015 in Petition No. 242/2009 [for Asset-III] had considered the respective depreciation provided during the 2004-09 tariff period as loan repayment. Therefore, depreciation provided during 2007-08 and 2008-09 has been considered as loan repayment for the respective assets in accordance with Regulation 56(i)(f) of the 2004 Tariff Regulations. The relevant extract of the Regulation 56(i)(f) of the 2004 Tariff Regulations is as follows:

“56 (i) Interest on Loan Capital

(f) In case any moratorium period is availed of by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly;”

18. In view of the above, the revised transmission charges approved in respect of the transmission assets for the 2004-09 tariff period are as follows:

Asset-1

Particulars	₹ in lakh)	
	2007-08	2008-09
Depreciation	838.29	917.75
Interest on Loan	1934.13	2107.19
Return on Equity	1336.19	1456.32
Advance against Depreciation	0.00	0.00
O&M Expenses	123.17	128.29
Interest on Working Capital	129.27	143.32
Total	4361.05	4752.87

Asset-2

Particulars	₹ in lakh)	
	2007-08 (11 months)	2008-09
Depreciation	61.97	69.28
Interest on Loan	106.07	112.83
Return on Equity	72.30	80.83



Advance against Depreciation	0.00	0.00
O&M Expenses	173.97	197.40
Interest on Working Capital	12.60	14.19
Total	426.91	474.53

Asset-3

Particulars	(₹ in lakh)	
	2007-08 (4 months)	2008-09
Depreciation	58.30	193.19
Interest on Loan	101.99	348.03
Return on Equity	72.11	240.82
Advance against Depreciation	0.00	0.00
O&M Expenses	84.61	264.02
Interest on Working Capital	9.64	31.89
Total	326.64	1077.95

Asset-4

Particulars	(₹ in lakh)	
	2008-09	
Depreciation	594.15	
Interest on Loan	1278.16	
Return on Equity	867.63	
Advance against Depreciation	0.00	
O&M Expenses	88.89	
Interest on Working Capital	190.27	
Total	3019.10	

Asset-5

Particulars	(₹ in lakh)	
	2008-09 (11 months)	
Depreciation	166.68	
Interest on Loan	370.40	
Return on Equity	252.71	
Advance against Depreciation	0.00	
O&M Expenses	144.26	
Interest on Working Capital	28.50	
Total	962.55	

Asset-II

Particulars	(₹ in lakh)	
	2008-09	
Depreciation	43.70	
Interest on Loan	74.71	
Return on Equity	50.91	
Advance against Depreciation	0.00	
O&M Expenses	7.10	
Interest on Working Capital	65.80	
Total	242.23	



Asset-III

(₹ in lakh)

Particulars	2008-09 (3 months)
Depreciation	13.61
Interest on Loan	24.36
Return on Equity	15.69
Advance against Depreciation	0.00
O&M Expenses	16.45
Interest on Working Capital	2.10
Total	72.21

19. The Annual Fixed Charges (AFC) in respect of Asset-1, Asset-2 and Asset-3 allowed for the 2004-09 tariff period vide order dated 10.5.2010 in Petition No. 330/2009, revised AFC claimed by the Petitioner in the instant petition and the revised AFC approved in the instant order are as follows:

(₹ in lakh)

Particulars	Asset-1		Asset-2		Asset-3	
	2007-08	2008-09	2007-08 (11 months)	2008-09	2007-08 (4 months)	2008-09
Allowed vide order dated order dated 10.5.2010 in Petition No. 330/2009	4321.75	4632.98	426.88	474.44	326.52	1076.80
Claimed by the Petitioner in the instant petition	4361.64	4753.22	429.53	483.41	327.44	1092.52
Approved in the instant order	4361.05	4752.87	426.91	474.53	326.64	1077.95

20. AFC in respect of Asset-4, Asset-5 and Asset-II allowed for the 2004-09 tariff period vide order dated 19.5.2010 in Petition No. 166/2009, revised AFC claimed by the Petitioner in the instant petition and the revised AFC approved in the instant order are as follows:

(₹ in lakh)

Particulars	Asset-4	Asset-5	Asset-II
	2008-09	2008-09 (11 months)	2008-09
Allowed vide order dated 19.5.2010 in Petition No. 166/2009	3018.63	962.48	242.23
Claimed by the Petitioner in the instant petition	3045.82	969.32	244.26
Approved in the instant order	3019.10	962.55	242.23

21. AFC in respect of Asset-III allowed vide order 18.6.2010 in Petition No. 242/2009 read with revision order dated 5.1.2015 in Petition No. 242/2009 and



corrigendum dated 10.2.2015 in Petition No. 242/2009, revised AFC claimed by the Petitioner in the instant petition and the revised AFC approved in the instant order are as follows:

Particulars	(₹ in lakh)
	2008-09 (3 months)
Allowed vide corrigendum dated 10.2.2015 in Petition No. 242/2009	72.20
Claimed by the Petitioner in the instant petition	72.36
Approved in the instant order	72.21

2009-14 Period

22. The Commission vide order dated 19.4.2011 in Petition No. 291/2010 had allowed the transmission tariff of Combined Asset-I [Asset-1 to Asset-5] and Asset-II for the period from 1.4.2009 to 31.3.2014. Also, vide order dated 18.10.2012 in Petition No. 130/TT/2012, the transmission tariff of Asset-III for the period from 1.4.2009 to 31.3.2014 was allowed.

23. Further, the transmission tariff of Combined Asset-I [Asset-1 to Asset-5], Asset-II and Asset-III was trued up vide order dated 29.2.2016 in Petition No. 225/TT/2015. The trued-up tariff allowed vide order dated 29.2.2016 is as follows:

Combined Asset-I

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3743.74	3805.67	3857.09	3888.58	3893.76
Interest on Loan	4030.90	3776.14	3501.25	3197.52	2860.04
Return on Equity	4018.31	4234.35	4295.47	4330.80	4389.08
O&M Expenses	1334.40	1410.87	1491.50	1576.90	1666.93
Interest on Working Capital	312.53	316.84	317.49	316.83	315.62
Total	13439.88	13543.88	13462.80	13310.63	13125.43

Asset-II

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	64.94	65.93	70.24	74.37	74.37
Interest on Loan	70.85	66.22	65.33	63.81	57.11
Return on Equity	68.80	72.41	77.22	81.77	82.76



O&M Expenses	89.08	94.18	99.57	105.26	111.28
Interest on Working Capital	8.72	8.97	9.42	9.85	10.03
Total	302.39	307.71	321.78	335.07	335.56

Asset-III

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	81.41	82.87	83.47	84.06	84.06
Interest on Loan	95.71	89.80	82.74	75.62	67.74
Return on Equity	86.08	90.84	91.58	92.24	93.35
O&M Expenses	89.08	94.18	99.57	105.26	111.28
Interest on Working Capital	9.94	10.20	10.35	10.52	10.68
Total	362.23	367.90	367.71	367.69	367.11

24. The Petitioner has claimed the revised transmission charges in respect of Combined Asset-I, Asset-II and Asset-III for the 2009-14 period in this petition as follows:

Combined Asset-I

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3743.74	3805.67	3857.09	3888.58	3893.76
Interest on Loan	4285.74	4031.43	3756.85	3453.37	3116.13
Return on Equity	4018.31	4234.35	4295.47	4330.80	4389.08
O&M Expenses	1334.40	1410.87	1491.50	1576.90	1666.93
Interest on Working Capital	317.85	322.17	322.83	322.16	320.96
Total	13700.05	13804.49	13723.74	13571.82	13386.86

Asset-II

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	64.94	65.93	71.02	77.07	78.34
Interest on Loan	74.79	70.17	70.19	70.81	65.35
Return on Equity	68.74	72.35	78.03	84.68	87.12
O&M Expenses	89.08	94.18	99.57	105.26	111.28
Interest on Working Capital	8.80	9.06	9.55	10.11	10.38
Total	306.35	311.68	328.36	347.94	352.46

Asset-III

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	81.41	82.87	83.47	84.06	84.06
Interest on Loan	96.99	91.07	84.01	76.89	69.02



Return on Equity	86.08	90.84	91.58	92.24	93.35
O&M Expenses	89.08	94.18	99.57	105.26	111.28
Interest on Working Capital	9.97	10.23	10.38	10.54	10.70
Total	363.53	369.19	369.01	368.99	368.41

25. We have considered the submissions of the Petitioner. The transmission tariff is revised in respect of Combined Asset-I, Asset-II and Asset-III on the basis of the following:

- a) Admitted capital cost as on 1.4.2009, 31.3.2014 and ACE during the 2009-14 period in respect of Combined Asset-I, Asset-II and Asset-III which are as follows:

Asset	Capital Cost (as on 1.4.2009)	ACE					Capital Cost (as on 31.3.2014)
		2009-10	2010-11	2011-12	2012-13	2013-14	
Combined Asset-I	70997.10	1466.41	899.48	1063.04	152.70	54.18	74632.91
Asset-II	1214.51	30.78	6.75	156.52	0.00	0.00	1408.56
Asset-III	1509.07	55.37	0.00	22.48	0.00	0.00	1586.92

- b) WAROI on actual loan, WAROD, Rate of IWC and O&M Expenses as per order dated 29.2.2016 in Petition No. 225/TT/2015.

26. In view of the above, the revised transmission charges approved in respect of Combined Asset-I, Asset-II and Asset-III for the 2009-14 tariff period are as follows:

Combined Asset-I

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3743.74	3805.67	3857.09	3888.58	3893.76
Interest on Loan	4184.30	3929.80	3655.11	3351.53	3014.19
Return on Equity	4018.31	4234.35	4295.47	4330.80	4389.08
O&M Expenses	1334.40	1410.87	1491.5	1576.9	1666.93
Interest on Working Capital	315.74	320.05	320.70	320.04	318.84
Total	13596.48	13700.75	13619.88	13467.86	13282.80

Asset-II

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	64.94	65.93	70.24	74.37	74.37
Interest on Loan	70.85	66.22	65.33	63.81	57.11



Return on Equity	68.80	72.41	77.22	81.77	82.76
O&M Expenses	89.08	94.18	99.57	105.26	111.28
Interest on Working Capital	8.72	8.97	9.42	9.85	10.03
Total	302.39	307.71	321.78	335.06	335.55

Asset-III

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	81.41	82.87	83.47	84.06	84.06
Interest on Loan	95.71	89.80	82.74	75.62	67.74
Return on Equity	86.08	90.84	91.58	92.24	93.35
O&M Expenses	89.08	94.18	99.57	105.26	111.28
Interest on Working Capital	9.94	10.20	10.35	10.52	10.68
Total	362.22	367.89	367.72	367.69	367.10

27. AFC allowed in respect of Combined Asset-I, Asset-II and Asset-III for the 2009-14 period vide order dated 29.2.2016 in Petition No. 225/TT/2015, revised AFC claimed by the Petitioner in the instant petition and AFC approved in the instant order are as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Combined Asset-I					
Allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015	13439.88	13543.88	13462.80	13310.63	13125.43
Claimed by the Petitioner in the instant petition	13700.05	13804.49	13723.74	13571.82	13386.86
Approved in the instant order	13596.48	13700.75	13619.88	13467.86	13282.80
Asset-II					
Allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015	302.39	307.71	321.78	335.07	335.56
Claimed by the Petitioner in the instant petition	306.35	311.68	328.36	347.94	352.46
Approved in the instant order	302.39	307.71	321.78	335.06	335.55
Asset-III					
Allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015	362.23	367.90	367.71	367.69	367.11
Claimed by the Petitioner in the instant petition	363.53	369.19	369.01	368.99	368.41
Approved in the instant order	362.22	367.89	367.72	367.69	367.10

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

28. The Petitioner has combined the Combined Asset-I, Asset-II and Asset-III to Combined Asset as on 1.4.2014 and, accordingly, the details of the trued-up



transmission charges as claimed by the Petitioner in respect of Combined Asset for the 2014-19 tariff period are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4057.74	4057.74	4057.74	4057.74	4057.74
Interest on Loan	2894.05	2535.15	2176.32	1817.63	1459.23
Return on Equity	4574.86	4595.84	4593.51	4593.51	4605.86
O&M Expenses	1734.56	1792.42	1851.73	1913.29	1976.72
Interest on Working Capital	361.14	356.56	351.52	346.67	342.21
Total	13622.35	13337.71	13030.82	12728.84	12441.76

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

(₹ in lakh)					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	144.55	149.37	154.31	159.44	164.73
Maintenance Spares	260.18	268.86	277.76	286.99	296.51
Receivables	2270.39	2222.95	2171.8	2121.47	2073.63
Total Working Capital	2675.12	2641.18	2603.87	2567.90	2534.87
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	361.14	356.56	351.52	346.67	342.21

Effective Date of Commercial Operation (E-COD)

30. Based on the trued-up admitted capital cost as on 31.3.2014 and actual COD of Combined Asset-I, Asset-II and Asset-III, E-COD has been worked out as follows:

Asset	Capital Cost (as on 31.3.2014) (₹ in lakh)	COD	Number of days from last COD	Weightage of Cost (%)	Weighted days	E-COD (latest COD - weighted days)
Combined Asset-I	74632.91	1.5.2008	245	96.14	235.55	5.5.2008
Asset-II	1408.56	1.4.2008	275	1.81	4.99	
Asset-III	1586.92	1.1.2009	0	2.04	0.00	
Total	77628.39			100.00	240.54	

31. E-COD is used to determine the lapsed life of the project as a whole which works out as 05 (five) years as on 1.4.2014 (i.e. the number of completed years as on 1.4.2014 from E-COD).



Weighted Average Life (WAL)

32. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2014 and their respective useful life as specified in the 2014 Tariff Regulations. Accordingly, WAL of Combined Asset has been worked out as 32 years as follows:

Particulars	Capital Cost (as on 31.3.2014) (₹ in lakh) (1)	Life (in years) (2)	Weighted Cost (₹ in lakh) (3) = (1)x(2)	WAL of Asset (in years) (4) = (3)/(1)
Building & Civil Works	1888.05	25	47201.28	31.81 (rounded off to 32 years)
Transmission Line	53199.89	35	1861996.14	
Sub Station	21750.62	25	543765.41	
PLCC	524.68	15	7870.24	
Total	77363.24		2460833.07	

33. As discussed above, E-COD of Combined Asset is 5.5.2008 and the lapsed life of the project as a whole works out as 5 years as on 1.4.2014 (i.e. the number of completed years as on 1.4.2014 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2014 to be 27 years.

Capital Cost

34. The Petitioner in the instant petition has claimed the completion cost of ₹1486.36 lakh as on 1.4.2014 for Asset-II which was restricted to apportioned approved cost (as per RCE-I) i.e. ₹1408.56 lakh vide order dated 29.2.2016 in Petition No. 225/TT/2015. Subsequently, a Review Petition No. 37/RP/2017 along with I.A. No. 66/IA/2017 was filed seeking review and modification of the said order. Further, it has been submitted that in the said Review Petition, RCE-II along with apportionment for Asset-II amounting to ₹1625.15 lakh was submitted.

35. The Petitioner has submitted that vide order dated 27.3.2018 in Review Petition No. 37/RP/2017 along with 66/IA/2017, liberty was granted to the Petitioner to



approach the Commission for consideration of the capital cost of Asset-II (as claimed in Petition No. 225/TT/2015) at the time of true up of the 2014-19 tariff.

36. Accordingly, the Petitioner in the instant petition has requested to allow the tariff for Asset-II as claimed in Petition No. 225/TT/2015 based on the capital cost of ₹1214.51 lakh as on 1.4.2009 and capital cost of ₹1486.36 Lakh as on 1.4.2014 (in view of ACE during the 2009-14 period) and has further submitted the tariff forms related thereto. The details of allowed capital cost on 31.3.2014 along with ACE during the 2014-19 period and actual capital cost as on 31.3.2014 along with actual ACE during the 2014-19 period [with respect to Asset-II] as claimed by the Petitioner in this petition are as follows:

	Capital Cost (as on 1.4.2009)	ACE					(₹ in lakh)
		2009-10	2010-11	2011-12	2012-13	2013-14	Total Cost (as on 31.3.2014)
Allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015	1214.51	30.78	6.75	156.52	0.00	0.00	1408.56
Claimed in instant Petition	1214.51	30.78	6.75	186.15	42.87	5.30	1486.36

37. We have considered the submissions of the Petitioner and note that the Commission vide order dated 29.2.2016 in Petition No. 225/TT/2015 had restricted the capital cost to apportioned approved cost (RCE-I) of ₹1408.56 lakh in respect of Asset-II. Further, I.A. No. 66/IA/2017 that was filed seeking condonation of delay in filing the said Review Petition was dis-allowed by the Commission vide order dated 27.3.2018 and accordingly the said Review Petition was rejected on the ground of non-compliance with the statutory time limit for filing a review petition (45 days from the date of issue of an order). Also, no opinion on the merits of the said Review Petition was expressed by the Commission and it was observed that RCE may be submitted by the Petitioner for consideration at the time of true up of transmission tariff for the 2014-19 tariff period in accordance with law.



38. We observe that the document as submitted by the Petitioner in support of RCE-II reveals that it is only an Annexure and RCE-II duly approved by BOD of the Petitioner company has not been furnished by the Petitioner in the instant Petition. Therefore, in the absence of approved RCE-II from BOD of the Petitioner company, the admitted capital cost as on 1.4.2014 of ₹1408.56 lakh has been considered.

39. The details of the claimed capital cost and ACE during 2014-19 period as claimed by the Petitioner for calculation of tariff for the 2014-19 tariff period are as follows:

(₹ in lakh)		
Capital Cost (as on 1.4.2014)	ACE	Capital Cost claimed (as on 31.3.2019)
	2014-19	
77706.19	0.00	77706.19

40. The Commission vide order dated 29.2.2016 in Petition No. 225/TT/2015 had allowed the capital cost of ₹77628.39 lakh as on 1.4.2014 as well as on 31.3.2019, since the Petitioner did not claim ACE during the 2014-19 tariff period. The capital cost of the existing project has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations and it is as follows:

(₹ in lakh)		
Capital Cost admitted (as on 1.4.2014)	ACE admitted (2014-19)	Capital Cost admitted (as on 31.3.2019)
77628.39	0.00	77628.39

41. The admitted capital cost as on 1.4.2014 of ₹77628.39 lakh has been considered as the opening capital cost for working out the true up of tariff for the 2014-19 tariff period.

Debt-Equity Ratio

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

Funding	Capital Cost as on 1.4.2014 (₹ in lakh)	(in %)	Total Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)
Debt	54339.87	70.00	54339.87	70.00
Equity	23288.52	30.00	23288.52	30.00
Total	77628.39	100.00	77628.39	100.00

Depreciation

43. Depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. The Gross Block during the 2014-19 tariff period in respect of Combined Assets has been depreciated at WAROD. WAROD at Annexure-I has been worked out after taking into account the depreciation rates of assets as specified in the 2014 Tariff Regulations. The trued-up depreciation allowed in respect of Combined Assets during the 2014-19 tariff period is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	77628.39	77628.39	77628.39	77628.39	77628.39
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	77628.39	77628.39	77628.39	77628.39	77628.39
Average Gross Block	77628.39	77628.39	77628.39	77628.39	77628.39
Freehold Land	265.15	265.15	265.15	265.15	265.15
Weighted average rate of Depreciation (WAROD) (%)	5.22	5.22	5.22	5.22	5.22
Balance useful life of the asset (Year)	69626.92	69626.92	69626.92	69626.92	69626.92
Elapsed life of the asset (year)	27	26	25	24	23
Depreciable Value	5	6	7	8	9
Depreciation during the year	4053.66	4053.66	4053.66	4053.66	4053.66
Cumulative Depreciation	26965.15	31018.81	35072.47	39126.13	43179.79
Remaining Depreciable Value	42661.77	38608.11	34554.45	30500.79	26447.13



44. Depreciation in respect of Combined Asset as allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015	4053.63	4053.63	4053.63	4053.63	4053.63
Claimed by the Petitioner in the instant petition	4057.74	4057.74	4057.74	4057.74	4057.74
Approved after true-up in this order	4053.66	4053.66	4053.66	4053.66	4053.66

Interest on Loan

45. The Petitioner has claimed WAROI on loan based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of the trued-up IoL allowed in respect of Combined Assets for the 2014-19 tariff period are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	54339.87	54339.87	54339.87	54339.87	54339.87
Cumulative Repayments up to Previous Year	21182.27	25235.93	29289.59	33343.25	37396.91
Net Loan-Opening	33157.61	29103.95	25050.29	20996.63	16942.97
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	4053.66	4053.66	4053.66	4053.66	4053.66
Net Loan-Closing	29103.95	25050.29	20996.63	16942.97	12889.30
Average Loan	31130.78	27077.12	23023.46	18969.80	14916.14
Weighted Average Rate of Interest on Loan (in %)	8.9384	8.9518	8.9700	8.9962	9.0374
Interest on Loan	2782.59	2423.90	2065.20	1706.55	1348.02

46. IoL in respect of Combined Asset as allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015	2628.19	2269.26	1910.24	1551.13	1191.85
Claimed by the Petitioner in the instant petition	2894.05	2535.15	2176.32	1817.63	1459.23
Approved after true-up in this order	2782.59	2423.90	2065.20	1706.55	1348.02

Return on Equity

47. The Petitioner has claimed RoE in respect of Combined Asset in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at Minimum Alternate Tax (MAT) rates and has claimed effective tax rates for the 2014-19 tariff period as follows:

Year	Claimed effective tax rate (in %)	Grossed up RoE (in %) [Base Rate/(1-t)]
2014-15	21.018	19.625
2015-16	21.382	19.715
2016-17	21.338	19.705
2017-18	21.337	19.705
2018-19	21.549	19.758

48. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rates based on the notified MAT rates for the Petitioner which are as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Effective tax (in %)
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

49. MAT rates considered in order dated 27.4.2020 for the purpose of grossing up of rate of RoE for trueing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations, are considered in the instant case which are as follows:



Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed up ROE (in %) [(Base Rate)/(1-t)]
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

50. The Petitioner has claimed RoE for the 2014-19 period after grossing up RoE of 15.50% with Effective Tax rates (based on MAT rates) each year as per the above said Regulation. RoE is trued-up on the basis of MAT rates applicable in the respective years and is approved as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	23288.52	23288.52	23288.52	23288.52	23288.52
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	23288.52	23288.52	23288.52	23288.52	23288.52
Average Equity	23288.52	23288.52	23288.52	23288.52	23288.52
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
Return on Equity	4566.88	4589.00	4589.00	4589.00	4601.35

51. RoE in respect of Combined Asset as allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015	4566.98	4566.98	4566.98	4566.98	4566.98
Claimed by the Petitioner in the instant petition	4574.86	4595.84	4593.51	4593.51	4605.86
Approved after true-up in this order	4566.88	4589.00	4589.00	4589.00	4601.35



Operation & Maintenance Expenses (O&M Expenses)

52. The O&M Expenses in respect of the various elements covered under Combined Asset as claimed by the Petitioner in this petition are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
765 kV Sub-station Bay					
Seoni: 765 kV bay of ICT-III at Seoni (1 No.)	84.42	87.22	90.12	93.11	96.20
400 kV Sub-station Bay (14 Numbers)					
Gwalior: 400 kV Bina Bay at Gwalior Bina: 400 kV Gwalior Bay at Bina Gwalior: 400 kV ICT-1 Bay at Gwalior Bhatapara:Korba Bay at Bhatapara Bhatapara:Raipur Bay at Bhatapara Khandwa:Rajgarh Circuit-I and II at Khandwa Rajgarh:Khandwa Circuit-I and II at Rajgarh Seoni: 400 kV Bay of ICT-III at Seoni Bina: 63 MVAr Bus Reactor Bay at Bina Bhatapara: 400 kV Bay of ICT-II at Bhatapara Gwalior: 400 kV ICT-II Bay at Gwalior Bhatapara: 400 kV ICT Bay at Bhatapara	844.20	872.20	901.18	931.14	961.94
220 kV Sub-station Bay (12 Numbers)					
Gwalior: 220 kV ICT-1 Bay at Gwalior Bhatapara: 220 kV Bay of ICT-II at Bhatapara Bhatapara: 220 kV Bhatapara Bay at Bhatapara Bhatapara: Suhela-I Bay at Bhatapara Bhatapara: Suhela-II Bay at Bhatapara Bhatapara: Suhela-III Bay at Bhatapara Gwalior: 4 Feeder Bays at Gwalior Gwalior: 220 kV ICT-II Bay at Gwalior Bhatapara: 220 kV ICT Bay at Bhatapara	506.52	523.32	540.72	558.60	577.20
S/C Bundled (04 sub-conductor)					
765 kV Bina-Gwalior Circuit-I (234.931 km)	142.37	147.30	152.00	157.17	162.34
D/C Bundled (twin conductor)					
i) LILO of Korba Raipur at Bhatapara (1.545 km) ii) 400 kV Khandwa-Rajgarh Circuit I and II (220.588 kms)	157.05	162.38	167.71	173.26	179.04
Total	1734.56	1792.42	1851.73	1913.29	1976.72

53. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system which are as follows:



Element	Norms for 2014-15	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19
765 kV Sub-station (₹ lakh/ bay)	84.42	87.22	90.12	93.11	96.2
400 kV Sub-station (₹ lakh/ bay)	60.30	62.30	64.37	66.51	68.71
220 kV Sub-station (₹ lakh/ bay)	42.21	43.61	45.06	46.55	48.10
Single Circuit (Bundled conductor with 4 sub-conductors) (₹ lakh/ km)	0.606	0.627	0.647	0.669	0.691
Double Circuit Twin Conductor (₹ lakh/ km)	0.707	0.731	0.755	0.780	0.806

54. We have considered the submissions of the Petitioner and, accordingly, the O&M Expenses are allowed as per the norms specified under Regulation 29(3) of the 2014 Tariff Regulations and the allowable O&M Expenses are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
765 kV Sub-station Bay					
Seoni: 765 kV bay of ICT-III at Seoni (1 Number)	84.42	87.22	90.12	93.11	96.20
400 kV Sub-station Bay (14 Numbers)					
Gwalior:400 kV Bina Bay at Gwalior Bina:400 kV Gwalior Bay at Bina Gwalior:400 kV ICT-1 Bay at Gwalior Bhatapara:Korba Bay at Bhatapara Bhatapara:Raipur Bay at Bhatapara Khandwa:Rajgarh Circuit-I and II at Khandwa Rajgarh:Khandwa Circuit-I and II at Rajgarh Seoni: 400 kV Bay of ICT-III at Seoni Bina: 63 MVAr Bus Reactor Bay at Bina Bhatapara: 400 kV Bay of ICT-II at Bhatapara Gwalior: 400 kV ICT-II Bay at Gwalior Bhatapara: 400 kV ICT Bay at Bhatapara	844.20	872.20	901.18	931.14	961.94
220 kV Sub-station Bay (12 Numbers)					



Gwalior: 220 kV ICT-1 Bay at Gwalior Bhatapara: 220 kV Bay of ICT-II at Bhatapara Bhatapara: 220 kV Bhatapara Bay at Bhatapara Bhatapara:Suhela-I Bay at Bhatapara Bhatapara:Suhela-II Bay at Bhatapara Bhatapara:Suhela-III Bay at Bhatapara Gwalior: 4 Feeder Bays at Gwalior Gwalior: 220 kV ICT-II Bay at Gwalior Bhatapara: 220 kV ICT Bay at Bhatapara	506.52	523.32	540.72	558.60	577.20
S/C Bundled (04 sub-conductor)					
765 kV Bina- Gwalior Circuit-I (234.931 km)	142.37	147.30	152.00	157.17	162.34
D/C Bundled (twin conductor)					
i) LILO of Korba Raipur at Bhatapara (1.545 kms) ii) 400 kV Khandwa-Rajgarh Circuit I and II (220.588 kms)	157.05	162.38	167.71	173.26	179.04
Total	1734.56	1792.42	1851.73	1913.28	1976.72

55. O&M Expenses in respect of Combined Asset as allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015	1734.56	1792.42	1851.73	1913.28	1976.72
Claimed by the Petitioner in the instant petition	1734.56	1792.42	1851.73	1913.29	1976.72
Approved after true-up in this order	1734.56	1792.42	1851.73	1913.28	1976.72

Interest on Working Capital

56. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and the trued-up IWC allowed in respect of Combined Asset are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Working Capital for O&M Expenses (O&M Expenses for 1 month)	144.55	149.37	154.31	159.44	164.73
Working Capital for Maintenance Spares	260.18	268.86	277.76	286.99	296.51



(15% of O&M Expenses)					
Working Capital for Receivables (Equivalent to 2 months of annual fixed cost)	2249.33	2202.12	2151.39	2101.07	2053.20
Total Working Capital	2654.06	2620.35	2583.46	2547.50	2514.43
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	358.30	353.75	348.77	343.91	339.45

57. IWC in respect of Combined Asset as allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015	354.74	349.67	344.68	339.82	335.05
Claimed by the Petitioner in the instant petition	361.14	356.56	351.52	346.67	342.21
Approved after true-up in this order	358.30	353.75	348.77	343.91	339.45

Approved Annual Fixed Charges for the 2014-19 Tariff Period

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

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4053.66	4053.66	4053.66	4053.66	4053.66
Interest on Loan	2782.59	2423.90	2065.20	1706.55	1348.02
Return on Equity	4566.88	4589.00	4589.00	4589.00	4601.35
O&M Expenses	1734.56	1792.42	1851.73	1913.28	1976.72
Interest on Working Capital	358.30	353.75	348.77	343.91	339.45
Total	13495.98	13212.73	12908.36	12606.41	12319.19

59. Accordingly, the Annual Transmission Charges as allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 29.2.2016 in Petition No. 225/TT/2015	13338.09	13031.96	12727.26	12424.84	12124.23



Claimed by the Petitioner in the instant petition	13622.35	13337.71	13030.82	12728.84	12441.76
Approved after true-up in this order	13495.98	13212.73	12908.36	12606.41	12319.19

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

60. The details of the transmission charges in respect of Combined Asset for the 2019-24 tariff period as claimed by the Petitioner in this petition are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	4057.74	4057.74	919.07	919.07	919.07
Interest on Loan	1097.28	731.49	507.56	423.36	334.45
Return on Equity	4378.35	4378.35	4378.35	4378.35	4378.35
O&M Expenses	2336.38	2418.17	2503.07	2591.83	2681.14
Interest on Working Capital	245.18	243.73	196.73	199.33	201.53
Total	12114.93	11829.48	8504.78	8511.94	8514.54

61. The details of IWC in respect of Combined Asset for the 2019-24 period as claimed by the Petitioner in this petition are as follows:

Particular	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	194.70	201.51	208.59	215.99	223.43
Maintenance Spares	350.46	362.73	375.46	388.77	402.17
Receivables	1489.54	1458.43	1048.53	1049.42	1046.87
Total Working Capital	2034.7	2022.67	1632.58	1654.18	1672.47
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	245.18	243.73	196.73	199.33	201.53

Capital Cost

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

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

(2) *The Capital Cost of a new project shall include the following:*

(a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*

(b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*



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

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
- (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
- (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

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

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.



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

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

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

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

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

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

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

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

63. The Petitioner has claimed capital cost as on 31.3.2019 of ₹77706.19 lakh in respect of the Combined Asset. The admitted capital cost as on 31.3.2019 of ₹77628.39 lakh is considered as the opening capital cost as on 1.4.2019 for determination of tariff for the 2019-24 tariff period in accordance with Regulation 19 of the 2019 Tariff Regulations. The Petitioner has not projected any ACE during the 2019-24 tariff period in respect of Combined Asset. Accordingly, the capital cost considered for the 2019-24 tariff period is as follows:

(₹ in lakh)

Capital Cost (as on 1.4.2019)	ACE (2019-24)	Capital Cost (as on 31.3.2024)
77628.39	0.00	77628.39

Debt-Equity Ratio

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

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



Provided that:

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

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

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

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

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

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

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

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”

65. The debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period is as follows:



Funding	Capital Cost (as on 1.4.2019) (₹ in lakh)	(in %)	Capital Cost (as on 31.3.2024) (₹ in lakh)	(in %)
Debt	54339.87	70.00	54339.87	70.00
Equity	23288.52	30.00	23288.52	30.00
Total	77628.39	100.00	77628.39	100.00

Depreciation

66. Regulations 33(1), 33(2) and 33(5) 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 there of including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:*

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

"(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis"

*"(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."

67. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Combined Asset has already completed 12 years of life as on 1.4.2021. Therefore, the remaining depreciable value has been spread across the balance useful life from 2021-22 onwards in accordance with Regulation 33(5) of the 2019 Tariff Regulations. WAROD at Annexure-II has been worked out after considering the depreciation rates



as specified in the 2019 Tariff Regulations. The depreciation allowed in respect of 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 Gross Block	77628.39	77628.39	77628.39	77628.39	77628.39
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	77628.39	77628.39	77628.39	77628.39	77628.39
Average Gross Block	77628.39	77628.39	77628.39	77628.39	77628.39
Freehold Land	265.15	265.15	265.15	265.15	265.15
Weighted average rate of Depreciation (WAROD) (%)	5.22	5.22	1.18	1.18	1.18
Balance useful life of the Asset at the beginning of the year (Year)	22	21	20	19	18
Elapsed life at the beginning of the year (Year)	10	11	12	13	14
Depreciable Value	69626.92	69626.92	69626.92	69626.92	69626.92
Depreciation during the year	4053.66	4053.66	916.99	916.99	916.99
Cumulative Depreciation at the end of the year	47233.45	51287.11	52204.10	53121.09	54038.08
Remaining Depreciable Value at the end of the year	22393.47	18339.81	17422.82	16505.83	15588.84

Interest on Loan

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

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

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

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

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



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

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

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

(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.”

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	54339.87	54339.87	54339.87	54339.87	54339.87
Cumulative Repayments up to Previous Year	41450.57	45504.23	49557.89	50474.88	51391.87
Net Loan-Opening	12889.30	8835.64	4781.98	3864.99	2948.00
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	4053.66	4053.66	916.99	916.99	916.99
Net Loan-Closing	8835.64	4781.98	3864.99	2948.00	2031.01
Average Loan	10862.47	6808.81	4323.49	3406.50	2489.51
Weighted Average Rate of Interest on Loan (in %)	9.0767	9.1081	9.1570	9.1561	9.0277
Interest on Loan	985.95	620.15	395.90	311.90	224.75

Return on Equity

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

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



(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage:

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

Provided further that:

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

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

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

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

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

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

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

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

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

Where “t” is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated



profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.

Illustration-

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

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

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

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

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

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

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

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

71. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. Accordingly, MAT rate applicable for 2019-20 has been considered for the purpose of grossing up RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of Combined Asset for the 2019-24 tariff period under Regulation 30 of the 2019 Tariff Regulations is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	23288.52	23288.52	23288.52	23288.52	23288.52
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	23288.52	23288.52	23288.52	23288.52	23288.52
Average Equity	23288.52	23288.52	23288.52	23288.52	23288.52
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50



MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	4374.05	4374.05	4374.05	4374.05	4374.05

Operation & Maintenance Expenses

72. The O&M expenses in respect of the various elements covered under Combined Asset as claimed by the Petitioner for the 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
765 kV Sub-station Bay					
Seoni:765 kV bay of ICT-III at Seoni (01 Number)	45.01	46.6	48.23	49.93	51.68
400 kV Sub-station Bay (14 Numbers)					
Gwalior: 400 kV Bina Bay at Gwalior Bina: 400 kV Gwalior Bay at Bina Gwalior: 400 kV ICT-1 Bay at Gwalior Bhatapara:Korba Bay at Bhatapara Bhatapara:Raipur Bay at Bhatapara Khandwa:Rajgarh Circuit-I and II at Khandwa Rajgarh:Khandwa Circuit-I and II at Rajgarh Seoni:400 kV Bay of ICT-III at Seoni Bina:63 MVar Bus Reactor Bay at Bina Bhatapara:400 kV Bay of ICT-II at Bhatapara Gwalior: 400 kV ICT-II Bay at Gwalior Bhatapara:400 kV ICT Bay at Bhatapara	450.10	465.92	482.30	499.24	516.74
220 kV Sub-station Bay (12 Numbers)					
Gwalior:220 kV ICT-1 Bay at Gwalior Bhatapara:220 kV Bay of ICT-II at Bhatapara Bhatapara:220 kV Bhatapara Bay at Bhatapara Bhatapara:Suhela-I Bay at Bhatapara Bhatapara:Suhela-II Bay at Bhatapara Bhatapara:Suhela-III Bay at Bhatapara Gwalior:4 Feeder Bays at Gwalior Gwalior:220 kV ICT-II Bay at Gwalior Bhatapara:220 kV ICT Bay at Bhatapara	270.12	279.60	289.44	299.52	310.08
765 kV Sub-station ICT					
Seoni:765/400 kV ICT-III at Seoni (1500 MVA)	736.50	762.00	789.00	817.50	846.00



400 kV Sub-station ICT					
Gwalior:400/220 kV ICT-I at Gwalior (315 MVA) Gwalior:400/220 kV ICT-II at Gwalior (315 MVA) Bhatapara:400/220 kV ICT-II at Bhatapara (315 MVA) Bhatapara:400/220 kV ICT-II at Bhatapara (315 MVA)	451.08	467.46	483.84	501.48	517.86
S/C Bundled (04 sub-conductor)					
765 kV Bina- Gwalior Circuit-I (234.931 km)	177.37	183.48	190.06	196.64	203.69
D/C Bundled (twin conductor)					
i) LILO of Korba Raipur at Bhatapara (1.545 kms) ii) 400 kV Khandwa-Rajgarh Circuit I and II (220.588 km)	195.70	202.59	209.69	217.02	224.58
PLCC	10.50	10.50	10.50	10.50	10.50
Total	2336.38	2418.17	2503.07	2591.83	2681.14

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

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
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	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-



pole scheme for the corresponding year of the tariff period;

ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;

iii. the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);

iv. the O&M expenses of ± 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 year

(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.

“35(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.”*

74. We have considered the submissions of the Petitioner. The Petitioner has claimed O&M Expenses separately for PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station have been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in



Petition No. 126/TT/2020 had already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.

75. The O&M expenses approved in respect of the various elements covered under Combined Asset for the 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
765 kV Sub-station Bay					
Seoni:765 kV bay of ICT-III at Seoni (1 No.)	45.01	46.6	48.23	49.93	51.68
400 kV Sub-station Bay (14 Numbers)					
Gwalior:400 kV Bina Bay at Gwalior Bina:400 kV Gwalior Bay at Bina Gwalior:400 kV ICT-1 Bay at Gwalior Bhatapara:Korba Bay at Bhatapara Bhatapara:Raipur Bay at Bhatapara Khandwa:Rajgarh Circuit-I and II at Khandwa Rajgarh:Khandwa Circuit-I and II at Rajgarh Seoni:400 kV Bay of ICT-III at Seoni Bina:63 MVAr Bus Reactor Bay at Bina Bhatapara:400 kV Bay of ICT-II at Bhatapara Gwalior: 400 kV ICT-II Bay at Gwalior Bhatapara:400 kV ICT Bay at Bhatapara	450.10	465.92	482.30	499.24	516.74
220 kV Sub-station Bay (12 Numbers)					
Gwalior:220 kV ICT-1 Bay at Gwalior Bhatapara:220 kV Bay of ICT-II at Bhatapara Bhatapara:220 kV Bhatapara Bay at Bhatapara Bhatapara:Suhela-I Bay at Bhatapara Bhatapara:Suhela-II Bay at Bhatapara Bhatapara:Suhela-III Bay at Bhatapara Gwalior:4 Feeder Bays at Gwalior Gwalior:220 kV ICT-II Bay at Gwalior Bhatapara:220 kV ICT Bay at Bhatapara	270.12	279.60	289.44	299.52	310.08
765 kV Sub-station ICT					
Seoni:765/400 kV ICT-III at Seoni (1500 MVA)	736.50	762.00	789.00	817.50	846.00
400 kV Sub-station ICT					
Gwalior:400/220 kV ICT-I at Gwalior (315 MVA)	451.08	467.46	483.84	501.48	517.86



Gwalior:400/220 kV ICT-II at Gwalior (315 MVA) Bhatapara:400/220 kV ICT-II at Bhatapara (315 MVA) Bhatapara:400/220 kV ICT-II at Bhatapara (315 MVA)					
S/C Bundled (04 sub-conductor)					
765 kV Bina- Gwalior Circuit-I (234.931 km)	177.37	183.48	190.06	196.64	203.69
D/C Bundled (twin conductor)					
i) LILO of Korba Raipur at Bhatapara (1.545 kms) ii) 400 kV Khandwa-Rajgarh Circuit I and II (220.588 kms)	195.70	202.59	209.69	217.02	224.58
Total	2325.88	2407.65	2492.56	2581.33	2670.62

Interest on Working Capital

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

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

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

- i. Receivables equivalent to 45 days of fixed cost;*
- ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*

iii. Operation and maintenance expenses, including security expenses for one month”

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

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

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

“3.Definitions ...

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

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



Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21 and from 2021-22 onwards has been considered as 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points).

78. We have considered the submissions of the Petitioner and accordingly IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations and the components of the working capital and interest allowed thereon in respect of Combined Asset for the 2019-24 tariff period are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for 1 month)	193.82	200.64	207.71	215.11	222.55
Working Capital for Maintenance Spares (15% of O&M Expenses)	348.88	361.15	373.88	387.20	400.59
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	1473.25	1440.09	1029.29	1030.15	1027.84
Total Working Capital	2015.96	2001.87	1610.88	1632.46	1650.98
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	242.92	225.21	169.14	171.41	173.35

Annual Fixed Charges of the 2019-24 Tariff Period

79. The transmission charges in respect of Combined Asset allowed for the 2019-24 tariff period are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	4053.66	4053.66	916.99	916.99	916.99
Interest on Loan	985.95	620.15	395.90	311.90	224.75
Return on Equity	4374.05	4374.05	4374.05	4374.05	4374.05
O&M Expenses	2325.88	2407.65	2492.56	2581.33	2670.62
Interest on Working Capital	242.92	225.21	169.14	171.41	173.35
Total	11982.47	11680.72	8348.65	8355.68	8359.76



Filing Fee and the Publication Expenses

80. The Petitioner has sought reimbursement of fee paid by it for filing the Petition and publication expenses. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

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

Goods and Services Tax

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

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



Security Expenses

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

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

Capital Spares

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

Sharing of Transmission Charges

87. During 2004-09 and 2009-14 tariff periods (upto to 30.6.2011), the transmission charges for inter-State transmission systems were being shared in accordance with the Tariff Regulations for the respective tariff periods. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed



by 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 Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of the transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

88. To summarise:

- a) The revised AFC approved in respect of the transmission assets for the 2004-09 tariff period as per the APTEL's judgments is as follows:

Asset-1

(₹ in lakh)	
2007-08	2008-09
4361.05	4752.87

Asset-2

(₹ in lakh)	
2007-08 (11 months)	2008-09
426.91	474.53

Asset-3

(₹ in lakh)	
2007-08 (4 months)	2008-09
326.64	1077.95

Asset-4

(₹ in lakh)	
2008-09	
3019.10	

Asset-5

(₹ in lakh)	
2008-09 (11 months)	
962.55	



Asset-II

(₹ in lakh)	
2008-09	
	242.23

Asset-III

(₹ in lakh)	
2008-09 (3 months)	
	72.21

- b) The consequential revision of AFC approved in respect of Combined Asset-I, Asset-II and Asset-III for the 2009-14 tariff period is as follows:

Combined Asset-I

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
13596.48	13700.75	13619.88	13467.86	13282.80

Asset-II

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
302.39	307.71	321.78	335.06	335.55

Asset-III

(₹ in lakh)				
2009-10	2010-11	2011-12	2012-13	2013-14
362.22	367.89	367.72	367.69	367.10

- c) The trued-up AFC approved in respect of Combined Asset for the 2014-19 tariff period is as follows:

(₹ in lakh)				
2014-15	2015-16	2016-17	2017-18	2018-19
13495.98	13212.73	12908.36	12606.41	12319.19

- d) AFC allowed in respect of Combined Asset for the 2019-24 tariff period in this order are as follows:

(₹ in lakh)				
2019-20	2020-21	2021-22	2022-23	2023-24
11982.47	11680.72	8348.65	8355.68	8359.76

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



90. This order disposes of Petition No. 691/TT/2020 in terms of the above discussions and findings.

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

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

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



Annexure-I

2014-19 Capital Expenditure	Capital Cost as on 1.4.2014 (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	265.15	0.00	265.15	0.00	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	1888.05	0.00	1888.05	3.34	63.06	63.06	63.06	63.06	63.06
Transmission Line	53199.89	0.00	53199.89	5.28	2808.95	2808.95	2808.95	2808.95	2808.95
Sub Station	21750.62	0.00	21750.62	5.28	1148.43	1148.43	1148.43	1148.43	1148.43
PLCC	524.68	0.00	524.68	6.33	33.21	33.21	33.21	33.21	33.21
Total	77628.39	0.00	77628.39	Total	4053.66	4053.66	4053.66	4053.66	4053.66
Average Gross Block (₹ in lakh)					77628.39	77628.39	77628.39	77628.39	77628.39
Weighted Average Rate of Depreciation					5.22%	5.22%	5.22%	5.22%	5.22%



Annexure-II

2019-24	Combined Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations (%)	Annual Depreciation as per Regulations (₹ in lakh)				
Capital Expenditure		2019-24			2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	265.15	0.00	265.15	0.00	0.00	0.00	spreading		
Building Civil Works & Colony	1888.05	0.00	1888.05	3.34	63.06	63.06			
Transmission Line	53199.89	0.00	53199.89	5.28	2808.95	2808.95			
Sub Station	21750.62	0.00	21750.62	5.28	1148.43	1148.43			
PLCC	524.68	0.00	524.68	6.33	33.21	33.21			
Total	77628.39	0.00	77628.39	Total	4053.66	4053.66	916.99	916.99	916.99
Average Gross Block (₹ in lakh)					77628.39	77628.39	77628.39	77628.39	77628.39
Weighted Average Rate of Depreciation					5.22%	5.22%	1.18%	1.18%	1.18%

