

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 316/TT/2020

Coram:

**Shri P.K. Pujari, Chairperson
Shri Arun Goyal, Member
Shri P. K. Singh, Member**

Date of order: 28.02.2022

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 2001-04, 2004-09 and 2009-14 tariff periods and truing up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of Kakrapar Transmission System in Western Region.

And in the Matter of:

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

.....Petitioner

Versus

1. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur,
Jabalpur – 482 008.
2. Madhya Pradesh Power Transmission Company Limited,
Shakti Bhawan, Rampur,
Jabalpur – 482 008.
3. Madhya Pradesh Audyogik Kendra,
Vikas Nigam (Indore) Limited,
3/54, Press Complex, Agra-Bombay Road,
Indore – 452 008.



4. Maharashtra State Electricity Distribution Company Limited,
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort,
Mumbai – 400 001.
 5. Maharashtra State Electricity Transmission Company Limited,
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (East),
Mumbai – 400 051.
 6. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan,
Race Course Road,
Vadodara – 390 007.
 7. Gujarat Energy Transmission Corporation Limited,
Sardar Patel Vidyut Bhawan,
Race Course Road,
Vadodara – 390 007.
 8. Electricity Department,
Government of Goa,
Vidyut Bhawan, Near Mandvi Hotel,
Panaji, Goa – 403 001.
 9. Electricity Department,
Administration of Daman & Diu,
Daman – 396 210.
 10. Electricity Department,
Administration of Dadra Nagar Haveli,
U.T., Silvassa – 396 230.
 11. Chhattisgarh State Electricity Board,
P.O. Sunder Nagar, Dangania,
Raipur, Chhattisgarh – 492 013.
 12. Chhattisgarh State Power Transmission Company Limited,
Office of The Executive Director (C&P),
State Load Despacth Building,
Dangania, Raipur – 492 013.
 13. Chhattisgarh State Power Distribution Company Limited,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh – 492 013.
-Respondent(s)**



For Petitioner: Shri S.S. Raju, PGCIL
Shri D.K. Biswal, PGCIL
Shri Ved Prakash Rastogi, PGCIL
Shri A.K. Verma, PGCIL

For Respondents: Shri Anindya Khare, MPPMCL

ORDER

The Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for revision of transmission tariff of 2001-04, 2004-09 and 2009-14 tariff periods; truing up of transmission tariff of 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”); and for determination of transmission tariff of 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of Kakrapar Transmission System (hereinafter referred to as “the transmission system”) in Western Region.

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

“1) Approve the revised Transmission Tariff for 2001-04 block, 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 09 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 regulations 2014 and tariff regulation’19 as per para 09 & 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 customers / DIC as the case may be,



as and when the same is materialized as per regulation 49 of 2014 and regulation 67 of 2019 tariff regulation. The petitioner may be allow 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 respondents.

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 withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

Background of the case

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

(a) The transmission system was approved by Department of Atomic Energy, Government of India, vide letter dated 24.1.1991 at an estimated cost of ₹5700.00 lakh. The implementation of the transmission system was commenced by Nuclear Power Corporation and, later, it was completed by the Petitioner.

(b) The scope of work included under the transmission system and the dates of commercial operation (COD) of the transmission lines are as follows:



Sl. No.	Name of the transmission line	COD
1.	220 kV Kakrapar -Baruch line with associated bays	1.12.1992
2.	220 kV Kakrapar-VAV line with associated bays	1.12.1992
3.	220 kV Kakrapar-Vapi line with associated bays	1.8.1993

- (c) The entire scope of the work is covered in the instant petition.
- (d) The transmission tariff for the period from 1.4.2001 to 31.3.2004 was approved vide order dated 16.7.2003 in Petition No. 46/2002.
- (e) The transmission tariff for the period from 1.4.2004 to 31.3.2009 was approved vide order dated 19.10.2005 in Petition No.115/2004. The transmission tariff was revised vide order dated 14.3.2008 in Petition No.115/2004.
- (f) The transmission tariff for 2009-14 period was allowed vide order dated 11.3.2011 in Petition No.111/2009. The transmission tariff for 2009-14 period was trued up and transmission tariff for 2014-19 was determined vide order dated 30.12.2015 in Petition No. 424/TT/2014.
- (g) The Petitioner has sought revision of transmission tariff approved for 2001-04 and 2004-09 tariff periods 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 Appellate Tribunal for Electricity (“the APTEL”) 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 cases. The Petitioner has also sought consequential revision of tariff allowed for 2009-14 tariff period, truing up of tariff of 2014-19 tariff period and determination of tariff of 2019-24 tariff period for the transmission system.
- (h) APTEL in judgment dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters pertaining to generating stations of NTPC had considered 4 (four) issues. The issues considered by the APTEL and its decisions/directions are follows:



Sl. 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 interest on loan	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.	The Commission's view upheld.
3(b)	O&M Expenses: Non-inclusion of incentives and ex-gratia payment to employees.	The Commission's view upheld.
4	Cost of spares for calculation of working capital	The Commission's view upheld.

(i) The APTEL in its judgment dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters pertaining to generating stations of NTPC had considered 9 (nine) issues. The issues considered and the decisions/ directions of the APTEL are as follows:

Sl. 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%	The 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 No.135 to 140 of 2005. The Commission to act accordingly.
IX	Computation of interest on loan 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.

(j) 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 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.

(k) Based on the APTEL's judgments dated 22.1.2007 and 13.6.2007, the Petitioner had sought revision of tariff of its transmission assets for 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 disposal of Civil Appeals by the Hon'ble Supreme Court.

(l) The Hon'ble Supreme Court vide its order dated 10.4.2018, dismissed the said Civil Appeals filed against the APTEL's said judgments. Thus, the judgements of APTEL have attained finality.

(m) Consequent to the Hon'ble Supreme Court's order dated 10.4.2018 in NTPC matters, 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 trueing up petition for 2014-19 tariff period.

(n) The instant petition was heard on 10.9.2021 and in view of the APTEL's judgments dated 22.1.2007 and 13.6.2007 and the order 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 transmission utilities, distribution licensees and power departments, which are procuring transmission services from the Petitioner, mainly beneficiaries of the 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 newspapers. MPPMCL i.e. Respondent No. 1, has filed its reply vide affidavit dated 27.5.2020 and has raised issues with reference to prudence check before revision of tariff, effective tax rate and grossing up of Return on Equity ("RoE") during 2014-19, Additional Capital Expenditure ("ACE") and de-capitalization during 2014-19 and 2019-24 tariff periods. The Petitioner vide affidavit dated 31.8.2021 has filed rejoinder to the reply of MPPMCL.

6. It has been placed before us that MPPMCL has repeatedly been raising the same issue of RoE as has been raised by it in other petitions despite clear findings of the Commission. The contentions of MPPMCL on this issue have been rejected by the Commission in other petitions including in Petition No. 326/TT/2020 vide



order dated 21.9.2021. As MPPMCL has not challenged the findings, the same have attained finality. In view of this, the submissions of MPPMCL on the issue of RoE being identical are rejected. The submissions of MPPMCL, Petitioner's clarifications thereto and the Commission's findings on the said issue have not been repeated here to avoid repetition. Further, the issues which are specific to the instant petition and not dealt by the Commission earlier are considered in the relevant portions of this order.

Re: Interest on Loan ("IoL")

7. APTEL while dealing with the issue of computation of IoL, in judgment dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters 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 No. 94 of 2005 and Appeal No. 96 of 2005. The APTEL vide its 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 order for the period 1.4.1998 to 31.3.2001. In view of the above, interest allowed for 2001-04 and 2004-09 tariff periods is revised on the basis of the normative debt repayment methodology.

Re: Additional Capital Expenditure ("ACE")

8. The APTEL vide judgment dated 13.6.2007 in Appeal No. 139/2006 and batch matters held that ACE after the date of commercial operation ("COD") should also be considered for computation of maintenance spares. In view of the above, maintenance spares to be considered for computation of working capital for 2001-04



and 2004-09 period are also required to be revised taking into consideration ACE after COD.

Re: Depreciation

9. As regards depreciation, the APTEL in its judgement dated 13.6.2007 in Appeal No.139 of 2006 and batch matters 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 above directions of APTEL, the outstanding loan allowed in respect of the transmission system for 2001-04 and 2004-09 tariff periods is revised in the instant order.

10. The revision of transmission tariff allowed for 2001-04 and 2004-09 tariff periods necessitates the revision of transmission tariff allowed for 2009-14 tariff period, which is also being done in the present order. The implementation of the directions of APTEL vide judgment dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and judgment dated 13.6.2007 in Appeal No. 139 of 2006 and batch cases, in the case of the Petitioner was kept pending 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 tariff allowed earlier and allowed in the instant order for 2001-04, 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. The hearing in this matter was held on 10.9.2021 through video conference and order was reserved.

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

13. This order is issued considering the submissions made in the petition vide affidavits dated 14.1.2020, 2.7.2021, reply filed by MPPMCL vide affidavit dated 27.5.2020 and Petitioner's rejoinder affidavit dated 31.8.2021.

REVISION OF TRANSMISSION CHARGES FOR 2001-04, 2004-09 AND 2009-14 TARIFF PERIODS

2001-04 Tariff Period

14. The Commission vide order dated 16.7.2003 in Petition No. 46/2002 had approved transmission charges in respect of the transmission system from 1.4.2001 to 31.3.2004 which are as follows:

Particulars	(₹ in lakh)		
	2001-02	2002-03	2003-04
Depreciation	133.01	96.87	96.87
Return on Equity	327.36	327.36	327.36
O&M Expenses	214.15	227.00	240.62
Advance against Depreciation	37.49	0.00	0.00
Interest on Loan	42.74	0.00	0.00
Interest on Working Capital	24.28	22.83	23.70
Total	779.03	674.05	688.55

15. The Petitioner in the instant petition has claimed the following revised transmission charges in respect of the transmission system for 2001-04 period:

Particulars	(₹ in lakh)		
	2001-02	2002-03	2003-04
Depreciation	133.01	96.87	96.87
Return on Equity	327.36	327.36	327.36
O&M Expenses	214.15	227.00	240.62
Advance against Depreciation	37.49	0.00	0.00
Interest on Loan	0.00	0.00	0.00
Interest on Working Capital	23.44	22.83	23.70
Total	735.45	674.06	688.55



16. We have considered the Petitioner's claim. Tariff is allowed in respect of the transmission system on the basis of following:

- a) Admitted capital cost of ₹4971.00 lakh as on 1.4.2001;
- b) Opening equity and opening loan has been considered as ₹2046 lakh each as on 1.4.2001 for computation of RoE and IoL.
- c) Weighted Average Rate of Interest on actual loan adopted from order dated 16.7.2003 in Petition No.46/2002; and
- d) Weighted Average Rate of Depreciation, Rate of Interest for Working Capital and O&M Expenses as per order dated 16.7.2003 in Petition No. 46/2002.

17. In view of above, the revised transmission charges allowed in respect of the transmission system for 2001-04 tariff period are as follows:

Particulars	(₹ in lakh)		
	2001-02	2002-03	2003-04
Depreciation	133.01	96.87	96.87
Return on Equity	327.36	327.36	327.36
O&M Expenses	214.15	227.00	240.62
Advance against Depreciation	37.49	0.00	0.00
Interest on Loan	0.00	0.00	0.00
Interest on Working Capital	23.44	22.83	23.70
Total	735.45	674.05	688.55

18. The Annual Fixed Charges (AFC) allowed for 2001-04 tariff period vide order dated 16.7.2003 in Petition No. 46/2002, revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

Particulars	(₹ in lakh)		
	2001-02	2002-03	2003-04
AFC approved vide order dated 16.7.2003 in Petition No.46/2002	779.03	674.05	688.55
AFC claimed by the Petitioner in the instant petition	735.45	674.06	688.55
AFC allowed in the instant order	735.45	674.05	688.55



2004-09 Tariff Period

19. The Commission vide order dated 19.10.2005 in Petition No. 115/2004 had approved transmission tariff for the period from 1.4.2004 to 31.3.2009. The transmission tariff of the transmission system was revised vide order dated 14.3.2008 in Petition No. 115/2004. The details of transmission tariff approved in respect of the transmission system are as follows:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	96.87	96.87	96.87	96.87	96.87
Return on Equity	347.97	347.97	347.97	347.97	347.97
O&M Expenses	274.96	285.95	297.65	309.12	321.89
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	24.55	25.42	26.34	27.29	28.31
Total	744.35	756.21	768.83	781.25	795.04

20. The Petitioner has claimed the following revised transmission charges in respect of the transmission system for 2004-09 period in the instant petition:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	96.87	96.87	96.87	96.87	96.87
Return on Equity	347.97	347.97	347.97	347.97	347.97
O&M Expenses	274.96	285.95	297.65	309.12	321.89
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	22.78	23.54	24.34	25.17	26.07
Total	742.58	754.33	766.83	779.13	792.80

21. We have considered the Petitioner's claim. Tariff is allowed in respect of the transmission system on the basis of the following:

- a) Admitted capital cost of ₹4971.00 lakh as on 1.4.2004.
- b) Regarding computation of RoE, equity considered as ₹2046 lakh in addition to this an amount of ₹439.50 lakh (due to restitution of equity) has



been considered as ACE. Total amount of equity considered for computation of RoE is ₹2485.50 lakh.

c) Weighted Average Rate of Interest on actual loan adopted from orders dated 19.10.2005 and 14.3.2008 in Petition No. 115/2004; and

d) Weighted Average Rate of Depreciation, Rate of Interest for Working Capital and O&M Expenses as per orders dated 19.10.2005 and 14.3.2008 in Petition No. 115/2004.

22. In view of above, the revised transmission charges allowed in respect of the transmission system for 2004-09 tariff period are as follows:

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	96.87	96.87	96.87	96.87	96.87
Return on Equity	347.97	347.97	347.97	347.97	347.97
O&M Expenses	274.96	285.95	297.65	309.12	321.89
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	22.78	23.54	24.34	25.17	26.07
Total	742.57	754.32	766.83	779.13	792.80

23. AFC allowed for 2004-09 tariff period vide orders dated 19.10.2005 and 14.3.2008 in Petition No.115/2004, revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
AFC approved vide orders dated 19.10.2005 and 14.3.2008 in Petition No. 115/2004	744.35	756.21	768.83	781.25	795.04
AFC claimed by the Petitioner in the instant petition	742.58	754.33	766.83	779.13	792.80
AFC allowed in the instant order	742.57	754.32	766.83	779.13	792.80

2009-14 Tariff Period

24. The Commission vide order dated 11.3.2011 in Petition No. 111/2009 approved tariff in respect of the transmission system for 2009-14 period and vide order dated



30.12.2015 in Petition No. 424/TT/2014 trued up the transmission tariff allowed for 2009-14 period and the same is as follows:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	96.87	96.87	96.87	96.87	96.87
Return on Equity	464.14	481.14	481.62	481.62	487.41
O&M Expenses	283.03	299.14	316.43	334.45	353.54
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	25.85	27.01	27.89	28.79	29.86
Total	869.89	904.16	922.80	941.72	967.68

25. In this petition, the Petitioner has claimed the following revised transmission charges in respect of the transmission system for 2009-14 period:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	96.87	96.87	96.87	96.87	96.87
Return on Equity	464.14	481.14	481.62	481.62	487.41
O&M Expenses	283.03	299.14	316.43	334.45	353.54
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	25.85	27.01	27.89	28.79	29.86
Total	869.89	904.16	922.81	941.73	967.68

26. We have considered the Petitioner's claim. Tariff is allowed in respect of the transmission system on the basis of following:

- a) Admitted capital cost of ₹4971.00 lakh for transmission system as on 1.4.2009;
- b) Weighted Average Rate of Interest on actual loan derived/adopted from order dated 30.12.2015 in Petition No. 424/TT/2014; and
- c) Weighted Average Rate of Depreciation as per order dated 30.12.2015 in Petition No.424/TT/2014.

27. In view of above, revised transmission charges allowed in respect of the transmission system for 2009-14 tariff period are as follows:



(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	96.87	96.87	96.87	96.87	96.87
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on equity	464.14	481.14	481.62	481.62	487.41
Interest on Working Capital	25.85	27.01	27.89	28.79	29.86
O&M Expenses	283.03	299.14	316.43	334.45	353.54
Total	869.89	904.16	922.80	941.72	967.68

28. AFC allowed for 2009-14 tariff period vide order dated 30.12.2015 in Petition No. 424/TT/2014, revised AFC claimed in the instant petition and AFC allowed in the instant order are as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
AFC approved vide order dated 30.12.2015 in Petition No. 424/TT/2014	869.89	904.16	922.80	941.72	967.68
AFC claimed by the Petitioner in the instant petition	869.89	904.16	922.81	941.73	967.68
AFC allowed in the instant order	869.89	904.16	922.80	941.72	967.68

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

29. The details of the trued-up transmission charges claimed by the Petitioner are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	97.68	98.42	98.42	98.41	101.37
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on equity	488.28	491.03	490.78	490.78	492.55
Interest on Working Capital	31.39	32.07	32.69	33.31	34.09
O&M Expenses	324.16	334.90	346.18	357.46	369.56
Total	941.51	956.42	968.07	979.96	997.57

30. The details of the Interest on Working Capital (IWC) claimed by the Petitioner are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses	27.01	27.91	28.85	29.79	30.80
Maintenance Spares	48.62	50.24	51.93	53.62	55.43
Receivables	156.92	159.40	161.35	163.33	166.26
Total	232.55	237.55	242.13	246.74	252.49
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	31.39	32.07	32.69	33.31	34.09



Capital Cost as on 1.4.2014

31. The capital cost of the transmission system has been calculated in accordance with Regulations 9(3) and 9(6) of the 2014 Tariff Regulations.

32. The Commission vide order dated 30.12.2015 in Petition No. 424/TT/2014 approved the capital cost as on 1.4.2014, ACE and de-capitalisation during 2014-19 tariff period and the same is as follows:

(₹ in lakh)

Capital Cost as on 31.3.2014	ACE and De-capitalisation				Total Capital Cost as on 31.3.2019
	2014-15		2017-18		
	ACE	De-capitalisation	ACE	De-capitalisation	
4971.00	19.91	1.25	30.00	5.06	5014.60

33. The Commission vide order dated 30.12.2015 in Petition No. 424/TT/2014 held as follows:

“38. The petitioner has submitted a copy of correspondence sent by GETCO requesting replacement of CTs. We observe that the additional capitalization is towards replacement of problematic/defective CTs and CBs, which has become essential for reliable operations. Further, the petitioner has also submitted the copy of correspondence from GETCO towards replacement of CTs. The total capital cost including additional capital expenditure proposed during the 2014-19 tariff period is ₹5014.60 lakh, which is well within the approved cost of ₹5700.00 lakh. Hence, the Commission approves the additional capitalisation proposed by the petitioner.”

34. The Petitioner in the instant true up petition has submitted the details of the claimed capital cost as on 1.4.2014 and as on to 31.3.2019 (including ACE and de-capitalisation during 2014-19 tariff period) as follows:

(₹ in lakh)

Capital Cost as on 1.4.2014	ACE and De-capitalisation (as per Auditor's Certificate)				Total Capital Cost as on 31.3.2019
	2014-15		2018-19		
	ACE	De-capitalisation	ACE	De-capitalisation	
4971.00	19.91	1.66	38.49	13.93	5013.81

35. The Petitioner has submitted the details of capital cost upto COD along with actual ACE and de-capitalization expenditure during 2014-19 tariff period as per



Auditor's Certificate dated 19.12.2019 in respect of the transmission system as follows:

(₹ in lakh)		
	Cost	Description
Actual cost as on 31.03.2014	0.00	Land (Freehold)
	0.00	Civil & Buildings
	4586.31	Substation
	331.02	TL
	53.67	PLCC
	0.00	Lease Hold Land
Total Cost as on 31.3.2014	4971.00	
ACE 2014-15	19.91	ACE for replacement of CT at 220 kV Haldarwa Sub-station (GETCO)
De Cap 2014-15	1.66	De-capitalization of replacement of CT at 220 kV Haldarwa Sub-station (GETCO)
ACE 2017-18	38.49	ACE for replacement of circuit breaker at 220 kV Vav (GETCO) Sub-station
De Cap 2017-18	13.93	De-capitalization for replacement of circuit breaker at 220 kV Vav (GETCO) Sub-station
Total Cost as on 31.3.2019 as per Auditor's Certificate	5013.81	

36. We have considered the submissions of the Petitioner. The capital cost allowed by the Commission as on 1.4.2014 vide order dated 30.12.2015 in Petition No. 424/TT/2014 in respect of the transmission system shall be considered as opening capital cost as on 1.4.2014 for truing up of tariff. We have also given our findings on ACE and de-capitalization in the relevant portions of this order.

Additional Capital Expenditure ("ACE") and De-capitalization

37. The Petitioner has submitted description with respect to actual ACE and de-capitalization claimed during 2014-19 tariff period in this petition. It has submitted that CTs and CBs of the transmission system were commissioned during 1992-93 and some of these equipment have worn out, leading to frequent faults and repairs. Therefore, it is necessary to replace them in a progressive manner so that the transmission system is not affected and it functions smoothly. Also, ACE and de-



capitalization during 2014-19 tariff period is beyond the cut-off date. Further, for admissibility of O&M Expenses, ACE incurred after the cut-off date is to be dealt in accordance with Regulation 14(3)(vii) and Regulation 14(3)(ix) of the 2014 Tariff Regulations.

38. The Petitioner has submitted that ₹43.60 lakh, was allowed by the Commission for 2014-19 tariff period on account of ACE for replacement of problematic/ defective equipment which were completing 25 years of service during 2014-19 period for efficient and secure operation of the transmission system. The actual net ACE incurred for the same is ₹42.81 lakh during 2014-19 period which is in accordance with the provision of Regulation 14(3)(vii) and Regulation 14(3)(ix) of the 2014 Tariff Regulations.

39. The details of ACE and de-capitalisation claimed by the Petitioner in respect of the transmission system for 2014-19 tariff period are as follows:

(₹ in lakh)

ACE and De-capitalisation (as per Auditor's Certificate)			
2014-15		2018-19	
ACE	De-capitalisation	ACE	De-capitalisation
19.91	1.66	38.49	13.93

40. The details pertaining to de-capitalization during 2014-19 period as submitted in Form-10B are as follows:

Year of de-capitalisation	Work/ Equipment proposed to be de-capitalised	Year of capitalisation of asset/ equipment being de-capitalised	Original book value of the asset being de-capitalised (₹ in lakh)	Cumulative depreciation corresponding to de-capitalisation (₹ in lakh)	Cumulative repayment of loan corresponding to de-capitalisation (₹ in lakh)
2014-15	Sub-station	1992-93	1.66	1.49	0.83
2018-19	Sub-station	1992-93	13.93	12.54	6.97

41. MPPMCL has submitted that the Petitioner has informed about ACE and de-capitalization of various equipment during 2014-19 tariff period. The Petitioner has



submitted that the equipment were commissioned more than 20 years ago and it was necessary to replace them in progressive manner to facilitate smooth functioning of the transmission system. MPPMCL has further submitted that the Petitioner has claimed ACE and de-capitalization on the basis of Auditor's Certificate but the same is not supported by any documents to show that transparent process was adopted while disposing of worn out instruments and their valuation. The Petitioner has also not submitted any criteria for finalizing the equipment which need immediate replacements and reasons therefor.

42. In response, the Petitioner has submitted that ACE/ de-capitalization for 2014-19 tariff period is towards replacement of CTs at Haldarwa Sub-station and circuit breakers at Vav Sub-station which were already allowed vide order dated 30.12.2015 in Petition No. 424/TT/2014.

43. We have considered the submissions of the Petitioner and MPPMCL. On appreciation of submissions of the parties and perusal of record, we observe that ACE claimed is towards replacement of CT at 220 kV Haldarwa Sub-station (GETCO) and replacement of circuit breaker at 220 kV Vav (GETCO) Sub-station. They are allowed under Regulations 14(3)(vii) and Regulation 14(3)(ix) of the 2014 Tariff Regulations.

44. In view of above, the details of capital cost (including ACE and decapitalization during 2014-19 period) considered for truing up of tariff for 2014-19 tariff period are as follows:



(₹ in lakh)

Capital Cost as on 1.4.2014	ACE and De-capitalisation (as per Auditor's Certificate)				Total Capital Cost as on 31.3.2019
	2014-15		2018-19		
	ACE	De-capitalisation	ACE	De-capitalisation	
4971.00	19.91	1.66	38.49	13.93	5013.81

Debt-Equity Ratio

45. The Petitioner has claimed debt-equity ratio as on 31.3.2014 allowed by the Commission vide order dated 30.12.2015 in Petition No. 424/TT/2014 and the same has been considered as opening debt-equity ratio as on 1.4.2014 as provided under Regulation 19(3) of the 2014 Tariff Regulations. The details of the same are as follows:

Particulars	Amount (₹ in lakh)	(in %)
Debt	2485.50	50.00
Equity	2485.50	50.00
Total	4971.00	100.00

46. Debt-equity ratio of 70:30 has been considered for ACE allowed during 2014-19 tariff period in accordance with Regulation 19(5) of the 2014 Tariff Regulations. De-capitalisation in this case is carried out in the debt-equity ratio as claimed by the Petitioner in Form-10B. Accordingly, the details of debt-equity ratio as on 1.4.2014 and 31.3.2019 in respect of the transmission system considered for the purpose of tariff for 2014-19 tariff period is as follows:

Debt-Equity for Capital Cost as on 1.4.2014

Particulars	Amount (₹ in lakh)	(in %)
Debt	2485.50	50.00
Equity	2485.50	50.00
Total	4971.00	100.00

Debt-Equity for ACE and de-capitalisation during 2014-19

Particulars	ACE		De-capitalisation		ACE		De-capitalisation	
	2014-15 (₹ in lakh)	(in %)	2014-15 (₹ in lakh)	(in %)*	2018-19	(in %)	2018-19	(in %)*
Debt	13.94	70.00	0.83	50.00	26.94	70.00	6.97	50.00
Equity	5.97	30.00	0.83	50.00	11.55	30.00	6.97	50.00



Total	19.91	100.00	1.66	100.00	38.49	100.00	13.93	100.00
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*As per the Form-10B submitted by the Petitioner

Debt-Equity for Capital Cost as on 31.3.2019

Particulars	Amount (₹ in lakh)	(in %)
Debt	2518.59*	50.23
Equity	2495.22**	49.77
Total	5013.81	100.00

*Debt as on 1.4.2014 plus debt considered for ACE minus adjustment made in debt on de-capitalisation.

** Equity as on 1.4.2014 plus equity considered for ACE minus adjustment made in equity on de-capitalisation.

Depreciation

47. The transmission system has already completed 12 years before 1.4.2014. Accordingly, depreciation has been calculated based on the remaining depreciable value to be recovered over the balance useful life. Thus, the trued-up depreciation allowed in respect of the transmission system for 2014-19 tariff period is as follows:

(₹ in lakh)

	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	4971.00	4989.25	4989.25	4989.25	4989.25
B	Addition during 2014-19 period	19.91	0.00	0.00	0.00	38.49
C	De-capitalisation	1.66	0.00	0.00	0.00	13.93
D	Closing Gross Block (A+B-C)	4989.25	4989.25	4989.25	4989.25	5013.81
E	Average Gross Block [(A+D)/2]	4980.13	4989.25	4989.25	4989.25	5001.53
F	Depreciable value (E*90%)	4482.11	4490.33	4490.33	4490.33	4501.38
G	Weighted average rate of Depreciation (WAROD) (in %) (L/E)	1.96	1.97	1.97	1.97	2.00
H	Lapsed useful life at the beginning of the year (Year)	22.00	23.00	24.00	25.00	26.00
I	Balance useful life at the beginning of the year (Year)	12.00	11.00	10.00	9.00	8.00
J	Cumulative Depreciation at the beginning of the year	3311.51	3407.57	3506.00	3604.43	3702.87
K	Remaining Aggregate Depreciable Value at the beginning of the year (F-J)	1170.60	1082.75	984.32	885.89	798.51
L	Depreciation during the year (K/I)	97.55	98.43	98.43	98.43	99.81
M	Depreciation adjustment on account of de-capitalisation	1.49	0.00	0.00	0.00	12.54
N	Cumulative Depreciation at the end of the year (J+L-M)	3407.57	3506.00	3604.43	3702.87	3790.14
O	Remaining Aggregate Depreciable Value at the end of the year (F-N)	1074.54	984.32	885.89	787.46	711.24



48. The details of depreciation in respect of the transmission system as approved vide order dated 30.12.2015 in Petition No. 424/TT/2014, as 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
Approved vide order dated 30.12.2015 in Petition No. 424/TT/2014	97.57	98.33	98.33	99.58	100.98
Claimed by the Petitioner in the instant petition	97.68	98.42	98.42	98.41	101.37
Allowed after true-up in this order	97.55	98.43	98.43	98.43	99.81

Interest on Loan (“IoL”)

49. The Petitioner has not claimed IoL for 2014-19 tariff period as the entire loan has been repaid. Accordingly, IoL has not been allowed for 2014-19 tariff period.

Return on Equity (“RoE”)

50. The Petitioner has claimed RoE in respect of the transmission system in terms of Regulation 24 and Regulation 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed following effective tax rates for 2014-19 tariff period as follows:

Year	Claimed effective tax rate (in %)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
2014-15	21.018	19.624
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

51. The Commission in order dated 27.4.2020 in Petition No.274/TT/2019 had arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is 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

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

53. The Petitioner has claimed RoE for 2014-19 period after grossing up RoE @15.50% with effective tax rates (based on MAT rates) each year as per the said Regulation. RoE is trued-up on the basis of MAT rates applicable in the respective years and is approved in respect of the transmission system for 2014-19 tariff period as follows:

(₹ in lakh)						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	2485.50	2490.64	2490.64	2490.64	2490.64
B	Addition due to ACE	5.97	0.00	0.00	0.00	11.55
C	De-Capitalisation	0.83	0.00	0.00	0.00	6.97
D	Closing Equity (A+B-C)	2490.64	2490.64	2490.64	2490.64	2495.22
E	Average Equity [(A+D)/2]	2488.07	2490.64	2490.64	2490.64	2492.93
F	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
G	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
H	Applicable RoE Rate (in %)	19.610	19.705	19.705	19.705	19.758
I	Return on Equity (E*H)	487.91	490.78	490.78	490.78	492.55



54. The details of RoE approved vide order dated 30.12.2015 in Petition No. 424/TT/2014, as claimed by the Petitioner in the instant Petition and as tried up in the instant order are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 30.12.2015 in Petition No. 424/TT/2014	487.96	488.50	488.50	489.24	489.97
Claimed by the Petitioner in the instant petition	488.28	491.03	490.78	490.78	492.55
Allowed after true-up in this order	487.91	490.78	490.78	490.78	492.55

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

55. O&M Expenses for the various elements covered under the transmission system as claimed by the Petitioner are within the norms specified under the 2014 Tariff Regulations and the same are allowed as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Lines					
220 kV Kakrapar- Vav (GETCO) Ckt I and II	43.00	43.00	43.00	43.00	43.00
220 kV Kakrapar- Vapi (GETCO) Ckt I and II	117.00	117.00	117.00	117.00	117.00
220 kV Kakrapar-Haldarwa (GETCO) Ckt I and II	74.00	74.00	74.00	74.00	74.00
Norms (₹ lakh/km)					
D/C (Single Conductor)	0.303	0.313	0.324	0.334	0.346
Total Transmission Line O&M Expenses	70.90	73.24	75.82	78.16	80.96
Sub-station					
220 kV: Kakrapar:Kakr-Vav-I	1	1	1	1	1
220 kV: Kakrapar:Kakr-Vav-II	1	1	1	1	1
220 kV: Kakrapar:Kakr-Vapi-I	1	1	1	1	1
220 kV: Kakrapar:Kakr-Vapi-II	1	1	1	1	1
220 kV: Kakrapar:Kakr-Hald-I	1	1	1	1	1
220 kV: Kakrapar:Kakr-Hald-II	1	1	1	1	1
Norms (₹ lakh/Bay)					
220 kV	42.21	43.61	45.06	46.55	48.10
Total Sub-station Expenses	253.26	261.66	270.36	279.30	288.60
Total O&M Expenses (₹ in lakh)	324.16	334.90	346.18	357.46	369.56



56. The details of O&M Expenses approved vide order dated 30.12.2015 in Petition No. 424/TT/2014, as claimed by the Petitioner in the instant Petition and as trued up in the instant order are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
234 km D/C transmission line	70.90	73.24	75.82	78.16	80.96
6 number of 220 kV bays	253.26	261.66	270.36	279.30	288.60
Total O&M Expenses	324.16	334.90	346.18	357.46	369.56
Approved vide order dated 30.12.2015 in Petition No. 424/TT/2014	324.16	334.90	346.18	357.46	369.56
Claimed by the Petitioner in the instant petition	324.16	334.90	346.18	357.46	369.56
Allowed after true-up in this order	324.16	334.90	346.18	357.46	369.56

Interest on Working Capital (“IWC”)

57. 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 the transmission system are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Working Capital for O&M Expenses (O&M Expenses for one Month)	27.01	27.91	28.85	29.79	30.80
Working Capital for Maintenance Spares (15% of O&M)	48.62	50.24	51.93	53.62	55.43
Working Capital for Receivables (Equivalent to two months of annual transmission charges)	156.83	159.36	161.35	163.33	166.00
Total Working Capital	232.47	237.51	242.12	246.74	252.23
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	31.38	32.06	32.69	33.31	34.05

58. The details of IWC approved vide order dated 30.12.2015 in Petition No.424/TT/2014, as claimed by the Petitioner in the instant Petition and as trued up in the instant order are as follows:



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 30.12.2015 in Petition No. 424/TT/2014.	31.39	32.01	32.63	33.30	34.02
Claimed by the Petitioner in the instant petition.	31.39	32.07	32.69	33.31	34.09
Allowed after true-up in this order.	31.38	32.06	32.69	33.31	34.05

Approved Annual Fixed Charges for 2014-19 Tariff Period

59. The trued-up AFC allowed in respect of the transmission system for 2014-19 tariff period are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	97.55	98.43	98.43	98.43	99.81
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	487.91	490.78	490.78	490.78	492.55
O&M Expenses	324.16	334.90	346.18	357.46	369.56
Interest on Working Capital	31.38	32.06	32.69	33.31	34.05
Total	941.01	956.18	968.08	979.98	995.98

60. Accordingly, the Annual Transmission Charges as allowed vide order dated 30.12.2015 in Petition No. 424/TT/2015, as claimed by the Petitioner in the instant petition and as trued-up in the instant order are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 30.12.2015 in Petition No. 424/TT/2014	941.07	953.75	965.64	979.57	994.53
Claimed by the Petitioner in the instant petition	941.51	956.42	968.07	979.96	997.57
Allowed after true-up in this order	941.01	956.18	968.08	979.98	995.98

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

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



(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	104.58	106.51	106.50	122.94	161.50
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	469.37	470.09	470.09	472.65	478.02
Interest on Working Capital	18.41	18.83	19.18	19.84	20.83
O&M Expenses	224.35	232.36	240.33	248.88	257.43
Total	816.71	827.79	836.10	864.31	917.78

62. The details of IWC in respect of the transmission system for 2019-24 period as claimed by the Petitioner in this petition are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	18.70	19.36	20.03	20.74	21.45
Maintenance Spares	33.65	34.85	36.05	37.33	38.61
Receivables	100.42	102.06	103.08	106.56	112.84
Total Working Capital	152.77	156.27	159.16	164.63	172.90
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	18.41	18.83	19.18	19.84	20.83

Capital Cost

63. 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 asset 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 up to 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 asset forming part of the project, but not in use, as declared in the tariff petition;

(b) De-capitalised Asset 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 asset.

(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. “

64. The admitted capital cost of ₹5013.81 lakh as on 31.3.2019 in respect of the transmission system has been considered as opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (“ACE”)

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

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

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

(a) Undischarged liabilities recognized to be payable at a future date;

(b) Works deferred for execution;

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23of these regulations;



- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
- (e) Change in law or compliance of any existing law; and
- (f) Force Majeure events:

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

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

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

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

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

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

- (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;*
- (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and*
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”*

66. The Petitioner vide Auditor’s Certificate dated 19.12.2019 has projected net ACE of ₹243.00 lakh in respect of the transmission system after adjustment of de-capitalisation during 2019-24 tariff period. The proposed ACE/ de-capitalization during 2019-24 period is as follows:



Particulars	(₹ in lakh)	
	Amount	
	Sub-station	
Proposed ACE in 2019-20	25.53	
Proposed ACE in 2022-23	125.35	
Proposed ACE in 2023-24	132.63	
Proposed De-capitalisation in 2022-23	20.65	
Proposed De-capitalisation in 2023-24	19.86	
NET ACE	243.00	

67. Further, the Petitioner has submitted as follows:

(a) CTs, CBs, Wave Traps (WTs), Control and Protection Panels, Power and Control Cables of the transmission system were commissioned during 1992-93 and some of these equipment have worn out which lead to frequent faults, burn outs and repairs.

(b) CTs and Capacitive Voltage Transformers (CVTs) have completed more than 25 years of service. Hence, frequent oil leakages and hot spots are observed due to ageing. These CTs and CVTs have become obsolete and no timely support from Original Equipment Manufacturer (OEM) nor spares are available. Hence, there are chances of breakdown which may create element outage due to failure.

(c) Isolators have also completed more than 25 years of service. Hence, there is problem of frequent mis-alignments, jamming, improper closing/opening, over travel, sluggishness in operating mechanism and hot spots due to ageing. Most of the times, even local operation becomes difficult. Further, as these isolators have become obsolete, timely support is not available for them.

(d) WT's have completed more than 25 years of service. As a result, failure of terminal connectors occur frequently and also there have been incidences of burning of WT's and unwinding of WT coils because of deterioration of insulation between turns of coil due to ageing. Hence, dismantling of complete WT's is also required for rectification of above issues which increase outage period of the element.



(e) Relays installed are of static type and due to ageing, problem of mal-operation/ non-operation occurs frequently because of sticking up of relay contacts as coils of auxiliary relays have weakened. Moreover, operation of switchyard equipment from control panel is difficult due to ageing of switches.

(f) Power and control cables, wiring and terminal blocks inside both control and protection panels and equipment MBs have become brittle leading to DC leakages and other frequent failures. These issues result in spurious/ non-desirable tripping of elements.

(g) Therefore, it has become necessary to replace above-mentioned equipment in a progressive manner so that the transmission system is not affected and functions smoothly.

68. The Petitioner has submitted that admissibility of ACE incurred after the cut-off date is to be dealt in accordance with Regulation 25(2)(c) of the 2019 Tariff Regulations and ACE proposed to be incurred has become necessary for efficient and secure operation of the transmission system.

69. The Petitioner vide affidavit dated 2.7.2021 has submitted OEM communications along with justification for replacement of equipment and switchyard civil works under ACE with respect to the transmission system. The Petitioner has submitted that equipment proposed for replacement are installed at Vav, Vapi and Haldarwa Sub-station of GETCO. GETCO is carrying out O&M of these equipment on behalf of the Petitioner. Frequent issues are being faced in routine O&M activities for this equipment. GETCO has also raised issues pertaining to O&M of old Sub-station equipment and requested the Petitioner to replace these equipment vide letters dated 16.3.2019, 5.3.2020 and 6.3.2020 including e-mail from Vapi (GETCO) dated 5.3.2020. The Petitioner has also submitted details of the issues being faced in the following equipment:



- i. Current Transformer (6 numbers),
- ii. Isolators (8 sets),
- iii. Capacitive Voltage Transformers (18 numbers),
- iv. Wave Traps (6 numbers),
- v. CB Relay Panel (6 numbers),
- vi. Control Panel (6 numbers),
- vii. Line Protection Panel (6 numbers),
- viii. Power and Control Cables.

70. The Petitioner vide affidavit dated 2.7.2021 has also made the following submissions:

(a) ACE projected during 2019-24 tariff period has been accorded approval by Director (Operations) of the Petitioner's Company. On approval of the Commission, execution of work shall be carried out keeping provisions in the budget which is approved by Board of Directors of the Petitioner's Company (year-to-year basis).

(b) Work of proposed replacement of equipment is yet to be started and exact date of commencement of dismantling of old equipment to be carried cannot be ascertained in advance. It depends on many factors such as shut-down and availability as the work is to be carried out in the existing system. However, after dismantling, the equipment will be replaced as early as possible. The exact date will be submitted after completion of the work in truing-up of tariff for 2019-24 period.

(c) The proposed replacement of equipment has been claimed under Chapter-7, Regulation 25(2) of the 2019 Tariff Regulations (i.e. ACE after the cut-off date). Even in the past, approvals have been accorded by the Commission towards replacement of problematic equipment under ACE.

(d) The Petitioner has long experience in operation and maintenance of EHV transmission system and it follows the best in class practices. The decision on replacement of equipment is taken keeping in view the reliability of the system and based on difficulties being faced during maintenance. The



Petitioner has proposed for replacement of equipment only when it is felt essential and it becomes difficult to operate the system without replacement.

(e) The beneficiaries are Respondents in this petition and none of them have raised any question with regard to replacement.

(f) There is no life defined by the manufacturer for the individual equipment. However, the life of individual equipment may be considered as 25 years in line with Sub-station's life as mentioned in the 2019 Tariff Regulations.

(g) Some problematic equipment like CB, CT, CVT, Isolators, C&R Panel, control and power cable have been proposed to be replaced to ensure system reliability. Other equipment/ materials like earthing system, tower, gantry structures, cables that play very important role in operation of any Sub-station require replacement. As a whole, it is very difficult to assess the life of the complete project. The equipment are replaced based on condition monitoring. However, balance of the system still remains under service for which replacement may be required in the near future.

(h) The gross block of old equipment proposed to be replaced is approximately 4.62% of the total gross block of the transmission system. However, other equipment of the project remain the same as commissioned with original project. As only some of the equipment are proposed to be replaced, it is difficult to determine the life extension of the entire project including old equipment. The new equipment can definitely run for more than five years. Considering the combination of equipment in which majority of items are old and may require replacement in future and this cannot be assessed at this stage.

(i) Considering the above facts and the fact that life of the transmission system completes in 2026-2027, no further life extension has been proposed.

(j) The Petitioner carries out periodic maintenance of Sub-station equipment as per standard practice. In case of violation of parameters based on condition monitoring test, action for repair/ replacement of equipment is



taken. It has been observed that with the passage of time, there is advancement in technology and new design equipment are being used in the transmission system. In many cases, either the manufacturer's close the manufacturing units or migrate to the new design equipment. Service support for these old equipment is either not available, or if available its cost is very high. .

(k) In case of old equipment, due to ageing and wear and tear, the failure rate of equipment increases and results in abrupt failure which is extremely difficult to predict even with the help of condition monitoring test.

(l) Reliability of old equipment also becomes poor due to ageing and wear and tear and prone to safety risk for O&M staff. In order to address the above concerns and to achieve better reliability and security of system, replacement of the equipment is planned under ACE.

71. MPPMCL has submitted that the Petitioner has proposed ACE and de-capitalization during 2019-24 period on the plea that the equipment have been installed long back and some of them have completed their service life and that it has become necessary to replace them in a progressive manner so that the system is not affected and continues to function smoothly. However, the Petitioner has not submitted any study to arrive at the conclusion that which equipment need replacement on priority and reason related thereto. MPPMCL has submitted that the Petitioner's claim may be admitted only after prudence check of pre-study/ survey of the problems mentioned by the Petitioner.

72. We have considered the submissions of the Petitioner and MPPMCL. We note that the proposed ACE is for replacement of 6 numbers 220 kV CTs at Vapi Sub-station, 8 sets Isolators at Vapi Sub-station, 6 numbers CVTs each at Vav, Vapi and Haldwara Sub-stations, 2 numbers WTs each at Vav, Vapi and Haldwara Sub-



stations, 6 numbers CB Relay Panels, 6 numbers Control Panel and 6 numbers Line Protection Panel at Vav, Vapi and Haldarwa Sub-stations, Power and Control Cables at Vav, Vapi and Haldarwa Sub-stations.

73. We are of the view that these items are of critical nature and their failure may affect the stability and reliability of the grid and, accordingly, the replacement of these obsolete equipment and consequent ACE is allowed, subject to truing-up on actual basis.

74. We observe that the Petitioner has not submitted OEM Certificate in respect of the Sub-station equipment which is sought to be replaced during 2019-24 tariff period. We direct the Petitioner to submit OEM Certificate in respect of Sub-station equipment which are sought to be replaced along with actual cost details of the replaced equipment and cost details of the new equipment Sub-station-wise at the time of truing up.

75. In view of above, ACE and de-capitalisation allowed for 2019-24 tariff period is as follows:

(₹ in lakh)				
Sl. No.	Particulars	2019-20	2022-23	2023-24
(1)	ACE	25.53	125.35	132.63
(2)	De-capitalization	0.00	20.65	19.86
(3)	Net ACE (1)-(2)	25.53	104.70	112.77

76. Accordingly, the details of capital cost (including ACE/de-capitalization) considered with respect to the transmission system for 2019-24 tariff period are as follows:

(₹ in lakh)				
Capital cost allowed as on 1.4.2019	ACE			Capital cost as on 31.3.2024
	2019-20	2022-23	2023-24	
5013.81	25.53	104.70	112.77	5256.81



Debt-Equity Ratio

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

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

Provided that:

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

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

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

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

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

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

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

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

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure



for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation.”

78. Debt-equity ratio for 2019-24 period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The details of debt-equity ratio considered in respect of the transmission system for the purpose of computation of tariff for 2019-24 tariff period are as follows:

Debt-Equity for Gross Capital Cost as on 1.4.2019

Particulars	Amount (₹ in lakh) (A)	(in %)
Debt	2518.59	50.23
Equity	2495.22	49.77
Total	5013.81	100.00

Debt-Equity for ACE and De-capitalisation during 2019-24

(₹ in lakh)

Particulars	ACE (B)		ACE (C)		De-capitalization (D)	
	2019-20 (₹ in lakh)	(in %)	2022-23 (₹ in lakh)	(in %)	2022-23 (₹ in lakh)	(in %)
Debt	17.87	70.00	87.75	70.00	10.33	50.00
Equity	7.66	30.00	37.61	30.00	10.33	50.00
Total	25.53	100.00	125.35	100.00	20.65	100.00

(₹ in lakh)

Particulars	ACE (E)		De-capitalization (F)	
	2023-24 (₹ in lakh)	(in %)	2023-24 (₹ in lakh)	(in %)
Debt	92.84	70.00	9.93	50.00
Equity	39.79	30.00	9.93	50.00
Total	132.63	100.00	19.86	100.00

Debt-Equity for Gross Capital Cost as on 31.3.2024

Particulars	Amount (₹ in lakh) (G)=[(A)+(B)+(C)-(D)+(E)-(F)]	(in %)
Debt	2696.79	51.30
Equity	2560.02	48.70
Total	5256.81	100.00

Depreciation

79. Regulation 33 of the 2019 Tariff Regulations provides as follows:



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

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

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

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

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

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

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

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

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

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the asset 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 asset.



(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2019 from the gross depreciable value of the asset.

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

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

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

(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-

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

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

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

80. The transmission system has already completed 12 years of life. Accordingly, depreciation has been calculated based on the remaining depreciable value (up to 90% of existing gross block of assets) to be recovered over the balance useful life. As discussed above, the Petitioner has proposed ACE towards replacement of Sub-station equipment. Hence, depreciation corresponding to ACE (new additions) claimed for 2019-20 onwards is allowed at normative rate of depreciation as



specified in the 2019 Tariff Regulations. Depreciation allowed in respect of the transmission system for 2019-24 tariff period is as follows:

(₹ in lakh)						
	(1) Existing Assets	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	5013.81	5013.81	5013.81	5013.81	4993.16
B	De-capitalisation	0.00	0.00	0.00	20.65	19.86
C	Closing Gross Block (A-B)	5013.81	5013.81	5013.81	4993.16	4973.30
D	Average Gross Block [(A+C)/2]	5013.81	5013.81	5013.81	5003.49	4983.23
E	Depreciable Value (D*90%)	4512.43	4512.43	4512.43	4503.14	4484.91
F	Weighted average rate of Depreciation (WAROD) (in %)	2.06	2.06	2.06	2.02	2.03
G	Remaining life at the beginning of the year (Year)	7.00	6.00	5.00	4.00	3.00
H	Lapsed life at the beginning of the year (Year)	27.00	28.00	29.00	30.00	31.00
I	Cumulative Depreciation at the beginning of the year	3790.14	3893.32	3996.51	4099.69	4181.96
J	Remaining depreciable value at the beginning of the year (E-I)	722.29	619.10	515.92	403.44	302.94
K	Depreciation during the year (J/G)	103.18	103.18	103.18	100.86	100.98
L	Depreciation adjustment on account of de-capitalisation	0.00	0.00	0.00	18.59	17.87
M	Cumulative Depreciation at the end of the year (I+K-L)	3893.32	3996.51	4099.69	4181.96	4265.07
N	Remaining depreciable value at the end of the year (E-M)	619.10	515.92	412.74	321.17	219.83

(₹ in lakh)						
	(2) New Additions	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	0.00	25.53	25.53	25.53	150.88
B	Addition during the year	25.53	0.00	0.00	125.35	132.63
C	Closing Gross Block (A+B)	25.53	25.53	25.53	150.88	283.51
D	Average Gross Block [(A+C)/2]	12.77	25.53	25.53	88.21	217.20
E	WAROD (in %)	5.28	5.28	5.28	5.28	5.28
F	Depreciable Value (D*90%)	11.49	22.98	22.98	79.38	195.48



G	Cumulative Depreciation at the beginning of the year	0.00	0.67	2.02	3.37	8.03
H	Depreciation (D*E)	0.67	1.35	1.35	4.66	11.47
I	Cumulative Depreciation at the end of the year (G+H)	0.67	2.02	3.37	8.03	19.50
J	Remaining Depreciation at the end of the year (F-I)	10.81	20.96	19.61	71.36	175.98

(₹ in lakh)					
(A) Total	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation during the year (1+2)	103.86	104.53	104.53	105.52	112.45

Interest on Loan (“IoL”)

81. The Petitioner has not claimed IoL during 2019-24 tariff period as the entire loan has been paid prior to 1.4.2019. Accordingly, no IoL has been allowed for 2019-24 tariff period.

Return on Equity (“RoE”)

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

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

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or



transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

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

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

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

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

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

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

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

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

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:

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."

83. The Petitioner has submitted that it is liable to pay Income Tax at MAT rate specified under the Taxation laws (Amendment) Ordinance 2019. Further, RoE has been calculated @18.782% after grossing up RoE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations for 2019-24 tariff period. As per Regulation 31(3) of the 2019 Tariff Regulations, the grossed-up rate of RoE at the end of every financial year shall be trued-up 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 IT authorities pertaining to 2019-24 tariff period on actual gross income. However, if any penalty arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the Petitioner. Any under-recovery or over-recovery of grossed-up rate on RoE after truing up shall be recovered or refunded to beneficiaries or the long term customers on yearly basis. The Petitioner has further submitted that any adjustment due to additional tax demand including



interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable/ adjustable during 2019-24 tariff period on yearly basis on receipt of Income Tax assessment order.

84. We have considered the submissions of the Petitioner. MAT rate applicable in 2019-20 has been considered for the purpose of RoE which will be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the transmission system for 2019-24 tariff period is as follows:

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	2495.22	2502.88	2502.88	2502.88	2530.16
B	Additions due to ACE	7.66	0.00	0.00	37.61	39.79
C	De-capitalisation	0.00	0.00	0.00	10.33	9.93
D	Closing Equity (A+B-C)	2502.88	2502.88	2502.88	2530.16	2560.02
E	Average Equity [(A+D)/2]	2499.05	2502.88	2502.88	2516.52	2545.09
F	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
G	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
H	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
I	Return on Equity (D*H)	469.37	470.09	470.09	472.65	478.02

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

85. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations are as follows:

“35. Operation and Maintenance Expenses:

...

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46



Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	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 years.

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

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

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

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

86. O&M Expenses as claimed by the Petitioner in respect of various elements covered under the transmission system for 2019-24 tariff period and as allowed are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Lines					
220 kV Kakrapar- Vav (GETCO) Ckt I and II	43.00	43.00	43.00	43.00	43.00
220 kV Kakrapar- Vapi (GETCO) Ckt I and II	117.00	117.00	117.00	117.00	117.00
220 kV Kakrapar- Haldarwa (GETCO) Ckt I and II	74.00	74.00	74.00	74.00	74.00
Norms (₹ lakh/km)					
D/C (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Total Transmission Line Expenses	88.22	91.49	94.54	98.05	101.32
Sub-station					



220 kV: Kakrapar:Kakr-Vav-I	1	1	1	1	1
220 kV: Kakrapar:Kakr-Vav-II	1	1	1	1	1
220 kV: Kakrapar:Kakr-Vapi-I	1	1	1	1	1
220 kV: Kakrapar:Kakr-Vapi-II	1	1	1	1	1
220 kV: Kakrapar:Kakr-Hald-I	1	1	1	1	1
220 kV: Kakrapar:Kakr-Hald-II	1	1	1	1	1
Norms (₹ lakh/Bay)					
220 kV	22.51	23.30	24.12	24.96	25.84
Total Sub-station Expenses	135.06	139.80	144.72	149.76	155.04
Communication System					
PLCC (₹ in lakh)	53.67	53.67	53.67	53.67	53.67
Norms (in %)	2	2	2	2	2
Total Communication System	1.07	1.07	1.07	1.07	1.07
Total O&M Expenses (₹ in lakh)	224.35	232.37	240.33	248.88	257.44

87. 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 2019 Tariff Regulations and the norms for sub-station has been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.

88. O&M Expenses allowed in respect of elements of transmission system covered in the instant petition are as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Lines					
220 kV Kakrapar- Vav (GETCO) Ckt I and II	43.00	43.00	43.00	43.00	43.00
220 kV Kakrapar- Vapi (GETCO) Ckt I and II	117.00	117.00	117.00	117.00	117.00
220 kV Kakrapar- Haldarwa (GETCO) Ckt I and II	74.00	74.00	74.00	74.00	74.00
Norms (₹ lakh/km)					



D/C (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Total Transmission Line Expenses	88.22	91.49	94.54	98.05	101.32
Sub-station					
220 kV: Kakrapar:Kakr-Vav-I	1	1	1	1	1
220 kV: Kakrapar:Kakr-Vav-II	1	1	1	1	1
220 kV: Kakrapar:Kakr-Vapi-I	1	1	1	1	1
220 kV: Kakrapar:Kakr-Vapi-II	1	1	1	1	1
220 kV: Kakrapar:Kakr-Hald-I	1	1	1	1	1
220 kV: Kakrapar:Kakr-Hald-II	1	1	1	1	1
Norms (₹ lakh/Bay)					
220 kV	22.51	23.30	24.12	24.96	25.84
Total Sub-station Expenses	135.06	139.80	144.72	149.76	155.04
Total O&M Expenses (₹ in lakh)	223.28	231.29	239.26	247.81	256.36

Interest on Working Capital (“IWC”)

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

“34. Interest on Working Capital

(1)...

(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;”



90. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of 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).

91. 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 the transmission system for 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 one month)	18.61	19.27	19.94	20.65	21.36
Working Capital for Maintenance Spares (15% of O&M Expenses)	33.49	34.69	35.89	37.17	38.45
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/annual transmission charges)	100.19	101.52	102.39	103.93	106.26
Total Working Capital	152.29	155.48	158.22	161.75	166.08
Rate of Interest of working capital (in %)	12.05	11.25	10.50	10.50	10.50
Interest of working capital	18.35	17.49	16.61	16.98	17.44

Annual Fixed Charges for 2019-24 Tariff Period

92. The transmission charges allowed in respect of the instant transmission system for 2019-24 tariff period are as follows:



Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	103.86	104.53	104.53	105.52	112.45
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	469.37	470.09	470.09	472.65	478.02
O&M Expenses	223.28	231.29	239.26	247.81	256.36
Interest on Working Capital	18.35	17.49	16.61	16.98	17.44
Total	814.86	823.41	830.49	842.96	864.27

Filing Fee and Publication Expenses

93. 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

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

Goods and Services Tax (GST)

95. 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, paid by the Petitioner on account of demand from Government/Statutory authorities, the same may be allowed to be recovered from the beneficiaries.



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

Security Expenses

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

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

Capital Spares

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



Sharing of Transmission Charges

100. During 2001-04, 2004-09 and 2009-14 tariff periods (up 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. With effect from 1.11.2020, the 2010 Sharing Regulations has been repealed and sharing of transmission charges is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection, and disbursement of transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

101. To summarise:

- a) The revised AFC allowed in respect of the transmission system for 2001-04 tariff period are as follows:

	(₹ in lakh)		
Particulars	2001-02	2002-03	2003-04
AFC	735.45	674.05	688.55

- b) The revised AFC allowed in respect of the transmission system for 2004-09 tariff period are as follows:

	(₹ in lakh)				
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
AFC	742.57	754.32	766.83	779.13	792.80



c) The revised AFC allowed in respect of the transmission system for 2009-14 tariff period are as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
AFC	869.89	904.16	922.80	941.72	967.68

d) The trued-up AFC allowed in respect of the transmission system for 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	941.01	956.18	968.08	979.98	995.98

e) AFC allowed in respect of the transmission system for 2019-24 tariff period in this order are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	814.86	823.41	830.49	842.96	864.27

102. This order disposes of Petition No. 316/TT/2020 in terms of the above discussion and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(P. K. Pujari)
Chairperson

