

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 289/TT/2020**

**Coram:**

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

**Date of Order: 29.11.2021**

**In the matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and revision of transmission tariff of the 2004-09 and 2009-14 tariff periods, truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of **Asset-a:** 400 kV D/C Dulhasti-Kishenpur Transmission Line with associated bays; **Asset-b** 400 kV Kishenpur-Wagoora Transmission Line along with associated bays at Kishenpur and Wagoora Sub-stations; and **Asset-c:** ICTs at Kishenpur under Dulhasti Combined Transmission System associated with the Dulhasti Hydroelectric Project (3x130 MW) in Jammu and Kashmir, Northern Region.

**And in the matter of:**

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

**.....Petitioner**

**Versus**

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,  
Vidyut Bhawan, Vidyut Marg,  
Jaipur-302005.
2. Ajmer Vidyut Vitran Nigam Limited,  
132 kV, GSS RVPNL, Sub-station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur-302017 (Rajasthan).
3. Jaipur Vidyut Vitran Nigam Limited,  
132 kV, GSS RVPNL, Sub-station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur-302017 (Rajasthan).



4. Jodhpur Vidyut Vitran Nigam Limited,  
132 kV, GSS RVPNL, Sub-station Building,  
Caligiri Road, Malviya Nagar,  
Jaipur-302017 (Rajasthan).
5. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan, Kumar House Complex Building-II,  
Shimla-171004.
6. Punjab State Electricity Board,  
The Mall,  
Patiala-147001.
7. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector-6,  
Panchkula-134109 (Haryana).
8. Power Development Department,  
Government of Jammu & Kashmir,  
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Limited,  
(Formerly Uttar Pradesh State Electricity Board),  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow-226001.
10. Delhi Transco Limited,  
Shakti Sadan, Kotla Road,  
New Delhi-110002.
11. BSES Yamuna Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi.
12. BSES Rajdhani Power Limited,  
Bses Bhawan, Nehru Place,  
New Delhi.
13. Tata Power Delhi Distribution Limited,  
33 kV Sub-station Building,  
Hudson Lane, Kingsway Camp,  
North Delhi-110009.
14. Chandigarh Administration,  
Sector-9,  
Chandigarh.



15. Uttarakhand Power Corporation Limited,  
Urja Bhawan, Kanwali Road,  
Dehradun.

16. North Central Railway,  
Allahabad.

17. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi-110002.

.....Respondent(s)

**For Petitioner** : Shri S. S Raju, PGCIL  
Shri D. K. Biswal, PGCIL  
Shri Ved Prakash Rastogi, PGCIL  
Shri Amit Yadav, PGCIL

**For Respondent** : None

### **ORDER**

The Petitioner, Power Grid Corporation of India Limited, has filed the instant petition for revision of transmission tariff of the 2004-09 and 2009-14 tariff periods; truing up of the transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”); and for determination of the transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following transmission assets under Dulhasti Combined Transmission System (hereinafter referred to as “the transmission system”) associated with the Dulhasti Hydroelectric Project (3x130 MW) in Jammu and Kashmir, Northern Region [hereinafter referred to as “the Dulhasti HEP”]:

**Asset-a:** 400 kV D/C Dulhasti-Kishenpur Transmission Line with associated bays;



**Asset-b:** 400 kV Kishenpur-Wagoora Transmission Line along with associated bays at Kishenpur and Wagoora Sub-stations

**Asset-c:** ICTs at Kishenpur.

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

- “1) *Approve the revised Transmission Tariff for 2004-09 block and transmission tariff for 2009-14 block for the assets covered under this petition, as per para 8 above.*
- 2) *Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9 and 10 above.*
- 3) *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 9.0 & 10 above for respective block.*

*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 recover FERV on the foreign loans deployed as provided under clause 68 of the Tariff Regulations,2019*
- 8) *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.*
- 9) *Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*



- 10) *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"*

3. **Backdrop of the case**

a) For evacuation of central sector power from the Dulhasti HEP, the Ministry of Power (MoP) vide letter no. 18/7/84-Trans. (Vol.II) dated 27.10.1987 had accorded approval for implementation of the transmission system by NHPC Limited (at an estimated cost of ₹16657.00 lakh) matching with that of Unit-I of the Dulhasti HEP i.e. by July 1994. The said approval had comprised the implementation of the following elements:

- i. 400 kV D/C Dulhasti-Kishenpur Transmission Line;
- ii. 400 kV D/C Kishenpur-Srinagar/ Wagoor Transmission Line;
- iii. 400/ 220 kV sub-station at Kishenpur with 2x250 MVA Transformer;
- iv. 220 kV Switching Station at Srinagar/ Wagoor; and
- v. Area Load Despatch Station at Kishenpur.

b) The said implementation of work was transferred to the Petitioner company from NHPC Limited in 1992. As difficulty was realised to match the completion of the transmission system with commissioning of Unit-I of the Dulhasti HEP, in order to meet the urgency of power evacuation from the Dulhasti HEP, MoP vide letter No. 18/2/92-Trans. dated 28.12.1992 accorded approval to the Contingency Plan/ Scheme to evacuate power from the Dulhasti HEP [at an estimated cost of ₹13769.00 lakh, which included IDC of ₹593.00 lakh (based on January 1992 Price Level)]. The scope of work covered under the said Plan/ Scheme was as follows:

- i. 400 kV Dulhasti-Kishtwar D/C Line;
- ii. 220 kV Kishtwar-Kishenpur D/C Line;
- iii. 400/ 220 kV sub-station at Kishtwar (7x105 MVA) [Single Phase]; and
- iv. 400/ 220 kV Auto Transformer at Kishenpur.

Telametry and PLCC Works

c) Since commissioning of Unit-I of the Dulhasti HEP got considerably delayed (by 5 years), a fresh review of the transmission system was required in order to have overall optimum as well as reliable system. Consequently, after consultation with CEA, the said Plan/ Scheme was dispensed with and the



originally approved implementation of the transmission system was revised by the Petitioner with minor modifications.

d) In view of above, the Petitioner had prepared the combined feasibility report including modified contingency scheme and accordingly the administrative approval and expenditure sanction to the said feasibility report was accorded by MoP vide letter No. 12/10/99-PG dated 2.7.2002 at a cost of ₹56705.00 lakh, which included IDC of ₹14204.00 lakh (based on 3<sup>rd</sup> Quarter, 2000 Price Level). The scope of work covered under this approval was:

**Transmission Lines:**

- i. 400 kV S/C Dulhasti-Kishenpur Transmission Line;  
(Through up-gradation of 220 kV D/C Line of Contingency Plan/ Scheme, which was completed): 122.34 kms.
- ii. 400 kV D/C Kishenpur-Wagoora Transmission Line: 84.80 kms.

**Sub-stations:**

- i. Extension of 400/ 220 kV sub-station at Kishenpur with 7x105 MVA Transformer; and
- ii. Extension of 400/ 220 kV sub-station at Wagoora.

**Shunt Capacitors: 247.5 MVAR**

e) Asset-c, which included two banks of 315 MVA, 400/ 220 kV comprising of 7x105 MVA Transformer were declared under commercial operation on 1.10.1997 and Annual Transmission Charges (ATC) of Asset-c (for the period up to 31.3.2001) was decided by the Central Government vide notification dated 16.11.1998 and subsequently revised vide notification dated 7.5.1999 to cater for Additional Capital Expenditure (ACE).

f) Further, the transmission tariff of Asset-c for the period from 1.4.2001 to 31.3.2004 and from 1.4.2004 to 31.3.2009 was allowed by the Commission vide order dated 31.7.2003 and 9.9.2005 in Petition No. 37/2002 and Petition No. 104/TT/2004 respectively.

g) COD of Asset-a was revised from 1.4.2000 to 1.4.2007 on account of delay in commissioning of the Dulhasti HEP and delayed installation of Shunt Capacitors of 247.7 MVAR.

h) COD of Asset-b was 1.11.2006.



- i) The transmission tariff of Asset-a (nomenclature given vide order dated 1.12.2008 in Petition No. 138/2007) and Asset-b for the period from their respective COD to 31.3.2009 (after accounting for ACE during 2006-07 in respect of Asset-b) was allowed vide order dated 1.12.2008 in Petition No. 138/2007.
- j) The transmission tariff of Asset-b was revised on account of ACE during 2007-08 and 2008-09 vide order dated 22.7.2009 and 10.2.2010 in Petition No. 69/2009 and Petition No. 234/2009 respectively.
- k) The transmission tariff of Asset-c for the period from 1.4.2009 to 31.3.2014 was allowed vide order dated 1.12.2010 in Petition No. 133/2009 which was subsequently trued-up along with tariff determination of Asset-c for the 2014-19 tariff period allowed vide order dated 15.2.2016 in Petition No. 149/TT/2014.
- l) The transmission tariff of Combined Asset-a and b (with notional COD of 1.4.2007) for the period from 1.4.2009 to 31.3.2014 (after accounting for ACE during 2009-10 and 2010-11) was allowed vide order dated 11.2.2011 in Petition No. 164/2010 which was subsequently trued-up along with tariff determination of Combined Asset-a and b for the 2014-19 tariff period vide order dated 11.1.2016 in Petition No. 366/TT/2014.
- m) The time over-run in the commissioning of Asset-a and Asset-b was condoned by the Commission vide order dated 1.12.2008 in Petition No. 138/2007.
- n) The entire scope of work covered under the transmission system is complete and is covered in this petition.
- o) With respect to Asset-c, owing to the fact that there was no ACE during the 2001-04 and 2004-09 tariff periods and entire loan was repaid during 2001-02 (on normative basis), no impact on maintenance spares and Interest on Loan (IoL) was there, consequent to which, the revised transmission tariff for the 2001-04, 2004-09 periods and consequential revised transmission tariff for the 2009-14 tariff period has not been submitted by the Petitioner.



p) The Petitioner has prayed for revision of transmission tariff in respect of Asset-a and Asset-b allowed for the 2004-09 tariff period on account of change in 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 (APTEL) dated 22.1.2007 in Appeal No. 81/2005 and batch matters and 13.6.2007 in Appeal No. 139/2006 and batch matters respectively; consequential revision of transmission tariff allowed for the 2009-14 tariff period; truing up of tariff of the 2014-19 tariff period; and determination of transmission tariff of the 2019-24 tariff period for Combined Asset.

q) The APTEL in judgment dated 22.1.2007 in Appeal No. 81/2005 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 as follows:

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

r) 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 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 Nos.135 to 140 of 2005. The Commission to act accordingly
IX	Computation of IoL in Singrauli Station	Net loan closing at the end of a year is reflected as net loan opening on the first day of the next year. The Commission shall re-compute the interest accordingly

s) 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.

t) Based on APTEL's judgments dated 22.1.2007 and 13.6.2007, the Petitioner had sought re-determination of tariff of its transmission assets for the



2001-04 and 2004-09 tariff periods in Petition No. 121/2007. The Commission after taking into consideration the pendency of Appeals before the Hon'ble Supreme Court, adjourned the said petition *sine die* and directed that the same be revived after the disposal of the Civil Appeals by the Hon'ble Supreme Court.

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

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

w) The instant petition was heard on 3.8.2021 and in view of the APTEL's judgments dated 22.1.2007 and 13.6.2007 and the judgment of Hon'ble Supreme Court dated 10.4.2018, tariff is being revised. Period-wise transmission tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods and suitable assumptions have been made at certain places and applied, which are indicated.

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers. Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9, has filed its reply vide affidavit dated 25.9.2020 and has made collective submissions in its reply, responding to the submissions of the Petitioner made in this petition as follows:



a) The Petitioner has submitted relevant orders passed by the Commission from time to time in this petition but has not submitted orders/ judgements passed by the APTEL in appeals filed by the Petitioner on the basis of which the tariff have been revised or determined.

b) The revision of tariffs in this petition dates back to year 2001 with its impact percolating down till year 2019 and thereafter in determination of tariff for the 2019-24 tariff period.

c) Verification of calculations of revised tariff, on account of revisions in depreciation and IWC due to change in maintenance spares and its impacts on tariff brought in from year 2001 till 31.3.2019, requires tracing of various involved costs right from year 2001 to 2019, a huge and complex exercise to be undertaken by UPPCL based on limited information available or not available through this petition.

d) In order to enable UPPCL to effectively verify the claim of the Petitioner made in this petition, the Commission may consider to direct the Petitioner to furnish the Statutory Auditors certificates in respect of changes made in depreciation and IWC and their effects brought forward into subsequent years from 2001 to 2019 as a result of revisions in tariff carried out in light of the various order(s) and judgments passed by the Commission and the APTEL respectively in line with changes in rates of interest on IWC from 2001-2019.

6. The issues raised by UPPCL as above have been clarified by the Petitioner in its rejoinder filed vide affidavit dated 2.8.2021. UPPCL's reply and clarifications related thereto as given by the Petitioner have been considered in the relevant portions of this order.

#### **Re: Interest on Loan**

7. The APTEL while dealing with the issue of computation of IoL, in judgment dated 22.1.2007 observed that IoL for the period from 1.4.1998 to 31.3.2001 shall be computed only on normative loan repayment as per its judgment dated 14.11.2006 in



Appeal Nos. 94 and 96 of 2005. The APTEL vide judgement dated 14.11.2006 had set aside the Commission's methodology of computation of loan on the actual repayment basis or normative repayment whichever is higher and held that the Commission is required to adopt normative debt repayment methodology for working out IoL liability for the period from 1.4.1998 to 31.3.2001. In view of the above, the interest allowed for the 2004-09 period is revised on the basis of the normative debt repayment methodology.

**Re: Additional Capital Expenditure**

8. The APTEL vide judgment dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters held that ACE after COD should also be considered for computation of maintenance spares. In view of the above, the maintenance spares to be considered for computation of working capital for the 2004-09 period are also required to be revised taking into consideration ACE after COD.

**Re: Depreciation**

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

10. The revision of transmission tariff allowed for the 2004-09 tariff period necessitates the revision of transmission tariff allowed for the 2009-14 tariff period, which is also being done in the present order. The implementation of the directions of the APTEL vide judgments dated 22.1.2007 in Appeal No. 81/2005 and batch matters and dated 13.6.2007 in Appeal No. 139/2006 and batch matters respectively was kept pending in case of the Petitioner awaiting the outcome of the Civil Appeals filed before the Hon'ble Supreme Court. Taking into consideration the facts of the case and



keeping in view the interest of the consumers, we are of the view that the beneficiaries should not be burdened with the carrying cost for the difference in the tariff allowed earlier and allowed in the instant order for the 2004-09 and 2009-14 tariff periods. Therefore, we direct that the Petitioner will neither claim nor pay any carrying cost from or to the beneficiaries for the difference, if any, in the tariff allowed earlier and the tariff being allowed in the instant order. Further, the said difference in tariff shall be recovered/ paid over a period of six months from the date of issue of this order.

11. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 9.1.2020, the Petitioner's affidavit dated 6.7.2021 filed in response to technical validation letter, UPPCL's reply filed vide affidavit dated 25.9.2020 and Petitioner's rejoinder filed vide affidavit dated 2.8.2021 to UPPCL's reply.

12. The hearing in this matter was held on 3.8.2021 through video conference and the order was reserved. Having heard the representatives of the Petitioner and after perusal of the materials on record, we proceed to dispose of the petition.

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

#### **2004-09 Period**

13. The transmission tariff of Asset-a and Asset-b for the period from their respective COD to 31.3.2009 (after accounting for ACE during 2006-07 in respect of Asset-b) was allowed vide order dated 1.12.2008 in Petition No. 138/2007. The transmission tariff of Asset-b was revised on account of ACE during 2007-08 and 2008-09 vide order dated 22.7.2009 and 10.2.2010 in Petition No. 69/2009 and Petition No. 234/2009 respectively.



14. In view of the above, the tariff allowed in respect of Asset-a and Asset-b for the 2004-09 tariff period was as follows:

**Asset-a**

Particulars	(₹ in lakh)	
	2007-08	2008-09
Depreciation	473.06	473.06
Interest on Loan	600.96	442.80
Return on Equity	1007.22	1007.22
Advance against Depreciation	648.65	648.65
Interest on Working Capital	81.86	80.03
O&M Expenses	62.17	64.76
<b>Total</b>	<b>2873.92</b>	<b>2716.52</b>

**Asset-b**

Particulars	(₹ in lakh)		
	2006-07 (Pro-rata 5 months)	2007-08	2008-09
Depreciation	300.43	751.97	787.85
Interest on Loan	680.52	1672.02	1701.18
Return on Equity	300.01	768.96	826.30
Advance against Depreciation	0.00	6.64	282.46
Interest on Working Capital	36.75	91.33	100.27
O&M Expenses	100.80	251.26	261.62
<b>Total</b>	<b>1418.51</b>	<b>3542.18</b>	<b>3959.70</b>

15. The Petitioner has claimed the revised transmission charges in respect of Asset-a and Asset-b for the 2004-09 tariff period in this petition as follows:

**Asset-a**

Particulars	(₹ in lakh)	
	2007-08	2008-09
Depreciation	473.06	473.06
Interest on Loan	600.96	442.80
Return on Equity	1007.22	1007.22
Advance against Depreciation	648.65	648.65
Interest on Working Capital	81.86	80.03
O&M Expenses	62.17	64.76
<b>Total</b>	<b>2873.92</b>	<b>2716.52</b>



## Asset-b

Particulars	(₹ in lakh)		
	2006-07 (Pro-rata 5 months)	2007-08	2008-09
Depreciation	300.43	751.97	787.85
Interest on Loan	684.60	1692.67	1722.25
Return on Equity	300.01	768.96	826.30
Advance against Depreciation	0.00	0.00	229.63
Interest on Working Capital	37.00	94.28	104.05
O&M Expenses	100.80	251.26	261.62
<b>Total</b>	<b>1422.84</b>	<b>3559.14</b>	<b>3931.71</b>

16. In response to contention of UPPCL that the APTEL judgements have not been enclosed, the Petitioner vide affidavit dated 2.8.2021 has submitted that the APTEL judgments have been submitted in Petition No. 255/TT/2019 and also vide affidavit dated 21.8.2020 in rejoinder to UPPCL in Petition No. 473/TT/2019. It has further submitted that all the information required to carry out the calculation of tariff of 2004-09 is provided with the petition.

17. We have considered the submissions of UPPCL and the Petitioner's clarifications thereto. The transmission tariff is allowed for Asset-a and Asset-b on the basis of the following:

- a) Admitted capital cost as on COD of ₹18411.53 lakh and ₹27291.04 lakh in respect Asset-a and Asset-b respectively as allowed vide order dated 1.12.2008 in Petition No. 138/2007;
- b) Weighted Average Rate of Interest (WAROI) on actual loan, Weighted Average Rate of Depreciation (WAROD), Rate of IWC and O&M Expenses as per order dated 1.12.2008, 22.7.2009 and 10.2.2010 in Petition No. 138/2007, Petition No. 69/2009 and Petition No. 234/2009 respectively; and
- c) With respect to Asset-b, ACE of ₹840.13 lakh in 2006-07, ₹1489.85 lakh in 2007-08 and ₹1240.90 lakh in 2008-09 as allowed vide order dated 1.12.2008, 22.7.2009 and 10.2.2010 in Petition No. 138/2007, Petition No. 69/2009 and Petition No. 234/2009 respectively.



18. In view of the above, the revised transmission charges allowed in respect of Asset-a and Asset-b for the 2004-09 tariff period are as follows:

**Asset-a**

Particulars	(₹ in lakh)	
	2007-08	2008-09
Depreciation	473.06	473.06
Interest on Loan	600.96	442.80
Return on Equity	1007.22	1007.22
Advance against Depreciation	648.65	648.65
Interest on Working Capital	81.86	80.03
O&M Expenses	62.17	64.76
<b>Total</b>	<b>2873.92</b>	<b>2716.52</b>

**Asset-b**

Particulars	(₹ in lakh)		
	2006-07 (Pro-rata 5 months)	2007-08	2008-09
Depreciation	300.43	751.97	787.85
Interest on Loan	685.00	1693.39	1722.01
Return on Equity	300.00	768.96	826.30
Advance against Depreciation	0.00	0.00	36.66
Interest on Working Capital	37.01	93.29	102.99
O&M Expenses	100.80	251.26	261.62
<b>Total</b>	<b>1423.25</b>	<b>3558.87</b>	<b>3930.41</b>

The Annual Fixed Charges (AFC) in respect of Asset-a for the 2004-09 tariff period as allowed vide order dated 1.12.2008 in Petition No. 138/2007, claimed by the Petitioner in the instant petition and approved in the instant order is as follows:

**Asset-a**

Particulars	(₹ in lakh)	
	2007-08	2008-09
Allowed vide order dated 1.12.2008 in Petition No. 138/2007	2873.92	2716.52
Claimed by the Petitioner in the instant petition	2873.92	2716.52
Approved in the instant order	2873.92	2716.52

19. AFC in respect of Asset-b for the 2004-09 tariff period as allowed/ revised vide order dated 1.12.2008, 22.7.2009 and 10.2.2010 in Petition No. 138/2007, Petition No. 69/2009 and Petition No. 234/2009 respectively, claimed by the Petitioner in the instant petition and approved in the instant order is as follows:





## Asset-b

Particulars	(₹ in lakh)		
	2006-07 (Pro-rata 5 months)	2007-08	2008-09
Allowed / revised vide order dated 1.12.2008, 22.7.2009 and 10.2.2010 in Petition No. 138/2007, Petition No. 69/2009 and Petition No. 234/2009 respectively	1418.51	3542.18	3959.70
Claimed by the Petitioner in the instant petition	1422.84	3559.14	3931.71
Approved in the instant order	1423.25	3558.87	3930.41

## 2009-14 Period

20. The Commission vide order dated 11.2.2011 in Petition No. 164/2010 had allowed the tariff for Combined Asset-a and b for the 2009-14 period which was trued-up vide order dated 11.1.2016 in Petition No. 366/TT/2014 as follows:

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2583.50	2585.03	2586.24	2588.68	2590.57
Interest on Loan	1914.70	1722.50	1536.52	1338.12	1139.51
Return on Equity	2481.40	2574.11	2578.41	2581.44	2614.57
Interest on Working Capital	169.11	168.42	166.09	163.58	161.77
O&M Expenses	472.64	499.64	528.30	558.51	590.36
<b>Total</b>	<b>7621.34</b>	<b>7549.70</b>	<b>7395.56</b>	<b>7230.33</b>	<b>7096.77</b>

21. The Petitioner has claimed the revised transmission charges for Combined Asset-a and b for the 2009-14 tariff period in this petition as follows:

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2583.50	2585.03	2586.24	2588.68	2590.57
Interest on Loan	1935.02	1742.83	1556.95	1358.48	1159.78
Return on Equity	2481.40	2574.11	2578.41	2581.44	2614.57
Interest on Working Capital	169.54	168.84	166.52	164.01	162.19
O&M Expenses	472.64	499.64	528.30	558.51	590.36
<b>Total</b>	<b>7642.10</b>	<b>7570.45</b>	<b>7416.42</b>	<b>7251.11</b>	<b>7117.47</b>

22. We have considered the submissions of the Petitioner. The revised transmission tariff is allowed for Combined Asset-a and b on the basis of the following:



- a) Admitted capital cost as on 1.4.2009 of ₹49273.45 lakh in respect of Combined Asset-a and b; and
- b) WAROI on actual loan, WAROD and ACE of ₹167.73 lakh approved as per order dated 11.1.2016 in Petition No. 366/TT/2014.

23. In view of the above, the revised transmission charges approved in respect of Combined Asset-a and b for the 2009-14 tariff period are as follows:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2583.50	2585.03	2586.24	2588.68	2590.57
Interest on Loan	1935.01	1742.83	1556.95	1358.48	1159.78
Return on Equity	2481.40	2574.11	2578.41	2581.44	2614.57
Interest on Working Capital	169.54	168.84	166.52	164.01	162.19
O&M Expenses	472.64	499.64	528.30	558.51	590.36
<b>Total</b>	<b>7642.09</b>	<b>7570.45</b>	<b>7416.41</b>	<b>7251.11</b>	<b>7117.48</b>

24. AFC allowed in respect of Combined Asset-a and b for the 2009-14 tariff period allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014, claimed by the Petitioner in the instant petition and approved in the instant order is as follows:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014	7621.34	7549.70	7395.56	7230.33	7096.77
Claimed by the Petitioner in the instant petition	7642.10	7570.45	7416.42	7251.11	7117.47
Approved in the instant order	7642.09	7570.45	7416.41	7251.11	7117.48

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

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

#### **Combined Asset-a and b**

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2590.60	2590.60	2590.60	2590.60	2590.60
Interest on Loan	966.02	773.45	582.03	390.13	197.62
Return on Equity	2616.61	2628.61	2627.28	2627.28	2634.34
O&M Expenses	540.27	558.37	576.89	596.00	615.78
Interest on Working Capital	171.94	168.79	165.37	162.01	158.83
<b>Total</b>	<b>6885.44</b>	<b>6719.82</b>	<b>6542.17</b>	<b>6366.02</b>	<b>6197.17</b>



**Asset-c**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	130.98	130.99	130.98	130.99	130.98
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	588.55	591.25	590.95	590.95	592.54
O&M Expenses	205.02	211.82	218.86	226.12	233.62
Interest on Working Capital	27.89	28.33	28.71	29.11	29.56
<b>Total</b>	<b>952.44</b>	<b>962.39</b>	<b>969.50</b>	<b>977.17</b>	<b>986.70</b>

26. The details of the trued-up IWC as claimed by the Petitioner in respect of the transmission assets for the 2014-19 tariff period are as follows:

**Combined Asset-a and b**

(₹ in lakh)

Particular	2014-15	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses	45.02	46.53	48.07	49.67	51.32
WC for Maintenance Spares	81.04	83.76	86.53	89.40	92.37
WC for Receivables	1147.57	1119.97	1090.36	1061.00	1032.86
Total Working Capital	1273.63	1250.26	1224.96	1200.07	1176.55
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest on Working Capital</b>	<b>171.94</b>	<b>168.79</b>	<b>165.37</b>	<b>162.01</b>	<b>158.83</b>

**Asset-c**

(₹ in lakh)

Particular	2014-15	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses	17.09	17.65	18.24	18.84	19.47
WC for Maintenance Spares	30.75	31.77	32.83	33.92	35.04
WC for Receivables	158.74	160.40	161.58	162.86	164.45
Total Working Capital	206.58	209.82	212.65	215.62	218.96
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest on Working Capital</b>	<b>27.89</b>	<b>28.33</b>	<b>28.71</b>	<b>29.11</b>	<b>29.56</b>

**Capital Cost**

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

28. The Commission vide order 11.1.2016 in Petition No. 366/TT/2014 had allowed capital cost as on 1.4.2014 and 1.4.2019 of ₹49441.18 lakh and ₹49441.18 lakh respectively in respect of Combined Asset-a & b. Vide order 15.2.2016 in Petition No. 149/TT/2014, the capital cost as on 1.4.2014 and 1.4.2019 of ₹4999.00 lakh and



₹4999.00 lakh was allowed in respect of Asset-c. No ACE with respect to the transmission assets was claimed by the Petitioner during the 2014-19 period. Accordingly, the details pertaining to approved cost along with capital cost allowed as on 31.3.2014 and 31.3.2019 in respect of the transmission assets considered for the purpose of trueing up the tariff for the 2014-19 period are as follows:

(₹ in lakh)

Asset	Capital Cost Approved	Capital Cost Allowed (as on 31.3.2014)	Capital Cost Allowed (as on 31.3.2019)
Asset-a	56705.00	49441.18	49441.18
Asset-b			
Asset-c		4999.00	4999.00

### **Debt-Equity Ratio**

29. The debt-equity ratio has been considered in accordance with Regulation 19(3) of the 2014 Tariff Regulations. As per Regulation 19(3) of the 2014 Tariff Regulations, the debt-equity ratio allowed by the Commission for determination of transmission tariff for the period ending on 31.3.2014 shall be considered. Accordingly, the details of debt-equity ratio in respect of the transmission assets as on 1.4.2014 and 31.3.2019 are as follows:

### **Combined Asset-a and b**

Funding	Capital Cost (as on 1.4.2014) (₹ in lakh)	(in %)	ACE (2014-19) (₹ in lakh)	(in %)	Total Capital Cost (as on 31.3.2019P) (₹ in lakh)	(in %)
Debt	36108.13	73.03	0.00	70.00	36108.13	73.03
Equity	13333.05	26.97	0.00	30.00	13333.05	26.97
<b>Total</b>	<b>49441.18</b>	<b>100.00</b>	<b>0.00</b>	<b>100.00</b>	<b>49441.18</b>	<b>100.00</b>

### **Asset-c**

Funding	Capital Cost (as on 1.4.2014) (₹ in lakh)	(in %)	ACE (2014-19) (₹ in lakh)	(in %)	Total Capital Cost (as on 31.3.2019) (₹ in lakh)	(in %)
Debt	2000.00	40.01	0.00	70.00	2000.00	40.01
Equity	2999.00	59.99	0.00	30.00	2999.00	59.99
<b>Total</b>	<b>4999.00</b>	<b>100.00</b>	<b>0.00</b>	<b>100.00</b>	<b>4999.00</b>	<b>100.00</b>



## Depreciation

30. The Gross Block during the 2014-19 tariff period has been depreciated at WAROD in respect of Combined Asset-a and b. WAROD at Annexure-I has been worked out considering the depreciation rates of assets as specified in the 2014 Tariff Regulations. The depreciation for Asset-c has been worked out considering the admitted capital expenditure as on 31.3.2014 and accumulated depreciation up to 31.3.2014. Asset-c has completed 12 years of life before 31.3.2014, the remaining depreciable value of ₹1178.86 lakh as on 31.3.2014 has been spread across the balance useful life in accordance with Regulation 27(5) of the 2014 Tariff Regulations. The annual depreciation from the year 2014-15 and onwards is ₹147.36 lakh. Accordingly, the trued-up depreciation approved in respect of the transmission assets during the 2014-19 tariff period is as follows:

### Combined Asset-a and b

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	49441.18	49441.18	49441.18	49441.18	49441.18
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	49441.18	49441.18	49441.18	49441.18	49441.18
Average Gross Block	49441.18	49441.18	49441.18	49441.18	49441.18
Weighted Average Rate of Depreciation (WAROD) (in %)	5.24	5.24	5.24	5.24	5.24
Balance useful life of the asset (Year)	27.00	26.00	25.00	24.00	23.00
Lapsed Life of the asset (Year)	7.00	8.00	9.00	10.00	11.00
Depreciable Value	44497.06	44497.06	44497.06	44497.06	44497.06
<b>Depreciation during the year</b>	<b>2590.60</b>	<b>2590.60</b>	<b>2590.60</b>	<b>2590.60</b>	<b>2590.60</b>
Cumulative Depreciation at the end of the year	19837.92	22428.52	25019.12	27609.72	30200.32
Aggregate Depreciable Value at the end of the year	24659.14	22068.54	19477.94	16887.34	14296.74



**Asset-c**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	4999.00	4999.00	4999.00	4999.00	4999.00
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	4999.00	4999.00	4999.00	4999.00	4999.00
Average Gross Block	4999.00	4999.00	4999.00	4999.00	4999.00
Weighted Average Rate of Depreciation (WAROD) (in %)	2.62	2.62	2.62	2.62	2.62
Balance useful life of the asset (Year)	9.00	8.00	7.00	6.00	5.00
Lapsed Life of the asset (Year)	16.00	17.00	18.00	19.00	20.00
Depreciable Value	4499.10	4499.10	4499.10	4499.10	4499.10
<b>Depreciation during the year</b>	<b>130.98</b>	<b>130.98</b>	<b>130.98</b>	<b>130.98</b>	<b>130.98</b>
Cumulative Depreciation at the end of the year	3451.22	3582.21	3713.19	3844.18	3975.16
Aggregate Depreciable Value at the end of the year	1047.88	916.89	785.91	654.92	523.94

31. Depreciation in respect of Combined Asset-a and b as allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014	2590.60	2590.60	2590.60	2590.60	2590.60
Claimed by the Petitioner in the instant petition	2590.60	2590.60	2590.60	2590.60	2590.60
Approved after true-up in this order	2590.60	2590.60	2590.60	2590.60	2590.60

32. Depreciation in respect of Asset-c as allowed vide order dated 15.2.2016 in Petition No. 149/TT/2014, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 15.2.2016 in Petition No. 149/TT/2014	147.36	147.36	147.36	147.36	147.36
Claimed by the Petitioner in the instant petition	130.98	130.99	130.98	130.99	130.98
Approved after true-up in this order	130.98	130.98	130.98	130.98	130.98



### **Interest on Loan**

33. The Petitioner has claimed WAROI on loan, based on its actual loan portfolio and rate of interest for Combined Asset-a and b. Further, no IoL in respect of Asset-c for the 2014-19 period has been claimed.

34. We have considered the submissions of the Petitioner. Accordingly, IoL has been calculated based on actual interest rates submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed in respect of Combined Asset-a and b is as follows:

### **Combined Asset-a and b**

	(₹ in lakh)				
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Gross Normative Loan	36108.13	36108.13	36108.13	36108.13	36108.13
Cumulative Repayments up to Previous Year	22001.24	24591.84	27182.44	29773.04	32363.64
Net Loan-Opening	14106.89	11516.29	8925.69	6335.09	3744.49
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	2590.60	2590.60	2590.60	2590.60	2590.60
Net Loan-Closing	11516.29	8925.69	6335.09	3744.49	1153.89
Average Loan	12811.59	10220.99	7630.39	5039.79	2449.19
Weighted Average Rate of Interest on Loan (in %)	7.5402	7.5673	7.6278	7.7409	8.0689
<b>Interest on Loan</b>	<b>966.01</b>	<b>773.45</b>	<b>582.03</b>	<b>390.12</b>	<b>197.62</b>

35. IoL in respect of Combined Asset-a and b as allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

	(₹ in lakh)				
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014	945.73	752.56	559.52	366.56	172.48
Claimed by the Petitioner in the instant petition	966.02	773.45	582.03	390.13	197.62
Approved after true-up in this order	966.01	773.45	582.03	390.12	197.62



### **Return on Equity (RoE)**

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

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

37. We have considered the submissions of the Petitioner. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same are as follows:

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

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

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

39. The Petitioner has claimed RoE for the 2014-19 period after grossing up RoE of 15.50% with Effective Tax rates (based on MAT rates) each year as per Regulation





25(3) of the 2014 Tariff Regulations. RoE is trued-up on the basis of MAT rates applicable in the respective years and is allowed in respect of the transmission assets as follows:

**Combined Asset-a and b**

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	13333.05	13333.05	13333.05	13333.05	13333.05
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	13333.05	13333.05	13333.05	13333.05	13333.05
Average Equity	13333.05	13333.05	13333.05	13333.05	13333.05
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity</b>	<b>2614.61</b>	<b>2627.28</b>	<b>2627.28</b>	<b>2627.28</b>	<b>2634.34</b>

**Asset-c**

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	2999.00	2999.00	2999.00	2999.00	2999.00
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	2999.00	2999.00	2999.00	2999.00	2999.00
Average Equity	2999.00	2999.00	2999.00	2999.00	2999.00
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (in %)	19.610	19.705	19.705	19.705	19.758
<b>Return on Equity</b>	<b>588.10</b>	<b>590.95</b>	<b>590.95</b>	<b>590.95</b>	<b>592.54</b>

40. RoE in respect of Combined Asset-a and b as allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014	2614.61	2614.61	2614.61	2614.61	2614.61
Claimed by the Petitioner in the instant petition	2616.61	2628.61	2627.28	2627.28	2634.34
Approved after true-up in this order	2614.61	2627.28	2627.28	2627.28	2634.34

41. RoE in respect of Asset-c as allowed vide order dated 15.2.2016 in Petition No. 149/TT/2014, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 15.2.2016 in Petition No. 149/TT/2014	588.10	588.10	588.10	588.10	588.10
Claimed by the Petitioner in the instant petition	588.55	591.25	590.95	590.95	592.54
Approved after true-up in this order	588.10	590.95	590.95	590.95	592.54

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

42. The trued-up O&M Expenses as claimed by the Petitioner in respect of the transmission assets are as follows:

### **Combined Asset-a and b**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
06 Numbers 400 kV sub-station bays (Wagoora-Kishanpur I & II, Wagoora Bus Reactor, Kishanpur-Wagoora I & II, Kishanpur-Dulhasti Bay)					
139.77 kms S/C (Twin/Triple Conductor) (Dulhasti-Kishanpur and Kishanpur-Wagoora)					
172.565 kms D/C (Twin/Triple Conductor) (Kishanpur-Wagoora)					
Claimed by the Petitioner in the instant petition	540.27	558.37	576.89	596.00	615.78

### **Asset-c**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
02 Numbers 400 kV sub-station bays (Kishanpur-ICT I & II)					
02 Numbers 220 kV sub-station bays (Kishanpur-ICT I & II)					
Claimed by the Petitioner in the instant petition	205.02	211.82	218.86	226.12	233.62



43. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The norms specified in respect of the elements covered in the transmission assets are as follows:

Element	Norms for 2014-15	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19
S/C (Twin/Triple Conductor)	₹0.404 lakh/km	₹0.418 lakh/km	₹0.432 lakh/km	₹0.446 lakh/km	₹0.461 lakh/km
D/C (Twin/Triple Conductor)	₹0.707 lakh/km	₹0.731 lakh/km	₹0.755 lakh/km	₹0.780 lakh/km	₹0.806 lakh/km
400 kV Sub-station	₹60.30 lakh/ bay	₹ 62.30 lakh/ bay	₹64.37 lakh/ bay	₹66.51 lakh/ bay	₹68.71 lakh/ bay
220 kV Sub-station	₹42.21 lakh/ bay	₹43.61 lakh/ bay	₹45.06 lakh/ bay	₹46.55 lakh/ bay	₹48.10 lakh/ bay

44. The trued-up O&M Expenses allowed in respect of the transmission assets for the 2014-19 tariff period as per the norms specified in Regulation 29(3) of the 2014 Tariff Regulations are as follows:

**Combined Asset-a and b**

Details	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
06 Numbers 400 kV sub-station bays	361.80	373.80	386.22	399.06	412.26
139.77 kms S/C (Twin/Triple Conductor)	56.47	58.42	60.38	62.34	64.43
172.565 kms D/C (Twin/Triple Conductor)	122.00	126.15	130.29	134.60	139.09
<b>Total</b>	<b>540.27</b>	<b>558.37</b>	<b>576.89</b>	<b>596.00</b>	<b>615.78</b>

**Asset-c**

Details	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
02 Numbers 400 kV sub-station bays	120.60	124.60	128.74	133.02	137.42
02 Numbers 220 kV sub-station bays	84.42	87.22	90.12	93.10	96.20
<b>Total</b>	<b>205.02</b>	<b>211.82</b>	<b>218.86</b>	<b>226.12</b>	<b>233.62</b>

45. O&M Expenses in respect of Combined Asset-a and b as allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014	540.27	558.37	576.89	596.00	615.78
Claimed by the Petitioner in the instant petition	540.27	558.37	576.89	596.00	615.78
Approved after true-up in this order	540.27	558.37	576.89	596.00	615.78

46. O&M Expenses in respect of Asset-c as allowed vide order dated 15.2.2016 in Petition No. 149/TT/2014, claimed by the Petitioner in the instant petition and true-up in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 15.2.2016 in Petition No. 149/TT/2014	205.02	211.82	218.86	226.12	233.62
Claimed by the Petitioner in the instant petition	205.02	211.82	218.86	226.12	233.62
Approved after true-up in this order	205.02	211.82	218.86	226.12	233.62

### Interest on Working Capital

47. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and the true-up IWC allowed in respect of the transmission assets is as follows:

### Combined Asset-a and b

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 month)	45.02	46.53	48.07	49.67	51.32
WC for Maintenance Spares (15% of O&M Expenses)	81.04	83.76	86.53	89.40	92.37
WC for Receivables (Equivalent to 2 months of annual fixed cost)	1147.23	1119.74	1090.36	1061.00	1032.86
Total Working Capital	1273.29	1250.03	1224.97	1200.07	1176.55
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest on Working Capital</b>	<b>171.89</b>	<b>168.75</b>	<b>165.37</b>	<b>162.01</b>	<b>158.83</b>



**Asset-c**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
WC for O&M Expenses (O&M Expenses for 1 month)	17.09	17.65	18.24	18.84	19.47
WC for Maintenance Spares (15% of O&M Expenses)	30.75	31.77	32.83	33.92	35.04
WC for Receivables (Equivalent to 2 months of annual fixed cost)	158.66	160.35	161.58	162.86	164.45
Total Working Capital	206.50	209.77	212.65	215.62	218.96
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
<b>Interest on Working Capital</b>	<b>27.88</b>	<b>28.32</b>	<b>28.71</b>	<b>29.11</b>	<b>29.56</b>

48. IWC in respect of Combined Asset-a and b as allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014	171.43	167.98	164.56	161.18	157.80
Claimed by the Petitioner in the instant petition	171.94	168.79	165.37	162.01	158.83
Approved after true-up in this order	171.89	168.75	165.37	162.01	158.83

49. IWC in respect of Asset-c as allowed vide order dated 15.2.2016 in Petition No. 149/TT/2014, claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 15.2.2016 in Petition No. 149/TT/2014	28.25	28.63	29.02	29.42	29.83
Claimed by the Petitioner in the instant petition	27.89	28.33	28.71	29.11	29.56
Approved after true-up in this order	27.88	28.32	28.71	29.11	29.56

**Approved Annual Fixed Charges for the 2014-19 Tariff Period**

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



**Combined Asset-a and b**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2590.60	2590.60	2590.60	2590.60	2590.60
Interest on Loan	966.01	773.45	582.03	390.12	197.62
Return on Equity	2614.61	2627.28	2627.28	2627.28	2634.34
O&M Expenses	540.27	558.37	576.89	596.00	615.78
Interest on Working Capital	171.89	168.75	165.37	162.01	158.83
<b>Total</b>	<b>6883.39</b>	<b>6718.45</b>	<b>6542.16</b>	<b>6366.01</b>	<b>6197.18</b>

**Asset-c**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	130.98	130.98	130.98	130.98	130.98
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	588.10	590.95	590.95	590.95	592.54
O&M Expenses	205.02	211.82	218.86	226.12	233.62
Interest on Working Capital	27.88	28.32	28.71	29.11	29.56
<b>Total</b>	<b>951.99</b>	<b>962.08</b>	<b>969.51</b>	<b>977.17</b>	<b>986.71</b>

51. Accordingly, AFC in respect of Combined Asset-a and b as allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 11.1.2016 in Petition No. 366/TT/2014	6862.64	6684.13	6506.18	6328.95	6151.27
Claimed by the Petitioner in the instant petition	6885.44	6719.82	6542.17	6366.02	6197.17
Approved after true-up in this order	6883.39	6718.45	6542.16	6366.01	6197.18

52. AFC in respect of Asset-c as allowed vide order date 15.2.2016 in Petition No. 149/TT/2014, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 15.2.2016 in Petition No. 149/TT/2014	968.74	975.91	983.34	991.00	998.92
Claimed by the Petitioner in the instant petition	952.44	962.39	969.50	977.17	986.70
Approved after true-up in this order	951.99	962.08	969.51	977.17	986.71



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

53. The Petitioner has combined the Combined Asset-a and b and Asset-c as Combined Asset for claiming tariff for the 2019-24 period. The Petitioner has claimed the transmission charges in respect of Combined Asset for the 2019-24 tariff period as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	705.75	705.75	705.75	705.75	705.75
Interest on Loan	68.01	19.18	-	-	-
Return on Equity	3067.48	3067.48	3067.48	3067.48	3067.48
O&M Expenses	752.10	778.78	806.01	834.54	863.15
Interest on Working Capital	90.54	91.16	92.06	93.30	94.36
<b>Total</b>	<b>4683.88</b>	<b>4662.35</b>	<b>4671.30</b>	<b>4701.07</b>	<b>4730.74</b>

54. The Petitioner has claimed IWC in respect of Combined Asset for the 2019-24 period as follows:

Particular	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses	62.68	64.90	67.17	69.55	71.93
WC for Maintenance Spares	112.82	116.82	120.90	125.18	129.47
WC for Receivables	575.89	574.81	575.91	579.58	581.65
Total Working Capital	751.39	756.53	763.98	774.31	783.05
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>90.54</b>	<b>91.16</b>	<b>92.06</b>	<b>93.30</b>	<b>94.36</b>

### Capital Cost

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

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

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

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

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



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

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

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

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

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





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

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

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

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

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

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

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

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

56. The Petitioner has claimed capital cost as on 31.3.2019 of ₹54440.18 lakh for Combined Asset. The notional COD of Combined Asset-a and b was 1.4.2007 and COD of Asset-c was 1.10.1997. The useful life of Asset-c is ending in 2022-23. The tariff for Combined Asset-a and b and Asset-c till now has been claimed separately and now towards the end of useful life of Asset-c, the Petitioner is claiming combined AFC. We are of the view that the tariff should not be combined at this stage and accordingly in respect of the transmission assets, tariff has been allowed separately in this order. The capital cost as on 31.3.2019 of ₹49441.18 lakh in respect of Combined Asset-a & b and capital cost as on 31.3.2019 of ₹4999.00 lakh in respect of Asset-c has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

### **Additional Capital Expenditure**

57. The Petitioner has projected ACE of ₹23.35 lakh in 2019-20 with respect to Asset-b. The Petitioner has submitted that the said projected ACE is on account of



house compensation, the related payment is uncertain and the payment of house compensation, if paid, will be claimed during truing-up of tariff of the 2019-24 period.

58. We have considered the submissions of the Petitioner. The Petitioner has projected liability of ₹23.35 lakh towards house compensation. We are not considering the projected liability at this stage and the same will be reviewed at the time of truing up based on the documentary evidence and proof of payment. Resultantly, no ACE is being allowed for the 2019-24 tariff period.

### **Adjustments to Equity**

59. COD of Asset-c was 1.10.1997 and its useful life of 25 years will be completed on 30.9.2022. First proviso to Regulation 18(3) of the 2019 Tariff Regulations provides that in case of a transmission system including communication system which has completed its useful life on or after 1.4.2019 and if the actual equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, then the equity shall be restricted to 30% of the total equity deployed. Regulation 18(3) of the 2019 Tariff Regulations provides as follows:

#### ***“18. Debt-Equity Ratio:***

....

*(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, 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;”*

60. The equity deployed is more than 30% in respect of Asset-c as on 1.4.2019. Therefore, as per the first proviso to Regulation 18(3) of the 2019 Tariff Regulations, equity with effect from 1.10.2022 onwards has been restricted to 30%. The loan has already been repaid prior to 1.4.2019. Accordingly, the equity as on 1.10.2022 is allowed as follows:



(₹ in lakh)	
Particulars	Amount
Closing equity as on 31.9.2022 (a)	2999.00
Equity in excess of 30% (b)	1499.30
Equity admissible as on 1.10.2022 (a)-(b)	1499.70

### **Debt-Equity Ratio**

61. 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.”

62. The debt-equity considered in respect of the transmission assets for the purpose of computation of tariff for the 2019-24 tariff period is as follows:

### **Combined Asset-a and b**

Funding	Capital Cost (₹ in lakh) (as on 1.4.2019)	(in %)	Capital Cost (₹ in lakh) (as on 31.3.2024)	(in %)
Debt	36108.13	73.03	36108.13	73.03
Equity	13333.05	26.97	13333.05	26.97
Total	49441.18	100.00	49441.18	100.00

### **Asset-c**

Funding	Capital Cost (₹ in lakh) (as on 1.4.2019)	(in %)	Capital Cost (₹ in lakh) (as on 31.3.2024)	(in %)
Debt	2000.00	40.01	2000.00	40.01
Equity	2999.00	59.99	2999.00*	59.99
<b>Total</b>	<b>4999.00</b>	<b>100.00</b>	<b>4999.00</b>	<b>100.00</b>

\*Equity to be serviced as on 31.3.2024 is ₹1499.70 lakh (Equity in excess of 30% reduced as discussed above)

### **Depreciation**

63. Regulations 33(1), 33(2) and 33(5) of the 2019 Tariff Regulations provide as follows:

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

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

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



from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis”

“(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-I** to these regulations for the assets of the generating station and transmission system:

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

64. The Combined Asset-a and b and Asset-c have completed 12 years of life as on 31.3.2019 and, therefore, the remaining depreciable value as on 31.3.2019 has been spread across the balance useful life of 22 and 04 years respectively in accordance with Regulation 33(5) of the 2019 Tariff Regulations. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed in respect of the transmission assets for the 2019-24 period is as follows:

**Combined Asset-a and b**

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	49441.18	49441.18	49441.18	49441.18	49441.18
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	49441.18	49441.18	49441.18	49441.18	49441.18
Average Gross Block	49441.18	49441.18	49441.18	49441.18	49441.18
Weighted average rate of Depreciation (WAROD) (in %)	1.31	1.31	1.31	1.31	1.31
Balance useful life at the beginning of the year (Year)	22.00	21.00	20.00	19.00	18.00
Lapsed life of the asset (Year)	12.00	13.00	14.00	15.00	16.00
Depreciable Value	44497.06	44497.06	44497.06	44497.06	44497.06
<b>Depreciation during the year</b>	<b>649.85</b>	<b>649.85</b>	<b>649.85</b>	<b>649.85</b>	<b>649.85</b>
Cumulative Depreciation at the end of the year	30850.18	31500.03	32149.88	32799.73	33449.58
Remaining Depreciable Value at the end of the year	13646.89	12997.04	12347.18	11697.33	11047.48



## Asset-c

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	4999.00	4999.00	4999.00	4999.00	4999.00
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	4999.00	4999.00	4999.00	4999.00	4999.00
Average Gross Block	4999.00	4999.00	4999.00	4999.00	4999.00
Weighted average rate of Depreciation (WAROD) (in %)	2.62	2.62	2.62	2.62	0.00
Balance useful life at the beginning of the year (Year)	4.00	3.00	2.00	1.00	0.00
Lapsed life of the asset (Year)	21.00	22.00	23.00	24.00	25.00
Depreciable Value	4499.10	4499.10	4499.10	4499.10	4499.10
<b>Depreciation during the year</b>	<b>130.98</b>	<b>130.98</b>	<b>130.98</b>	<b>130.98</b>	<b>0.00</b>
Cumulative Depreciation at the end of the year	4106.15	4237.13	4368.12	4499.10	4499.10
Remaining Depreciable Value at the end of the year	392.95	261.97	130.98	0.00	0.00

## Interest on Loan

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

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

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

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

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

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

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

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



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

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

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

### **Combined Asset-a and b**

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	36108.13	36108.13	36108.13	36108.13	36108.13
Cumulative Repayments up to Previous Year	34954.24	35604.09	36108.13	36108.13	36108.13
Net Loan-Opening	1153.89	504.04	0.00	0.00	0.00
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	649.85	649.85	0.00	0.00	0.00
Net Loan-Closing	504.04	0.00	0.00	0.00	0.00
Average Loan	828.97	252.02	0.00	0.00	0.00
Weighted Average Rate of Interest on Loan (in %)	8.4909	8.5592	8.6592	8.8031	9.1766
<b>Interest on Loan</b>	<b>70.39</b>	<b>21.57</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

67. In respect of Asset-c, no IoL is allowed for the 2019-24 tariff period.

### **Return on Equity**

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

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

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law,



shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

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

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

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

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

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

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

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

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

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

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





**Illustration-**

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

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

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

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

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

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

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

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

69. The Petitioner has submitted that it is liable to pay Income Tax at MAT rate prescribed under the Taxation laws (Amendment) Ordinance 2019. In addition to above, the Petitioner has repeated its submissions already made regarding RoE in numerous other petitions already disposed by the Commission.

70. We have considered the submissions of the Petitioner and accordingly MAT rate is applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the transmission assets is as follows:

**Combined Asset-a and b**

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	13333.05	13333.05	13333.05	13333.05	13333.05
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	13333.05	13333.05	13333.05	13333.05	13333.05
Average Equity	13333.05	13333.05	13333.05	13333.05	13333.05
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472



Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity</b>	<b>2504.21</b>	<b>2504.21</b>	<b>2504.21</b>	<b>2504.21</b>	<b>2504.21</b>

### **Asset-c**

(₹ in lakh)						
Particulars	2019-20	2020-21	2021-22	2022-23	2022-23	2023-24
Opening Equity	2999.00	2999.00	2999.00	2999.00	1499.70	1499.70
Additions	0.00	0.00	0.00	0.00	0.00	0.00
Closing Equity	2999.00	2999.00	2999.00	2999.00	1499.70	1499.70
Average Equity	2999.00	2999.00	2999.00	2999.00	1499.70	1499.70
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity</b>	<b>563.27</b>	<b>563.27</b>	<b>563.27</b>	<b>281.64</b>	<b>140.84</b>	<b>281.67</b>

### **Operation & Maintenance Expenses**

71. The O&M Expenses as claimed by the Petitioner in respect of the transmission assets for the 2019-24 tariff period are as follows:

(₹ in lakh)					
Details	2019-20	2020-21	2021-22	2022-23	2023-24
08 Numbers 400 kV sub-station Bays	257.20	266.24	275.60	285.28	295.28
02 Numbers 220 kV sub-station Bays	45.02	46.60	48.24	49.92	51.68
06 Numbers 105 MVA 400 kV sub-station ICT	225.54	233.73	241.92	250.74	258.93
139.77 kms Single Circuit (Twin Conductor)	70.30	72.82	75.34	77.99	80.79
172.565 kms Double Circuit (Twin Conductor)	152.03	157.38	162.90	168.60	174.46
PLCC (2% of ₹100.25 lakh)	2.01	2.01	2.01	2.01	2.01
<b>Total</b>	<b>752.10</b>	<b>778.78</b>	<b>806.01</b>	<b>834.54</b>	<b>863.15</b>

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

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

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



<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<b>Norms for AC and HVDC lines (₹ Lakh per km)</b>					
Single Circuit (Bundled Conductor with six or more	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple	1.544	1.598	1.654	1.713	1.773
<b>Norms for HVDC stations</b>					
HVDC Back-to-Back stations (Rs Lakh per 500	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);



iv. the O&M expenses of  $\pm 800$  kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme;

v. the O&M expenses of  $\pm 800$  kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for  $\pm 800$  kV, Bishwanath-Agra HVDC bi-pole scheme; and

vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three year.

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

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

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

**“35(4) Communication system:** The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”

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



74. The O&M Expenses allowed in respect of the transmission assets for the 2019-24 tariff period are as follows:

**Combined Asset-a and b**

	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
06 Numbers of 400 kV sub-station bays					
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
<b>Total</b>	<b>192.90</b>	<b>199.68</b>	<b>206.70</b>	<b>213.96</b>	<b>221.46</b>
139.77 kms S/C (Twin/Triple Conductor)					
Norms (₹ lakh/km)	0.503	0.521	0.539	0.558	0.578
<b>Total</b>	<b>70.30</b>	<b>72.82</b>	<b>75.34</b>	<b>77.99</b>	<b>80.79</b>
172.565 kms D/C (Twin/Triple Conductor)					
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
<b>Total</b>	<b>152.03</b>	<b>157.38</b>	<b>162.90</b>	<b>168.60</b>	<b>174.46</b>
06 Numbers of 105 MVA 400 kV sub-station ICT					
Norms (₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411
<b>Total</b>	<b>225.54</b>	<b>233.73</b>	<b>241.92</b>	<b>250.74</b>	<b>258.93</b>
<b>Total O&amp;M Expenses allowed (₹ in lakh)</b>	<b>640.77</b>	<b>663.61</b>	<b>686.86</b>	<b>711.29</b>	<b>735.64</b>

**Asset-c**

	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
02 Numbers of 400 kV sub-station bays					
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
<b>Total</b>	<b>64.30</b>	<b>66.56</b>	<b>68.90</b>	<b>71.32</b>	<b>73.82</b>
02 Numbers of 220 kV sub-station bays					
Norms (₹ lakh/Bay)	22.51	23.30	24.12	24.96	25.84
<b>Total</b>	<b>45.02</b>	<b>46.60</b>	<b>48.24</b>	<b>49.92</b>	<b>51.68</b>
<b>Total O&amp;M Expenses allowed (₹ in lakh)</b>	<b>109.32</b>	<b>113.16</b>	<b>117.14</b>	<b>121.24</b>	<b>125.50</b>

**Interest on Working Capital**

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



**“34. Interest on Working Capital**

(1)...

**(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;”*

76. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. In addition to this, the Petitioner has repeated its submissions already made regarding IWC in numerous other petitions already disposed by the Commission.

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



### **Combined Asset- and b**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses (O&M Expenses for 1 month)	53.40	55.30	57.24	59.27	61.30
WC for Maintenance Spares (15% of O&M Expenses)	96.12	99.54	103.03	106.69	110.35
WC for Receivables (Equivalent to 45 days of annual transmission charges)	484.63	482.17	481.85	484.98	486.74
Total Working Capital	634.14	637.01	642.12	650.94	658.39
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest on Working Capital</b>	<b>76.41</b>	<b>71.66</b>	<b>67.42</b>	<b>68.35</b>	<b>69.13</b>

### **Asset-c**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
WC for O&M Expenses (O&M Expenses for 1 month)	9.11	9.43	9.76	10.10	10.46
WC for Maintenance Spares (15% of O&M Expenses)	16.40	16.97	17.57	18.19	18.83
WC for Receivables (Equivalent to 45 days of annual transmission charges)	100.67	101.32	101.71	84.64	51.10
Total Working Capital	126.18	127.72	129.04	112.93	80.38
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest on Working Capital</b>	<b>15.20</b>	<b>14.37</b>	<b>13.55</b>	<b>11.86</b>	<b>8.44</b>

### **Annual Fixed Charges of the 2019-24 Tariff Period**

78. The transmission charges allowed in respect of Combined Asset-a and b and Asset-c for the 2019-24 tariff period are as follows:

### **Combined Asset-a and b**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	649.85	649.85	649.85	649.85	649.85
Interest on Loan	70.39	21.57	0.00	0.00	0.00
Return on Equity	2504.21	2504.21	2504.21	2504.21	2504.21
O&M Expenses	640.77	663.61	686.86	711.29	735.64
Interest on Working Capital	76.41	71.66	67.42	68.35	69.13
<b>Total</b>	<b>3941.64</b>	<b>3910.91</b>	<b>3908.34</b>	<b>3933.70</b>	<b>3958.84</b>



## **Asset-c**

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	130.98	130.98	130.98	130.98	0.00
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	563.27	563.27	563.27	422.47	281.67
O&M Expenses	109.32	113.16	117.14	121.24	125.50
Interest on Working Capital	15.20	14.37	13.55	11.86	8.44
<b>Total</b>	<b>818.78</b>	<b>821.79</b>	<b>824.95</b>	<b>686.56</b>	<b>415.61</b>

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

79. 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**

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

## **Goods and Services Tax**

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





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

### **Security Expenses**

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

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

### **Capital Spares**

85. 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**

86. During the tariff periods 2004-09 and 2009-14 (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 2010 Sharing Regulations, 2010 and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the liabilities of 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 Sharing Regulations and shall be recovered from the concerned DICs through Bills under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of transmission charges for subsequent period shall be recovered in terms of the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

87. To summarise:

- a) The revised AFC approved in respect of Asset-a and Asset-b as per the APTEL's judgments for the 2004-09 tariff period are as follows:

(₹ in lakh)			
Asset	2006-07	2007-08	2008-09
Asset-a	-	2873.92	2716.52
Asset-b	1423.25	3558.87	3930.41

- b) The consequential revision of AFC approved in respect of Combined Asset-a and b for the 2009-14 tariff period are as follows:

(₹ in lakh)				
2009-10	2010-11	2012-13	2013-14	2014-15
7642.09	7570.45	7416.41	7251.11	7117.48

- c) The tried-up AFC approved in respect of Combined Asset-a and b and Asset-c for the 2014-19 tariff period are as follows:

(₹ in lakh)					
Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-a and b	6883.39	6718.45	6542.16	6366.01	6197.18
Asset-c	951.99	962.08	969.51	977.17	986.71



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

(₹ in lakh)					
Asset	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset-a and b	3941.64	3910.91	3908.34	3933.70	3958.84
Asset-c	818.78	821.79	824.95	686.56	415.61

88. Annexure-I given hereinafter shall form part of the order.

89. This order disposes of Petition No. 289/TT/2020 in terms of the above discussions and findings.

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

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

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

**sd/-**  
**(P. K. Pujari)**  
**Chairperson**



## ANNEXURE-I

**Combined Asset-a&b**

2014-19 Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	ACE	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15			2014-15	2015-16	2016-17	2017-18	2018-19
Land - Leasehold	719.46	0.00	719.46	3.34%	24.03	24.03	24.03	24.03	24.03
Building Civil Works & Colony	360.29	0.00	360.29	3.34%	12.03	12.03	12.03	12.03	12.03
Transmission Line	45556.09	0.00	45556.09	5.28%	2405.36	2405.36	2405.36	2405.36	2405.36
Sub Station	2705.09	0.00	2705.09	5.28%	142.83	142.83	142.83	142.83	142.83
PLCC	100.25	0.00	100.25	6.33%	6.35	6.35	6.35	6.35	6.35
<b>Total</b>	<b>49441.18</b>	<b>0.00</b>	<b>49441.18</b>	<b>Total</b>	<b>2590.60</b>	<b>2590.60</b>	<b>2590.60</b>	<b>2590.60</b>	<b>2590.60</b>
				<b>Average Gross Block (₹ in lakh)</b>	<b>49441.18</b>	<b>49441.18</b>	<b>49441.18</b>	<b>49441.18</b>	<b>49441.18</b>
				<b>Weighted Average Rate of Depreciation</b>	<b>5.24%</b>	<b>5.24%</b>	<b>5.24%</b>	<b>5.24%</b>	<b>5.24%</b>

