

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 469/TT/2019

Coram:

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

Date of order : 29.05.2021

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and revision of transmission tariff of the 2004-09 and 2009-14 tariff periods and truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of 400 kV S/C Meramundali-Jeypore Transmission Line along with extension of Meramundali and Jeypore Sub-stations in Eastern Region.

And in the matter of:

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

.....Petitioner

Vs

1. Bihar State Power (Holding) Company Ltd.,
(Formerly Bihar State Electricity Board-BSEB),
Vidyut Bhavan, Bailey Road, Patna-800001.
2. West Bengal State Electricity Distribution Company Ltd.,
Bidhyut Bhawan, Bidhan Nagar, Block DJ, Sector-II,
Salt Lake City, Calcutta-700091.
3. Grid Corporation of Odisha Ltd.,
Shahid Nagar, Bhubaneswar-751007.
4. Jharkhand State Electricity Board,
In front of Main Secretariat, Doranda,
Ranchi-834002.



5. Damodar Valley Corporation,
DVC Tower, Maniktala, Civic Centre, VIP Road,
Calcutta-700054.

6. Power Department,
Government of Sikkim, Gangtok-737101.

.....Respondent(s)

For Petitioner: Shri S. S. Raju, PGCIL
Shri A. K. Verma, PGCIL
Shri B. Dash, PGCIL
Shri Ved Prakash Rastogi, PGCIL

For Respondents: Shri Manish Kumar Choudhary, Advocate, BSPHCL

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd., a deemed transmission licensee, for 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 (hereinafter referred to as “the 2014 Tariff Regulations”) and determination of tariff of the 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) of 400 kV S/C Meramundali-Jeypore Transmission Line along with extension of Meramundali and Jeypore Sub-stations (hereinafter referred to as “the transmission asset”) in Eastern Region.

2. The Petitioner has made the following prayers in the instant Petition:

“1) Approve the revised Transmission Tariff for 2004-09 block and transmission tariff for 2009-14 block for the assets covered under this petition, as per para 8 above.

2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per Para 9 and 10 above.

3) (a) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum



Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 9 and 10 above for respective block.

(b) Further it is submitted that deferred tax liability before 01.04.2009 shall be recoverable from the beneficiaries or long term customers / DIC as the case may be, as and when the same is materialized as per regulation 49 of 2014 and regulation 67 of 2019 tariff regulation. The petitioner may be allow to recover the deferred tax liability materialised directly without making any application before the commission as provided in the regulation.

4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.

7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.5 above.

8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.

9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

Backdrop of the petition

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

a) The Investment Approval (I.A.) for the transmission asset in Eastern Region was accorded by Board of Directors of the Petitioner Company on 22.11.2000 at an estimated cost of ₹16651 lakh, including IDC of ₹1826 lakh.



b) The provisional tariff for the transmission asset was approved vide order dated 13.2.2004 in Petition No. 96/2003; the transmission tariff from Commercial Operation Date (COD) to 31.3.2009 was approved vide order dated 6.2.2007 in Petition No. 48/2006; the transmission tariff for 2004-09 period was revised vide order dated 13.5.2009 in Petition No. 18/2009 due to Additional Capital Expenditure (ACE) during 2004-05 and 2005-07; transmission tariff for the period from 1.4.2009 to 31.3.2014 was determined vide order dated 15.3.2011 in Petition No. 185/2010; and the transmission tariff for the 2009-14 period was trued-up and tariff for the 2014-19 period was determined vide order dated 22.12.2015 in Petition No. 507/TT/2014.

c) As per the I.A., the transmission asset was scheduled to be put under commercial operation by June, 2003 whereas its was put under commercial operation w.e.f. 1.6.2004 with a time over-run of about 12 months. The Commission vide order dated 6.2.2007 in Petition No. 48/2006 had condoned the entire time over-run as it was beyond the control of the Petitioner. Details of COD of the instant asset along with time over-run are as follows:

Scheduled COD	COD	Time over-run Condoned
June, 2003	1.6.2004	12 months

d) The Petitioner has sought revision of transmission tariff approved for the 2004-09 tariff period on account of change in Interest on Loan (IoL) and Interest on Working Capital (IWC) to the extent of revision in IoL and in Maintenance Spares in terms of the Appellate Tribunal for Electricity (APTEL) judgment dated 22.1.2007 and 13.6.2007 in Appeal No. 81 of 2005 and batch matters and Appeal No. 139 of 2006 and batch matters respectively. The Petitioner has sought 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 the transmission asset.

e) APTEL vide judgments dated 22.1.2007 in Appeal No.81/2005 and batch matters, and judgment dated 13.6.2007 in Appeal No. 139/2006



pertaining to generating stations of NTPC decided, inter alia, the following issues:

- (i) Computation of interest on loan;
- (ii) Consequences of refinancing of loan;
- (iii) Depreciation as deemed repayment;
- (iv) Admissibility of depreciation up to 90% of the value of the assets;
- (v) Consideration of maintenance of spares for working capital;
- (vi) Depreciation of assets.

f) 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.

g) Based on APTEL's judgments dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and 13.6.2007 in Appeal No. 139 of 2007 and batch matters and the Commission's order dated 18.1.2019 in Petition No. 121/2007, the Petitioner had sought re-determination of transmission tariff of its transmission assets of 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.

h) The Hon'ble Supreme Court vide order dated 10.4.2018, dismissed the said Civil Appeals. Thus, the said judgements of the APTEL has attained finality.

i) Consequent to the Hon'ble Supreme Court's order dated 10.4.2018, Petition No. 121/2007 was listed for hearing before the Commission 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 in respect of concerned transmission assets.



j) The instant petition was heard on 24.3.2021 and in view of APTEL's judgments dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters along with order dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters and the order of Hon'ble Supreme Court dated 10.4.2018, transmission tariff is being revised. Although, period-wise transmission tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods, suitable assumptions at certain places, if required, are being applied which are indicated.

4. The Respondents are distribution licensees and power departments and transmission licensees, who are procuring transmission service from the Petitioner and are mainly beneficiaries of the of the Eastern Region.

5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. Bihar State Power (Holding) Company Ltd. (BSPHCL), Respondent No. 1, has filed its reply vide affidavit dated 27.3.2021. BSPHCL has raised the issues of effective tax rate considered for the calculation of Return on Equity (RoE), GST, adjustment of floating rates of interest during 2019-24 period, recovery of publication charges, filing fees and sharing of transmission charges. The Petitioner, vide affidavit dated 8.4.2021 has filed rejoinder to the reply of BSPHCL. The issues raised by BSPHCL and the clarifications given by the Petitioner are considered in the relevant portions of this order.



6. This order is being issued considering the submissions of the Petitioner vide affidavits dated 26.8.2019, 30.7.2020 and 8.4.2021, BSPHCL's affidavit dated 27.3.2021.

7. The hearing in this matter was held on 24.3.2021 through video conference and the order was reserved. Having heard the representatives of the Petitioner, learned Counsel for BSPHCL 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

Re: Interest on Loan (IOL)

8. APTEL while dealing with the issue of computation of IoL, in judgement dated 22.1.2007 in Appeal No.81/2005 and batch matters observed that IoL for the period from 1.4.1998 to 31.3.2001 shall be computed only on normative loan repayment as per its judgement dated 14.11.2006 in Appeal No. 94 and Appeal No. 96 of 2005. APTEL *vide* its judgement dated 14.11.2006 in Appeal No. 94 and Appeal No. 96 of 2005 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 the IoL liability for the period from 1.4.1998 to 31.3.2001. In view of the judgement of APTEL, interest allowed for 2001-04 and 2004-09 periods is to be revised on the basis of the normative debt repayment methodology.

Re: Additional Capital Expenditure (ACE)

9. APTEL in its judgement dated 13.6.2007 in Appeal No. 139 of 2006 and batch cases held that ACE after COD should also be considered for computation of



maintenance spares. In view of the judgement of APTEL, maintenance spares to be considered for computation of working capital for 2001-04 and 2004-09 periods are also required to be revised taking into consideration ACE after COD.

Re: Depreciation

10. As regards depreciation, APTEL in its judgement dated 13.6.2007 in Appeal No. 139 of 2006 and batch matters observed that depreciation is an expense and it cannot be deployed for deemed repayment of loan and accordingly directed the Commission to compute the outstanding loan afresh. Accordingly, the outstanding loan allowed for the transmission asset for 2001-04 and 2004-09 periods is revised in the instant order.

11. We have considered the submissions. The revision of transmission tariff allowed for the 2004-09 tariff period necessitates the revision of tariff allowed for the 2009-14 period, which is also allowed in the instant order. The implementation of the directions of the APTEL in case of the Petitioner has been kept pending waiting for 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, the Petitioner is directed neither to claim nor to pay any carrying cost from the beneficiaries for the difference, if any, in the tariff allowed earlier and that allowed in the present 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.



2004-09 Period

12. The Commission vide order dated 13.5.2009 in Petition No. 18/2009 had approved the following transmission charges for the transmission asset for the 2004-09 period:

	(₹ in lakh)				
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	336.58	420.57	432.51	432.51	432.51
Return on Equity	363.34	462.77	482.11	482.11	482.11
O&M Expenses	156.56	195.37	203.44	211.17	220.00
Advance against Depreciation	0.00	24.02	442.56	550.09	550.09
Interest on Loan	871.07	1044.75	1008.70	924.51	836.73
Interest on Working Capital	44.28	55.26	63.64	65.28	65.08
Total	1771.83	2202.74	2632.96	2665.67	2586.52

13. The Petitioner has claimed the following revised transmission charges for the transmission asset of the 2004-09 tariff period:

	(₹ in lakh)				
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	336.58	420.57	432.51	432.51	432.51
Return on Equity	363.34	462.77	482.11	482.11	482.11
O&M Expenses	156.56	195.37	203.44	211.17	220.00
Advance against Depreciation	0.00	30.32	454.27	563.24	563.24
Interest on Loan	877.22	1059.14	1022.22	936.90	847.93
Interest on Working Capital	44.54	56.65	65.67	67.41	67.29
Total	1778.24	2224.81	2660.22	2693.34	2613.09

14. We have considered the Petitioner's claim. The transmission tariff is allowed for the transmission asset on the basis of the following:

- a. Admitted capital cost of ₹14832.22 lakh as on COD;
- b. ₹354.00 lakh and ₹920.66 lakh as ACE during 2004-05 and 2005-06 periods;
- c. Weighted Average Rate of Interest (WAROI) on actual loan adopted from order dated 13.5.2009 in Petition No. 18/2009; and



d. Weighted Average Rate of Depreciation (WAROD), Rate of Interest (RoI) for working capital and O&M Expenses as per order dated 13.5.2009 in Petition No.18/2009.

15. In view of the above, the revised transmission charges allowed for the transmission asset for the 2004-09 tariff period is as follows:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	336.58	420.57	432.51	432.51	432.51
Interest on Loan	877.22	1059.14	1022.22	936.90	847.93
Return on equity	363.34	462.77	482.11	482.11	482.11
Interest on Working Capital	44.54	55.97	63.31	67.24	67.11
O&M Expenses	156.56	195.37	203.44	211.17	220.00
Advance against Depreciation	0.00	0.00	327.48	563.24	563.24
Total	1778.24	2193.82	2531.06	2693.17	2612.90

16. The Annual Fixed Charges (AFC) allowed for 2004-09 tariff period vide order dated 13.5.2009 in Petition No. 18/2009, the revised AFC claimed in the instant petition and revised AFC allowed in the instant order is as follows:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
AFC approved vide orders dated 13.5.2009 in Petition No. 18/2009	1771.83	2202.74	2632.96	2665.67	2586.52
AFC claimed by the Petitioner in the instant petition	1778.24	2224.81	2660.22	2693.34	2613.09
AFC allowed in the instant order	1778.24	2193.82	2531.06	2693.17	2612.90

2009-14 Period

17. The Commission vide order dated 15.3.2011 in Petition No. 185/2010 had approved the tariff for the transmission asset for the 2009-14 tariff period and in order dated 22.12.2015 in Petition No. 507/TT/2014 had trued-up the transmission tariff allowed for the 2009-14 tariff period that was allowed in order 15.3.2011 in Petition No. 185/2010 and the same is as follows:



(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	850.90	850.90	850.90	850.90	854.60
Return on Equity	643.06	666.62	667.27	667.27	679.42
O&M Expenses	320.45	338.57	358.11	378.65	400.21
Interest on Loan	758.21	685.14	616.65	538.12	463.04
Interest on Working Capital	62.97	62.84	62.41	61.80	61.64
Total	2635.59	2604.07	2555.34	2496.74	2458.91

18. The Petitioner has claimed the following revised transmission charges for the transmission asset of the 2009-14 period in the instant petition:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	850.90	850.90	850.90	850.90	854.60
Return on Equity	643.06	666.62	667.27	667.27	679.42
O&M Expenses	320.45	338.57	358.11	378.65	400.21
Interest on Loan	769.04	695.65	627.54	549.09	473.89
Interest on Working Capital	63.20	63.06	62.63	62.03	61.87
Total	2646.64	2614.80	2566.46	2507.93	2469.98

19. We have considered the Petitioner's claim. The transmission tariff for the 2009-14 tariff period is revised on the basis of the following:

- a. Admitted capital cost of ₹16108.88 lakh for transmission asset as on 1.4.2009;
- b. ₹140.44 lakh ACE during 2013-14 period;
- c. WAROI on actual loan derived/ adopted from order dated 22.12.2015 in Petition No. 507/TT/2014; and
- d. WAROD as per order dated 22.12.2015 in Petition No. 507/TT/2014.

20. In view of the above, the revised transmission charges allowed for the transmission asset for the 2009-14 tariff period is as follows:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	850.90	850.90	850.90	850.90	854.60
Interest on Loan	769.04	695.65	627.54	549.09	473.89
Return on equity	643.06	666.62	667.27	667.27	679.42
Interest on Working Capital	63.20	63.06	62.63	62.03	61.87
O&M Expenses	320.45	338.57	358.11	378.65	400.21



Total	2646.65	2614.80	2566.46	2507.93	2469.99
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21. AFC allowed for the 2009-14 tariff period vide order dated 22.12.2015 in Petition No. 507/TT/2014, the revised AFC claimed in the instant petition and the revised AFC allowed in the instant order is as follows:

Particulars	(₹ in lakh)				
	2004-05	2005-06	2006-07	2007-08	2008-09
AFC approved vide orders dated 22.12.2015 in Petition No. 507/TT/2014	2635.59	2604.07	2555.34	2496.74	2458.91
AFC claimed by the Petitioner in the instant petition	2646.64	2614.80	2566.46	2507.93	2469.98
AFC allowed in the instant order	2646.65	2614.80	2566.46	2507.93	2469.99

Truing up of Annual Fixed Charges for the 2014-19 Tariff Period

22. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission asset for 2014-19 period is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	858.31	858.31	858.31	187.44	187.44
Interest on Loan	398.09	316.38	234.99	184.31	166.00
Return on equity	684.08	687.22	686.87	686.87	688.71
Interest on Working Capital	64.84	63.71	62.53	46.63	46.99
O&M Expenses	365.12	377.51	390.10	402.91	416.35
Total	2370.44	2303.13	2232.80	1508.16	1505.49

23. The details of the trued-up IWC claimed by the Petitioner for the transmission asset for 2014-19 period is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	30.43	31.46	32.51	33.58	34.70
Maintenance Spares	54.77	56.63	58.52	60.44	62.45
Receivables	395.07	383.86	372.13	251.36	250.92
Total	480.27	471.95	463.16	345.38	348.07
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	64.84	63.71	62.53	46.63	46.99

Capital Cost

24. The capital cost of the transmission asset has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations. The Commission vide order dated 22.12.2015 in Petition No. 507/TT/2014 had allowed capital cost of ₹16247.32 lakh as on 31.3.2014 and ₹16337.05 lakh as on 31.3.2019. The Petitioner has not claimed any ACE during the 2014-19 period. Accordingly, the capital cost considered for truing up of tariff of the 2014-19 tariff period is as follows:

(₹ in lakh)		
Capital Cost as on 1.4.2014	ACE during 2014-19	Capital Cost as on 31.3.2019
16247.32	0.00	16247.32

Debt-Equity Ratio

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

Particulars	Capital cost as on 1.4.2014 (₹ in lakh)	(%)	Total cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	12761.57	78.55	12761.57	78.55
Equity	3485.75	21.45	3485.75	21.45
Total	16247.32	100.00	16247.32	100.00

Depreciation

26. The depreciation has been worked out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. The Gross Block during the 2014-19



tariff period has been depreciated at weighted average of depreciation (WAROD). WAROD at Annexure-I has been worked out after taking into account the depreciation rates of assets as specified in the 2014 Tariff Regulations. The transmission asset has completed 12 years of life as on 31.3.2017, the remaining depreciable value has been spread across the balance useful life of 22 years in accordance with Regulation 27(5) of the 2014 Tariff Regulations. The trued-up depreciation is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	16247.32	16247.32	16247.32	16247.32	16247.32
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	16247.32	16247.32	16247.32	16247.32	16247.32
Average Gross Block	16247.32	16247.32	16247.32	16247.32	16247.32
WAROD (%)	5.28	5.28	5.28	1.20	1.20
Balance useful life of the asset (Year)	25	24	23	22	21
Aggregate Depreciable Value	14622.59	14622.59	14622.59	14622.59	14622.59
Depreciation during the year	858.31	858.31	858.31	194.58	194.58
Cumulative Depreciation	8625.16	9483.48	10341.79	10536.37	10730.95
Remaining Aggregate Depreciable Value	5997.43	5139.11	4280.80	4086.22	3891.64

27. The details of depreciation approved vide order dated 22.12.2015 in Petition No. 507/TT/2014, claimed by the Petitioner in the instant petition and trued-up depreciation in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.12.2015 in Petition No.507/TT/2014	858.31	860.68	863.05	192.80	192.80
Claimed by the Petitioner in the instant petition	858.31	858.31	858.31	187.44	187.44
Allowed after true-up in this order	858.31	858.31	858.31	194.58	194.58



Interest on Loan (IoL)

28. The Petitioner has claimed IoL based on actual interest rates for each year during the 2014-19 period. We have considered the submissions of the Petitioner and accordingly calculated the IoL based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as detailed below:

- a. Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition; and
- b. The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period.

29. Trued-up IoL allowed for the transmission asset for the 2014-19 tariff period is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	12761.57	12761.57	12761.57	12761.57	12761.57
Cumulative Repayments up to Previous Year	7766.85	8625.16	9483.48	10341.79	10536.37
Net Loan-Opening	4994.72	4136.41	3278.09	2419.78	2225.20
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	858.31	858.31	858.31	194.58	194.58
Net Loan-Closing	4136.41	3278.09	2419.78	2225.20	2030.62
Average Loan	4565.56	3707.25	2848.94	2322.49	2127.91
Weighted Average Rate of Interest on Loan (%)	8.719	8.534	8.248	7.924	7.762
Interest on Loan	398.09	316.38	234.99	184.03	165.17

30. The details of IoL approved vide order dated 22.12.2015 in Petition No. 507/TT/2014, IoL claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.12.2015 in Petition No. 507/TT/2014	387.54	308.63	229.81	178.93	160.32
Claimed by the Petitioner in the instant petition	398.09	316.38	234.99	184.31	166.00



Allowed after true-up in this order	398.09	316.38	234.99	184.03	165.17
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Return on Equity (RoE)

31. The Petitioner has claimed RoE for the transmission asset in accordance with 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 following effective tax rates for the 2014-19 tariff period:

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

32. BSPHCL has submitted that the Petitioner in the instant Petition has not specified whether the tax and interest paid by the Petitioner is after adjustment of any refund of tax including interest received, if any, and is also exclusive of penalty on account of late payment of tax or short deposit of tax. BSPHCL has further submitted that truing up of grossed up RoE has to be done on the basis of actual tax paid every year during the 2014-19 period and that the 2014 Tariff Regulations do not allow for claiming any differential tariff arising due to truing up of grossed up RoE directly from the beneficiaries. BSPHCL has submitted that the Petitioner has relied on Regulation 25(3) of the 2014 Tariff Regulations in order to adjust the yearly impact of MAT for truing up exercise and on perusal of averments made in tabular chart for 2018-19, it reflects that ITR for 2018-19 was not filed with the petition. Based on the assessment order for 2014-15, 2015-16 and actual tax paid for 2016-17 and 2018-19 and by following the formula (MAT 18.50% plus surcharge plus Cess 4%) for 2018-19 tariff



period, the tariff for each year of 2014-19 tariff period has been trued up to arrive at grossed up ROE rate.

33. BSPHCL has submitted that Regulation 25(3) of the 2014 Tariff Regulations specifically provides that the transmission licensee shall true up the grossed up rate of return of equity at the end of financial year and it further provides that penalty shall not be claimed by the transmission licensee and any under recovery or over recovery of grossed up rate of return on equity after true up, shall be recovered or refunded to beneficiaries or long term transmission customers on year to year basis. Therefore, Regulation 25(3) casts a statutory duty on the Petitioner, to carry out the true-up exercise on year to year basis strictly in accordance with the said provision and has to mandatorily provide all the details to the Commission with the true-up petition. The instant petition is totally silent upon it and the Petitioner has neither given any details nor annexed proper documents with instant petition. No Profit and loss Account duly certified by Chartered Accountant has been placed on record. BSHPCL has further submitted that there is no specific averment in the petition to the effect that actual tax has been paid duly on the income from transmission business and not from all business/source. Accordingly, tariff for the 2014-19 tariff period has not been trued up in accordance with the mandate of Regulation 25(3) of the 2014 Tariff Regulations.

34. In response, the Petitioner has submitted that the Commission has allowed trued-up tariff of the 2014-19 tariff period vide order dated 27.4.2020 in Petition No. 247/TT/2019 and various other similar orders, wherein effective tax rate based (for 2014-19 tariff period) on notified MAT rates are considered for the purpose of grossing-up of rate of RoE. The Petitioner has prayed to allow it to claim the differential tariff on account of the trued-up RoE based on the effective tax rate



calculated and Income Tax Assessment/ re-assessment for the 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 periods, on receipt of the respective assessment orders, directly from the beneficiaries, on year to year basis. Further, the Petitioner has submitted that Income Tax Assessment for 2017-18 and 2018-19 has not been completed yet. The Petitioner has submitted that it may be allowed to recover the deferred tax liability materialized before 1.4.2009 directly from the beneficiaries or long term customers/ DIC without making any application as provided in the Tariff Regulations.

35. We have considered that submissions of the Petitioner and BSPHCL. The Petitioner is entitled for RoE as per the Regulations 24 and 25 of the 2014 Tariff Regulations. The basic contention of BSPHCL is that the Petitioner has not submitted the documents/ information required for grossing up of the RoE and the grossing up is not done by the Petitioner in accordance with Regulation 25(3) of the 2014 Tariff Regulations. Similar issues were raised by BSPHCL and other Respondents/ beneficiaries of the Petitioner in other petitions as well. It is observed that the Petitioner has submitted necessary documents/ information in support of its claim and for grossing up of the RoE. Taking into consideration the submissions of the Respondent/ beneficiaries of the Petitioner, the Commission has already arrived at a finding that the effective tax rate for the Petitioner based on the notified MAT rates and the grossing up of RoE was strictly done in accordance with Regulation 25 of the 2019 Tariff Regulations. Therefore, we are of the view that there is no necessity to freshly enter into discussion on this issue again.

36. As stated above, 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 is given in the table below. The relevant portion of the order 27.4.2020 is as follows:

“26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/ DICs as the case may be on year to year basis.

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

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

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

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

38. Trued-up RoE is allowed on the basis of the MAT rate applicable in the respective years for the instant transmission asset and it is as follows:

(₹ in lakh)					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	3485.75	3485.75	3485.75	3485.75	3485.75
Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	3485.75	3485.75	3485.75	3485.75	3485.75
Average Equity	3485.75	3485.75	3485.75	3485.75	3485.75
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Applicable RoE Rate (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity for the year	683.56	686.87	686.87	686.87	688.71

39. The details of RoE approved vide order dated 22.12.2015 in Petition No. 507/TT/2014, claimed in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.12.2015 in Petition No. 507/TT/2014	683.56	686.20	688.83	688.83	688.83
As claimed by the Petitioner in the instant petition	684.08	687.22	686.87	686.87	688.71
Allowed after true-up in this order	683.56	686.87	686.87	686.87	688.71

Operation & Maintenance Expenses (O&M Expenses)

40. The trued-up O&M Expenses claimed by the Petitioner for the transmission asset are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Line					
400 kV AC Twin Conductor Single Circuit Mermundali-Jeypore Transmission Line (km)	456	456	456	456	456
Norms (₹ lakh/km)	0.40	0.42	0.43	0.45	0.46
O&M Expenses Transmission Line	184.22	190.61	196.99	203.38	210.22
Sub-station					
Number of 400 kV Bays	3	3	3	3	
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71



O&M Expenses Sub-station	180.90	186.90	193.11	199.53	206.13
Total O&M Expenses (₹ in lakh)	365.12	377.51	390.10	402.91	416.35

41. The O&M Expenses claimed by the Petitioner are within norms specified under the 2014 Tariff Regulations. The O&M Expenses allowed are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Line					
400 kV AC Twin Conductor Single Circuit Mermundali-Jeypore Transmission Line (km)	456	456	456	456	456
Norms (₹ lakh/km)	0.40	0.42	0.43	0.45	0.46
O&M Expenses Transmission Line	184.22	190.61	196.99	203.38	210.22
Sub-station					
Number of 400 kV Bays	3	3	3	3	
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
O&M Expenses Sub-station	180.90	186.90	193.11	199.53	206.13
Total O&M Expenses (₹ in lakh)	365.12	377.51	390.10	402.91	416.35

42. The details of O&M Expenses approved vide order dated 22.12.2015 in Petition No. 507/TT/2014, claimed in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.12.2015 in Petition No. 507/TT/2014	365.12	377.51	390.10	402.91	416.35
Claimed by the Petitioner in the instant petition	365.12	377.51	390.10	402.91	416.35
Allowed after true-up in this order	365.12	377.51	390.10	402.91	416.35

Interest on Working Capital (IWC)

43. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and trued-up IWC has been allowed for the transmission asset as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
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O&M Expenses (O&M Expenses for 1 month)	30.43	31.46	32.51	33.58	34.70
Maintenance Spares (15% of O&M Expenses)	54.77	56.63	58.52	60.44	62.45
Receivables (Equivalent to two months of annual transmission charges)	394.98	383.80	372.13	252.53	251.99
Total Working Capital	480.18	471.88	463.16	346.54	349.14
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	64.82	63.70	62.53	46.78	47.13

44. The details of IWC approved vide order dated 22.12.2015 in Petition No. 507/TT/2014, claimed in the instant petition and trued-up IWC in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 22.12.2015 in Petition No. 507/TT/2014	64.58	63.56	62.56	46.67	46.98
Claimed by the Petitioner in the instant petition	64.84	63.71	62.53	46.63	46.99
Allowed after true-up in this order	64.82	63.70	62.53	46.78	47.13

Annual Fixed Charges for the 2014-19 Tariff Period

45. The trued-up AFC approved for the transmission asset for the 2014-19 tariff period are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	858.31	858.31	858.31	194.58	194.58
Interest on Loan	398.09	316.38	234.99	184.03	165.17
Return on Equity	683.56	686.87	686.87	686.87	688.71
Interest on Working Capital	64.82	63.70	62.53	46.78	47.13
O&M Expenses	365.12	377.51	390.10	402.91	416.35
Total	2369.91	2302.77	2232.80	1515.17	1511.95

46. Accordingly, the Annual Transmission Charges approved vide order dated 22.12.2015 in Petition No. 507/TT/2014, claimed by the Petitioner and approved after truing up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19



Allowed earlier in order dated 22.12.2015 in Petition No. 507/TT/2014	2359.11	2296.58	2234.35	1510.14	1505.28
Claimed by the Petitioner in the instant petition	2370.44	2303.13	2232.80	1508.16	1505.49
Allowed after true-up in this order	2369.91	2302.77	2232.80	1515.17	1511.95

Determination of Annual Fixed Charges for the 2019-24 Tariff Period

47. The Petitioner has claimed the following transmission charges for the 2019-24 tariff period for the transmission asset:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	187.44	187.44	187.44	187.44	187.44
Interest on Loan	159.02	143.74	128.47	113.19	97.92
Return on Equity	688.71	688.71	688.71	688.71	688.71
Interest on Working Capital	29.86	30.19	30.48	30.78	31.06
O&M Expenses	328.02	339.62	351.33	363.63	376.50
Total	1393.05	1389.70	1386.43	1383.75	1381.63

48. The details of IWC claimed by the Petitioner for the 2019-24 period for the transmission asset are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	27.34	28.30	29.28	30.30	31.38
Maintenance Spares	49.20	50.94	52.70	54.54	56.48
Receivables	171.28	171.33	170.93	170.60	169.87
Total Working Capital	247.82	250.57	252.91	255.44	257.73
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	29.86	30.19	30.48	30.78	31.06

Capital Cost

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

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

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

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



- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) Adjustment of revenue earned by the transmission licensee by using the asset before the date of commercial operation;*
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) Expenditure on account of change in law and force majeure events; and*
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

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

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



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

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

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

(a) The asset forming part of the project, but not in use, as declared in the tariff petition;
(b) De-capitalised Asset after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

(c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
(d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
(e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”

50. The Petitioner has a claimed capital cost of ₹16247.32 lakh as on 31.3.2019 for the transmission asset. The same has been worked out by the Commission as on 31.3.2019 and 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. The Petitioner has not claimed ACE for the 2019-24 tariff period for the transmission asset.

51. Accordingly, the capital cost considered for the 2019-24 tariff period is as follows:

(₹ in lakh)	
Capital Cost as on 1.4.2019	Capital Cost as on 31.3.2024
16247.32	16247.32

Debt-Equity Ratio

52. 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.

(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.”

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

Particulars	Capital cost as on 1.4.2019 (₹ in lakh)	(%)	Total cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	12761.57	78.55	12761.57	78.55
Equity	3485.75	21.45	3485.75	21.45
Total	16247.32	100.00	16247.32	100.00

Depreciation

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

55. The weighted average rate of depreciation (WAROD) has been worked out and placed at Annexure-II to this order and the same is based on as per the rates of depreciation specified in 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 for the 2019-24 period is as follows:

(₹ in lakh)

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Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	16247.32	16247.32	16247.32	16247.32	16247.32
Addition during 2019-24 due to projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	16247.32	16247.32	16247.32	16247.32	16247.32
Average Gross Block	16247.32	16247.32	16247.32	16247.32	16247.32
Balance useful life at the beginning of the year (Year)	20.00	19.00	18.00	17.00	16.00
Depreciable Value	14622.59	14622.59	14622.59	14622.59	14622.59
Rate of Depreciation (%)	1.20	1.20	1.20	1.20	1.20
Depreciation during the year	194.58	194.58	194.58	194.58	194.58
Cumulative Depreciation	10925.53	11120.12	11314.70	11509.28	11703.86
Remaining Aggregate Depreciable Value	3697.05	3502.47	3307.89	3113.31	2918.73

Interest on Loan (IoL)

56. 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 asset, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to 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.



(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.”

57. BSPHCL has submitted that there is no provision in the 2019 Tariff Regulations which supports the claim of floating rate of interest to be directly adjusted/ claimed from the beneficiaries. In response, the Petitioner has submitted that for the 2019-24 tariff period, IoL has been calculated on the basis of interest rates prevailing as on 1.4.2019.

58. We have considered the submissions of the Petitioner and BSPHCL. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up and it will not be adjusted directly with the beneficiaries. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the transmission asset for the 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	12761.57	12761.57	12761.57	12761.57	12761.57
Cumulative Repayments up to Previous Year	10730.95	10925.53	11120.12	11314.70	11509.28
Net Loan-Opening	2030.62	1836.04	1641.45	1446.87	1252.29



Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	194.58	194.58	194.58	194.58	194.58
Net Loan-Closing	1836.04	1641.45	1446.87	1252.29	1057.71
Average Loan	1933.33	1738.75	1544.16	1349.58	1155.00
Weighted Average Rate of Interest on Loan (%)	8.150	8.150	8.150	8.150	8.150
Interest on Loan	157.57	141.71	125.85	109.99	94.13

Return on Equity (RoE)

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

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

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

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

Provided further that:

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

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

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

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

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



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

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

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

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

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

Illustration-

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

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

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

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

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

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

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

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

60. BSPHCL has contended that no proper exercise has been carried out by the Petitioner to calculate the MAT rate or RoE rate as mandated in the above Regulation. Since the procedure is flawed, there is no rationale for the Petitioner to claim MAT rate @ 21.54887% and RoE @19.75 % (being rate of 2018-19) for the tariff for the 2019-24 tariff period.

61. In response, the Petitioner has submitted that the at the time of filing the petition, ROE was calculated at the then existing rate of MAT as the Petitioner is liable to pay income tax at MAT rate. However, there was a change in the MAT rate vide the Taxation Laws (Amendment) Ordinance, 2019 published in the Gazette dated 20.9.2019. Therefore, ROE may be calculated @18.782% after grossing up ROE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given at Regulation 31(2) of the 2019 Tariff Regulations. As per Regulation 31(3) of the 2019 Tariff Regulations, the grossed up rate of ROE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2019-24 tariff period 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 RoE 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. It has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable/ adjustable during



the tariff period 2019-24 on year to year basis on receipt of Income Tax assessment order.

62. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. We have considered the submissions of the Petitioner. Accordingly, MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the transmission asset for the 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	3485.75	3485.75	3485.75	3485.75	3485.75
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	3485.75	3485.75	3485.75	3485.75	3485.75
Average Equity	3485.75	3485.75	3485.75	3485.75	3485.75
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	654.69	654.69	654.69	654.69	654.69

Operation & Maintenance Expenses (O&M Expenses)

63. The O&M Expenses claimed by the Petitioner for the transmission asset for the 2019-24 tariff period are as follows:

(₹ in lakh)					
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line					
400 kV AC Twin Conductor Single Circuit Mermundali-Jeypore Transmission Line (km)	456	456	456	456	456
Norms (₹ lakh/km)	0.50	0.52	0.54	0.56	0.58
O&M Expenses for Transmission Line	229.37	237.58	245.78	254.45	263.57
Sub-station					
Number of 400 kV Bays	3	3	3	3	3
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
O&M Expenses Sub-station	96.45	99.84	103.35	106.98	110.73
Communication System (PLCC)					
Project Cost (₹ in lakh)	110	110	110	110	110
Norm (%)	2.00	2.00	2.00	2.00	2.00



O&M Expenses for PLCC	2.2	2.2	2.2	2.2	2.2
Total O&M Expenses (₹ in lakh)	328.02	339.62	351.33	363.63	376.50

64. The norms specified under Regulation 35(3) and Regulation 35(4) of the 2019

Tariff Regulations provides as follows:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
765 Kv	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
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
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
<i>Norms for HVDC stations</i>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834



± 500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
± 800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

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

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

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

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



65. The Petitioner has claimed O&M Expenses separately for the 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 has been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. The relevant portions of the order dated 24.1.2021 in Petition No. 126/TT/2020 are extracted hereunder:

“103. Thus, although PLCC equipment is a communication system, it has been considered as a part of sub-station, as it is used both for protection and communication. Therefore, we are of the considered view that rightly, it was not considered for separate O&M Expenses while framing norms of O&M for 2019-24 tariff period. While specifying norms for bays and transformers, O&M Expenses for PLCC have been included within norms for O&M Expenses for sub-station. Norms of O&M Expenses @2% of the capital cost in terms of Regulation 35(4) of the 2019 Tariff Regulations have been specified for communication system such as PMU, RMU, OPGW etc. and not for PLCC equipment.”

“105. In our view, granting of O&M Expenses for PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations under the communication system head would tantamount to granting O&M Expenses twice for PLCC equipment as PLCC equipment has already been considered as part of the sub-station. Therefore, the Petitioner’s prayer for grant of O&M Expenses for the PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations is rejected.

106. The principle adopted in this petition that PLCC is part of sub-station and accordingly no separate O&M Expenses is admissible for PLCC equipment in the 2019-24 tariff period under Regulation 35(4) of the 2019 Tariff Regulations shall be applicable in case of all petitions where similar claim is made by the Petitioner. As already mentioned, the Commission, however, on the basis of the claim made by the Petitioner has inadvertently allowed O&M Expenses for PLCC equipment @2% of its original project cost, which is applicable for other “communication system”, for 2019-24 period in 31 petitions given in Annexure-3 of this order. Therefore, the decision in this order shall also be applicable to all the petitions given in Annexure-3. Therefore, PGCIL is directed to bring this decision to the notice of all the stakeholders in the 31 petitions given in Annexure-3 and also make revised claim of O&M Expenses for

PLCC as part of the sub-station at the time of truing up of the tariff allowed for 2019-24 period in respective petitions.”

Therefore, the Petitioner’s claim for separate O&M Expenses for PLCC @2% is not allowed.

66. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and the same are as follows:

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line					
400 kV AC Twin Conductor Single Circuit Mermundali Jeypore Transmission Line (km)	456	456	456	456	456
Norms (₹ lakh/km)	0.50	0.52	0.54	0.56	0.58
O&M Expenses Transmission Line	229.37	237.58	245.78	254.45	263.57
Sub-station					
Number of 400 kV Bays	3	3	3	3	3
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
O&M Expenses Sub-station	96.45	99.84	103.35	106.98	110.73
Total O&M Expenses (₹ in lakh)	325.82	337.42	349.13	361.43	374.30

Interest on Working Capital (IWC)

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

“34. Interest on Working Capital

(1)...

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

- i. Receivables equivalent to 45 days of fixed cost;*
- ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*
- iii. Operation and maintenance expenses, including security expenses for one month”*

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



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

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

“3.Definitions ...

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

68. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. RoI considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, RoI for 2020-21 onwards has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and interest allowed thereon for the transmission asset is as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses for 1 month)	27.15	28.12	29.09	30.12	31.19
Maintenance Spares (20% of O&M Expenses)	48.87	50.61	52.37	54.21	56.14
Receivables (Equivalent to 45 days of annual transmission charges)	167.46	167.19	166.71	166.30	165.51
Total Working Capital	243.48	245.92	248.17	250.63	252.85
Rate of Interest on working capital (%)	12.05	11.25	11.25	11.25	11.25
Interest of Working Capital	29.34	27.67	27.92	28.20	28.45

Annual Fixed Charges for the 2019-24 Tariff Period

69. The transmission charges allowed for the transmission asset for the 2019-24 tariff period are summarised as follows:



					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	194.58	194.58	194.58	194.58	194.58
Interest on Loan	157.57	141.71	125.85	109.99	94.13
Return on Equity	654.69	654.69	654.69	654.69	654.69
Interest on Working Capital	29.34	27.67	27.92	28.20	28.45
O&M Expenses	325.82	337.42	349.13	361.43	374.30
Total	1362.00	1356.06	1352.18	1348.89	1346.15

Filing Fee and Publication Expenses

70. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BSPHCL has submitted that filing fee is at the discretion of the Commission and need not be allowed necessarily. In response, the Petitioner has submitted that the Commission in order dated 28.3.2016 in Petition No. 137/TT/2015 for determination of tariff for 2014-19 period allowed the recovery of petition filing fee and publication of notices from the beneficiaries on pro-rata basis and the Petitioner is claiming the same as per Regulation 70(1) of the 2019 Tariff Regulations.

71. We have considered the submissions of the Petitioner and BSPHCL. The Petitioner is 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

72. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 2019-24 tariff period. The Petitioner shall also be entitled 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 (GST)



73. 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. BSPHCL has submitted that the claim of the Petitioner towards billing and receiving GST and statutory charges on transmission from the Respondents is premature. In response, the Petitioner has reiterated its earlier submissions.

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

Security Expenses

75. The Petitioner has submitted that security expenses for the transmission asset are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true-up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true-up at the end of the year on actual expenses. The Petitioner has submitted that



the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

76. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. It is observed that the Petitioner has already filed Petition No. 260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

Capital Spares

77. 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

78. BSPHCL has submitted that the Commission in earlier orders held that the present consumers cannot and should not be burdened for the past charges and more specifically when the claim is made for revision of transmission tariff for the period which is almost one and half decade old. In response, the Petitioner has submitted that transmission tariff for 2004-09 period will be recovered as per order dated 6.2.2007 in Petition No. 48/2006 and 13.5.2009 in Petition No. 18/2009 and transmission tariff for the 2009-14 tariff period it will be recovered as per order dated 22.12.2015 in Petition No. 507/TT/2014.



79. We have considered the submissions of the Petitioner and BSPHCL. BSPHCL has contended that retrospective revision of tariff should not be allowed. The tariff of the transmission asset for the 2004-09 period could not be revised due to pending Appeals before the Hon'ble Supreme Court. As stated in paragraph 3 of this order, the Civil Appeals were dismissed by the Hon'ble Supreme Court on 10.4.2018 and thus the judgements of APTEL setting aside the methodology adopted by the Commission in computation of certain components of tariff attained finality. Accordingly, the Commission directed the Petitioner to claim revised tariff as per the APTEL's judgements at the time of truing up and the Petitioner has accordingly claimed revised tariff for the 2004-09 and 2009-14 tariff periods in the instant petition along with truing up of tariff of the 2014-19 tariff period and determination of tariff of 2019-24 tariff period. Thus, the tariff for the 2004-09 tariff period, which could not be revised earlier due to pending Civil Appeals and the consequent revision of tariff of the 2009-14 tariff period is allowed in this order.

80. The revised transmission tariff for 2004-09 period shall be recovered as per order dated 6.2.2007 in Petition No. 48/2006 and 13.5.2009 in Petition No. 18/2009. The revised transmission charges for 2009-14 tariff period shall be recovered as per order dated 22.12.2015 in Petition No. 507/TT/2014.

81. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations 2020, as applicable, as provided in Regulation 43



of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

82. To summarise:

(a) The revised Annual Fixed Charges allowed for the transmission asset for the 2004-09 tariff period as per APTEL's judgments are:

					(₹ in lakh)
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Annual Fixed Charges	1778.24	2193.82	2531.06	2693.17	2612.90

(b) The consequential revision of Annual Fixed Charges allowed for the transmission asset for the 2009-14 tariff period are:

					(₹ in lakh)
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Annual Fixed Charges	2646.65	2614.80	2566.46	2507.93	2469.99

(c) The trued-up Annual Fixed Charges allowed for the transmission asset for 2014-19 tariff period are:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	2369.91	2302.77	2232.80	1515.17	1511.95

(d) The Annual Fixed Charges approved for the transmission asset for the 2019-24 tariff period are:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	1362.00	1356.06	1352.18	1348.89	1346.15

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



84. This order disposes of Petition No. 469/TT/2019 in terms of the above discussion and findings.

sd/-
(Pravas Kumar Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson



Annexure-I

Asset	Particular	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
					2014-15	2015-16	2016-17	2017-18	2018-19
	Building	36.13	36.13	3.34	1.21	1.21	1.21		
	Transmission Line	14638.65	14638.65	5.28	772.92	772.92	772.92		
	Sub Station	1462.54	1462.54	5.28	77.22	77.22	77.22		
	PLCC	110.00	110.00	6.33	6.96	6.96	6.96		
	TOTAL	16247.32	16247.32		858.31	858.31	858.31	194.58	194.58
	Average Gross Block (₹ in lakh)				16247.32	16247.32	16247.32	16247.32	16247.32
	Weighted Average Rate of Depreciation (%)				5.28	5.28	5.28	1.20	1.20



Annexure-II

	Particular	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
					2019-20	2020-21	2021-22	2022-23	2023-24
Asset	Building	36.13	36.13	2.28%					
	Transmission Line	14638.65	14638.65	1.21%					
	Sub Station	1462.54	1462.54	1.21%					
	PLCC	110.00	110.00	0.64%					
	TOTAL	16247.32	16247.32		194.58	194.58	194.58	194.58	194.58
			Average Gross Block (₹ in lakh)		16247.32	16247.32	16247.32	16247.32	16247.32
			Weighted Average Rate of Depreciation		1.20	1.20	1.20	1.20	1.20

