

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 357/TT/2019

Coram:

**Shri P.K. Pujari, Chairperson
Shri I.S. Jha, Member
Shri Arun Goyal, Member
Shri Pravas Kumar Singh, Member
Shri P.S. Mhaske, Member (Ex-officio)**

Date of order: 25.04.2021

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999, revision of transmission tariff of the 2004-09 and 2009-14 tariff periods and truing up of transmission tariff of the 2014-19 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 2nd 400 kV D/C Kahalgaon-Biharshariff transmission line in Eastern Region.

And in the Matter of:

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

.....Petitioner

Versus

1. Bihar State Power (Holding) Company Ltd.,
(Formerly Bihar State Electricity Board-BSEB),
Vidyut Bhavan, Bailey Road, Patna-800001
Bihar.
2. West Bengal State Electricity Distribution Company Ltd.,
Bidhyut Bhawan, 7th Floor, DJ Block, Sector II,
Salt Lake City, Kolkata-700091
West Bengal.
3. Grid Corporation of Odisha Ltd.,
Shahid Nagar, Bhubaneswar-751007
Odisha.



4. Jharkhand State Electricity Board,
In front of Main Secretariat, Doranda,
Ranchi-834002, Jharkhand.
5. Damodar Valley Corporation,
DVC Tower, Maniktala, Civic Centre, VIP Road,
Calcutta-700054,
West Bengal.
6. Power Department,
Govt. of Sikkim,
Gangtok-737101,
Sikkim

.....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 Arijit Maitra, Advocate, GRIDCO
Ms.Rohini Prasad, Advocate, BSPHCL

ORDER

The instant petition has been filed by the Petitioner, 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 for determination of tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) of the period from 1.4.2019 to 31.3.2024 in respect of 2nd 400 kV D/C Kahalgaon-Biharshariff transmission line in Eastern Region (hereinafter referred to as “the transmission asset”).



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 asset 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 asset 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 Regulations 2019 as per para 9 and 10 above for respective block.

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) of 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) of 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.”

Background

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

(a) The Investment Approval (IA) for the transmission asset was accorded by the Board of Directors of the Petitioner vide Memorandum dated 6.12.2001



at an estimated cost of ₹13577 lakh, including IDC of ₹1263 lakh, based on 2nd quarter 2001 price level.

(b) The transmission tariff for the transmission asset was determined from COD to 31.3.2009 vide order dated 6.2.2007 in Petition No. 137/2006. Tariff for the 2009-14 period was allowed vide order dated 15.3.2011 in Petition No. 240/2010 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”). Tariff for the 2009-14 period was trued up and tariff for the period from 1.4.2014 to 31.3.2019 was determined vide order dated 11.12.2015 in Petition No. 433/TT/2014.

(c) The entire scope of work as per IA is complete and has been covered in the instant petition.

(d) As per the IA, the transmission asset was scheduled to be put under commercial operation by June 2004. However, the transmission asset was put under commercial operation w.e.f. 1.12.2004 with delay of about 6 months. The Commission vide order dated 6.2.2007 in Petition No. 137/2006 has condoned the entire delay observing the same to be beyond the control of the Petitioner.

(e) The transmission tariff allowed for the 2014-19 tariff period in the previous order and the transmission tariff based on truing up as claimed by the Petitioner in the instant petition is as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges approved vide order dated 11.12.2015 in Petition No. 433/TT/2014	1879.62	1836.65	1793.83	1267.42	1263.02
AFC claimed by the Petitioner based on truing up in the instant Petition	1899.54	1859.49	1815.92	1299.29	1295.39

(f) 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 judgments of the Appellate Tribunal for



Electricity (APTEL) dated 22.1.2007 and dated 13.6.2007 in Appeal No. 81/2005 and batch and Appeal No. 139 of 2006 and batch respectively. The Petitioner has also sought consequential revision of tariff allowed for the 2009-14 tariff period, truing up of tariff of the 2014-19 tariff period and determination of tariff for the 2019-24 tariff period of the transmission asset.

(g) APTEL vide its judgments dated 22.1.2007 in Appeal No. 81/2005 and batch and dated 13.6.2007 in Appeal No. 139/2006 pertaining to generating stations of NTPC decided mainly on 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 asset
- (v) Consideration of maintenance of spares for working capital
- (vi) Depreciation of asset.

(h) The Commission and certain interested parties preferred Civil Appeals against the APTEL 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.

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

(j) The Hon'ble Supreme Court vide its judgment and final order dated 10.4.2018, dismissed the said Civil Appeals.

(k) Consequent to the Hon'ble Supreme Court's judgment 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 petitions for the 2014-19 tariff period in respect of concerned transmission assets.

(l) In view of the APTEL judgments dated 22.1.2007 and dated 13.6.2007 and the judgment of Hon'ble Supreme Court dated 10.4.2018, the tariff is being revised. Accordingly, tariff is being re-worked period wise based on the Tariff Regulations applicable for the respective tariff periods alongwith necessary assumptions at certain places wherever need be.

(m) The transmission asset was put under commercial operation on 1.12.2004. The tariff from 1.12.2004 has been worked out based on the admitted capital cost as under:

Admitted Expenditure up to COD	Additional Capital Expenditure		Admitted Capital Cost as on 31.3.2009
	2004-05	2005-06	
11840.31	402.55	49.59	12292.45

(n) Accordingly, considering the above admitted capital cost, the tariff is being revised for the 2004-09 and 2009-14 tariff periods in terms of the APTEL judgments dated 22.1.2007 and dated 13.6.2007.

4. The Respondents are transmission utilities, distribution licensees and power departments, which are procuring transmission services, mainly beneficiaries of the Eastern 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 objections have been received from the general public in response to the aforesaid notices published in the newspapers. BSPHCL, Respondent No. 1, has filed its reply vide affidavit dated 2.3.2021 and has raised issues regarding effective tax rate considered for the



calculation of Return on Equity (RoE), adjustment of floating rates of interest during 2019-24 period, recovery of publication charges, filing fees and capital spares. The Petitioner vide affidavit dated 8.3.2021 has filed rejoinder to the reply of BSPHCL. The issues raised by the Respondent BSPHCL and clarifications given by the Petitioner are dealt in the relevant portions of this order. No reply was filed by GRIDCO, Respondent No.3 despite time sought and granted by the Commission.

6. This order is issued considering the submissions made by the Petitioner vide affidavits dated 20.8.2019 and 31.7.2020, reply affidavit of BSPHCL dated 2.3.2021 and rejoinder to the reply of BSPHCL vide affidavit dated 8.3.2021.

7. The hearing in this matter was held on 10.3.2021 through video conference and the order was reserved.

8. Having heard the representatives of the Petitioner and the Respondent BSPHCL and having perused the material on record, we proceed to dispose of the petition.

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

9. The Petitioner has sought revision of the computation of IoL, maintenance spares for working capital and depreciation allowed for the 2004-09 period on the basis of the judgements of the Hon'ble APTEL dated 22.1.2007 in Appeal No.81/2005 and dated 13.6.2007 in Appeal No.139/2006. The APTEL while dealing with the issue of computation of IoL, in its 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. APTEL in its judgment dated 14.11.2006 set aside the Commission's methodology of computation of loan on the actual repayment basis or normative repayment whichever is higher. The relevant portions of the judgment of 14.11.2006 are as follows:

“12. We have heard the arguments of the Senior Counsel(s) of appellant and respondents. We notice that the appellant has not challenged the formula for computing the annual repayment amount as provided in Appeal No. 96 of 2005 & IA No. 117 of 2006 in Appeal No. 94 of 2005 para-22 of the impugned order and has only challenged the provisions at para 23 specifying that the amount of annual repayment for calculation of interest on loan is chosen higher of the normative debt and actual debt.

13. As mentioned earlier the servicing of the capital (equity or debt) is financed by the recovery of interest on debt capital and through earning of return on equity capital. The actual loan repayment has been normalized to 50% of the total capital by the formula in para 22 of the impugned order given in para 11 above. Once it has been decided and agreed that the financing plan would be based on normative debt-equity ratio of 50:50 and not the actual debt-equity ratio, the same normative basis should be adopted for recovery of cost of servicing the capital.

14. In the instant case since the normative debt-equity ratio of 50:50 has been adopted in the financing plan, the loan repayment should be computed based on normative debt. This is to ensure that whatever normative debt has been considered, tariff should ensure the recovery of the same normative debt and interest thereon.

18. In its Tariff Regulation of 2004 the Central Commission perhaps recognizing the aforesaid anomaly has dispensed with the practice of adopting higher of actual or normative repayment and has corrected the method of determination of quantum of debt repayment only on the basis of the normative debt with effect from 01.04.2004.

19. In view of the above, the Central Commission is required to adopt normative debt repayment methodology for working out the interest on loan liability for the period 01.04.1998 to 31.03.2001.”

In view of the above, the interest allowed for the 2004-09 period is revised on the basis of the normative debt repayment methodology.

10. APTEL in its judgment dated 13.6.2007 in Appeal No. 139 of 2006 and others held that additional capitalisation after the commercial operation date (COD) should also be considered for computation of maintenance spares as under:

“Analysis and Decision

We are not inclined to agree with the contention of the respondents that escalation of 6% will take care of the additional capitalization. Escalation is meant to factor inflation and is allowed as per CERC Regulations whether or not



additional capitalization takes place. Question before us is that: can the historical cost be frozen with the Commissioning of the station. It is quite normal and prudent to ensure earliest operation of the plant without necessarily 100% completion of plants and works, of course not at the cost of safety of the plant. Adding some of the plants and works after the commercial operation will reduce interest during construction. If technically it is possible to delay some of the plants or works, it is only prudent to do so. For example it is common to build redundancies in the plant at a little later stage. CERC's own regulations rightly recognized additional capitalization. It is pertinent to set out excerpts pertaining to additional capitalization from CERC (Terms & Conditions of Tariff) Regulation, 2004 Clause 18 as below:-

“Additional capitalization (1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission, subject to prudence check:

(i) Deferred liabilities

(ii) Works deferred for execution

(iii) Procurement of initial capital spares in the original scope of work, subject to ceiling specified in regulation 17.

(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(v) On account of change in law.

Provided that original scope of work along with estimates of expenditure shall be submitted along with the application for provisional tariff.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the generating station.”

It is clear from the abovementioned Clause 18 of the CERC Regulations that additional capitalization after the date of commercial operation is recognized as part of the capital expenditure. Historical cost does not literally mean that the cost on the date of the commercial operation. The term historical cost is used so as to distinguish it from 'book value' or 'the replacement cost'. The cost of maintenance spares limited to 1% of the historical cost corresponds to the plant and equipment and installations which are required to be maintained. If the cost of additional equipment is not included in the historical cost, how spares for the additional equipment be procured for maintenance of the additional equipment. In this view of the matter, the CERC needs to examine afresh in the light of the aforesaid observations.”

11. 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 the Additional Capital Expenditure (ACE) after the date of commercial operation.



12. As regards depreciation, APTEL in its 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. The relevant portion of the judgment is as under:

“Analysis and Decision

In the orders of this Tribunal dated November 14, 2006 and January 24, 2007 it has been laid down that the computation of outstanding loan will be on normative basis only (instead of normative or actual whichever is higher). In view of this there is no question of any adjustment of the depreciation amount as deemed repayment of loan.

It is to be understood that the depreciation is an expense and not an item allowed for repayment of loan. If a corporation does not borrow, it would not mean that the corporation will not be allowed any depreciation. Depreciation is an expense it represents a decline in the value of asset because of use, wear or obsolescence. The Accounting Principles Board of USA defines depreciation as under:-

“The cost of a productive facility is one of the costs of the service it renders during its useful economic life. Generally accepted accounting principles require that this cost be spread over the expected useful life of the facility in such a way as to allocate it as equitably as possible to the periods during which services are obtained from the use of the facility. This procedure is known as depreciation accounting, a system of accounting which aims to distribute the cost or other basic value of tangible capital asset, less salvage (if any), over the estimated useful life of the unit (which may be a group of asset) in a systematic and rational manner. It is a process of allocation, not of valuation”

It is well established that the depreciation is an expense and therefore, it cannot be deployed for deemed repayment of loan. In this view of the matter the CERC shall need to make a fresh computation of outstanding loan in the light of the aforesaid observations.”

13. In view of the above directions of APTEL, the outstanding loan allowed for the transmission asset for the 2004-09 period is being revised in the instant order.

14. The revision of 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 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 will neither claim nor pay any carrying cost from the beneficiaries for the difference, if any, in the tariff allowed earlier and that 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.

2004-09 Tariff Period:

15. The Commission approved the transmission charges for the 2004-09 period vide order dated 6.2.2007 in Petition No. 137/2006 which are as follows:

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	105.45	323.48	324.11	324.11	324.11
Return on Equity	155.48	475.93	476.97	476.97	476.97
O&M Expenses	50.07	156.20	162.68	168.83	175.92
Advance against Depreciation	0.00	0.00	0.00	384.50	384.50
Interest on Loan	222.05	660.86	634.32	592.51	537.89
Interest on Working Capital	13.82	42.05	42.54	49.46	49.54
Total	546.87	1658.51	1640.63	1996.38	1948.93

16. The Petitioner has claimed the following revised transmission charges for the transmission asset for the 2004-09 period in this petition:

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	105.45	323.48	324.11	324.11	324.11
Return on Equity	155.48	475.93	476.97	476.97	476.97
O&M Expenses	50.07	156.20	162.68	168.83	175.92
Advance against Depreciation	0.00	0.00	0.00	114.87	411.22
Interest on Loan	223.27	676.42	657.92	614.85	558.17
Interest on Working Capital	13.91	43.28	44.00	46.27	51.54
Total	548.18	1675.31	1665.67	1745.90	1997.92



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

- a) Admitted capital cost of ₹11840.31 lakh as on COD;
- b) ₹402.55 lakh and ₹49.59 lakh as ACE during 2004-05 and 2005-06 periods;
- c) Weighted Average Rate of Interest (WAROI) on actual loan adopted from order dated 6.2.2007 in Petition No.137/2006; and
- d) Weighted Average Rate of Depreciation (WAROD), Rate of Interest (RoI) for Working Capital and O&M Expenses as per order dated 6.2.2007 in Petition No.137/2006.

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

(₹ in lakh)					
Particulars	2004-05 (pro rata for 4 months)	2005-06	2006-07	2007-08	2008-09
Depreciation	105.45	323.48	324.11	324.11	324.11
Interest on Loan	223.27	676.42	657.92	614.85	558.17
Return on equity	155.48	475.93	476.97	476.97	476.97
Interest on Working Capital	13.91	42.79	43.48	45.72	50.95
O & M Expenses	50.07	156.20	162.68	168.83	175.92
Advance against Depreciation	0.00	0.00	0.00	114.87	411.22
Total	548.18	1674.82	1665.15	1745.34	1997.34

2009-14 Tariff Period

19. The Commission vide order dated 15.3.2011 in Petition No.240/2010 approved the transmission tariff of the transmission asset for the 2009-14 period and subsequently vide order dated 11.12.2015 in Petition No.433/TT/2014 trued up the tariff allowed for the 2009-14 tariff period and the same is as under:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	651.54	653.24	653.24	653.24	653.24
Return on Equity	638.01	663.25	663.90	663.90	671.88



O&M Expenses	234.59	248.04	262.25	277.23	293.00
Interest on Loan	487.56	439.24	389.69	338.85	287.88
Interest on Working Capital	48.77	49.00	48.69	48.38	48.27
Total	2060.47	2052.77	2017.76	1981.59	1954.27

20. The Petitioner has claimed the following revised transmission charges for the transmission asset for the 2009-14 period in this petition:

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	651.54	653.24	653.24	653.24	653.24
Return on Equity	638.01	663.25	663.90	663.90	671.88
O&M Expenses	234.59	248.04	262.25	277.23	293.00
Interest on Loan	506.81	458.48	408.93	358.03	306.97
Interest on Working Capital	49.17	49.40	49.09	48.78	48.67
Total	2080.13	2072.41	2037.42	2001.18	1973.76

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

- a) Admitted capital cost of ₹12292.45 lakh for transmission asset as on 1.4.2009;
- b) ₹64.24 lakh ACE during 2009-10 period;
- c) WAROI on actual loan derived/adopted from order dated 11.12.2015 in Petition No.433/TT/2014, and
- d) WAROD as per order dated 11.12.2015 in Petition No.433/TT/2014.

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

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	651.54	653.24	653.24	653.24	653.24
Interest on Loan	506.81	458.48	408.93	358.03	306.97
Return on equity	638.01	663.25	663.90	663.90	671.88
Interest on Working Capital	49.17	49.40	49.09	48.78	48.67
O&M Expenses	234.59	248.04	262.25	277.23	293.00
Total	2080.13	2072.41	2037.41	2001.18	1973.76



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

23. The details of the trued up transmission charges claimed by the Petitioner are as under:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	653.23	653.23	653.23	172.58	172.58
Interest on Loan	255.81	204.33	152.68	118.58	102.87
Return on equity	672.40	675.48	675.14	675.14	676.95
Interest on Working Capital	51.15	50.53	49.84	38.51	38.73
O&M Expenses	266.95	275.92	285.03	294.48	304.26
Total	1899.54	1859.49	1815.92	1299.29	1295.39

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

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	22.25	22.99	23.75	24.54	25.36
Maintenance Spares	40.04	41.39	42.75	44.17	45.64
Receivables	316.59	309.92	302.65	216.55	215.90
Total	378.88	374.30	369.15	285.26	286.90
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	51.15	50.53	49.84	38.51	38.73

Capital Cost as on 1.4.2014

25. The capital cost of the transmission asset has been calculated in accordance with Regulations 9(3) and 9(6) of the 2014 Tariff Regulations. The Commission vide order dated 11.12.2015 in Petition No. 433/TT/2014 approved the transmission tariff of the transmission asset for the 2014-19 period based on admitted capital cost of ₹12356.69 lakh as on 31.3.2014. Therefore, the admitted capital cost of ₹12356.69 lakh as on 31.3.2014 has been considered for working out the true up tariff for the tariff period 2014-19.

Additional Capital Expenditure (ACE)

26. The Petitioner has not claimed any ACE during the 2014-19 period.



Capital Cost considered for true up of tariff for the 2014-19 tariff period

27. The capital cost considered for truing up of tariff for the 2014-19 tariff period is as under:

(₹ in lakh)		
Capital Cost as on 1.4.2014	ACE during 2014-19 Period	Capital Cost as on 31.3.2019
12356.69	0.00	12356.69

Debt-Equity Ratio

28. 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 admitted debt-equity ratio of 72.27:27.73 for the period ending on 31.3.2014 has been considered as opening debt-equity ratio as on 1.4.2014 for the purpose of truing up of tariff of the 2014-19 tariff period of the transmission asset. The details of the debt-equity ratio allowed in respect of the transmission asset as on 1.4.2014 and 31.3.2019 is as follows:

Funding	Capital cost as on 1.4.2014 (₹ in lakh)	(%)	Total cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	8930.47	72.27	8930.47	72.27
Equity	3426.22	27.73	3426.22	27.73
Total	12356.69	100.00	12356.69	100.00

Depreciation

29. The Petitioner has claimed depreciation considering capital expenditure of ₹12356.69 lakh as on 1.4.2014 for the transmission asset. The Petitioner has not claimed any depreciation towards "IT Equipment" in the present petition.



30. The depreciation has been worked out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. The Gross Block during the tariff period 2014-19 has been depreciated at WAROD. WAROD (as placed in Annexure-I) has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations. Accordingly, depreciation allowed for the 2014-19 tariff period is as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	12356.69	12356.69	12356.69	12356.69	12356.69
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	12356.69	12356.69	12356.69	12356.69	12356.69
Average Gross Block	12356.69	12356.69	12356.69	12356.69	12356.69
WAROD (%)	5.29	5.29	5.29	Spreading	Spreading
Balance useful life (at the beginning of the year)	26	25	24	23	22
Aggregate Depreciable Value	11121.02	11121.02	11121.02	11121.02	11121.02
Depreciation during the year	653.24	653.24	653.24	172.59	172.59
Cumulative Aggregate Depreciation	5845.08	6498.31	7151.55	7324.13	7496.72
Remaining Aggregate Depreciable Value	5275.95	4622.71	3969.48	3796.89	3624.30

31. Accordingly, depreciation approved vide order dated 11.12.2015 in Petition No.433/TT/2014, claimed by the Petitioner in the instant petition and true up depreciation in respect of the transmission asset is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 11.12.2015 in Petition No.433/TT/2014	653.24	653.24	653.24	162.02	162.02
As claimed by the Petitioner in the instant petition	653.23	653.23	653.23	172.58	172.58
Allowed after true-up in this order	653.24	653.24	653.24	172.59	172.59

Interest on Loan (IoL)

32. 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. The IoL has been worked out as detailed below:

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

33. The details of trued up IoL allowed for the transmission asset are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	8930.47	8930.47	8930.47	8930.47	8930.47
Cumulative Repayments up to Previous Year	5191.84	5845.08	6498.31	7151.55	7324.13
Net Loan-Opening	3738.63	3085.39	2432.16	1778.92	1606.34
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	653.24	653.24	653.24	172.59	172.59
Net Loan-Closing	3085.39	2432.16	1778.92	1606.34	1433.75
Average Loan	3412.01	2758.78	2105.54	1692.63	1520.05
Weighted Average Rate of Interest on Loan (%)	7.497	7.406	7.251	7.006	6.767
Interest on Loan	255.81	204.33	152.68	118.58	102.87

34. Accordingly, IoL approved vide order dated 11.12.2015 in Petition No.433/TT/2014, IoL claimed by the Petitioner in the instant petition and allowed after truing up in respect of the transmission asset is shown in the following table:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 11.12.2015 in Petition No.433/TT/2014	236.85	185.60	134.35	101.24	86.85
As claimed by the Petitioner in the instant petition	255.81	204.33	152.68	118.58	102.87
Allowed after true-up in this order	255.81	204.33	152.68	118.58	102.87

Return on Equity (RoE)

35. BSPHCL in its reply has submitted that as per Regulation 25(3) of the 2014 Regulations, penalty, if any, arising on account of delay in deposit or short deposit of



tax amount cannot be permitted to be claimed and the actual tax paid has to be duly adjusted for any refund of tax including interest received from the income tax authorities. The present petition is silent on whether the tax and interest paid by the Petitioner is indeed after such adjustment and exclusive of the impermissible claims. Additionally, the grossed up rate of return on equity has to be trued up every financial year based on actual tax paid as stated in Regulations 25(3) of the 2014 Tariff Regulations, hence, truing up of grossed up rate of return on equity ought to be done on this basis only. The Regulation also does not contemplate claim of differential tariff on this account directly from the beneficiaries. Thus, the differential tariff on this account may not be permitted to be claimed directly from the beneficiaries. BSPHCL has submitted that there is no prayer in the petition with respect to recovery of deferred tax liability, hence the same cannot be allowed to the Petitioner.

36. BSPHCL has further submitted that prayer for recovery of deferred tax liability in the instant petition is misplaced in as much as the same had already been considered at para 70 of the order dated 11.12.2015 in Petition No. 433/TT/2014.

37. In response, the Petitioner has submitted that so far it has been granted trued-up tariff of 2014-19 period by the Commission in various matters wherein following effective tax rate for 2014-19 tariff period based on notified Minimum Alternate Tax (MAT) rates has been considered for grossing-up of rate of return on equity (RoE).



Year	Notified MAT rates (inclusive of surcharge & cess)	Effective tax (in %)	Grossed up ROE (Base Rate/1-t) (in %)
2014-15	20.961	20.961	19.611
2015-16	21.342	21.342	19.706
2016-17	21.342	21.342	19.706
2017-18	21.342	21.342	19.706
2018-19	21.549	21.549	19.758

38. Accordingly, the tariff for each year of the tariff period 2014-19 is being determined by Commission considering the above Effective Tax percentage to arrive at Grossed up RoE. In view of the above, the Petitioner submitted that Grossed up RoE and effective tax rate for tariff period 2014-19 has already been determined by the Commission. Further, the Petitioner requested the Commission to allow it to claim the differential tariff on account of the trued-up RoE based on effective tax rate calculated as above and Income-tax assessment/re-assessment for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of the respective assessment orders, directly from the beneficiaries, on year to year basis as provided in the regulation. Income tax assessment for the year 2017-18 and 2018-19 has not yet been completed. The Petitioner has also submitted that it has inadvertently failed to include the prayer with regard to recovery of deferred tax liability as and when it materializes and requested that the Commission may condone the said error and allow the recovery of deferred tax liability as and when it materializes.

39. Further, the Petitioner submitted that deferred tax liability before 1.4.2009 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 the 2014 Tariff Regulations and Regulation 67 of the 2019 Tariff Regulations. The Petitioner has further prayed that it may be allowed to recover the deferred tax liability



materialised directly without making any application before the Commission as provided in the regulation.

40. We have considered that submissions of the Petitioner and Respondent BSPHCL. The Petitioner is entitled for RoE as per the Regulation 24 and 25 of the 2014 Tariff Regulations. No merit is observed in the submissions of BSPHCL as as the Petitioner has submitted necessary documents in support of its claim.

41. The Petitioner is entitled to RoE for the transmission asset in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at 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

42. The Commission vide 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 under:

“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

43. The same MAT rates as allowed vide order dated 27.4.2020 in Petition No. 274/TT/2019 are 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 which is as under:

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

44. The details of trued up RoE allowed for the transmission asset are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	3426.22	3426.22	3426.22	3426.22	3426.22
Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	3426.22	3426.22	3426.22	3426.22	3426.22
Average Equity	3426.22	3426.22	3426.22	3426.22	3426.22
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	671.88	675.14	675.14	675.14	676.95



45. Accordingly, RoE approved earlier, claimed in the instant petition and trued up in respect of the transmission asset are shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 11.12.2015 in Petition No.433/TT/2014	671.88	671.88	671.88	671.88	671.88
As claimed by the Petitioner in the instant petition	672.40	675.48	675.14	675.14	676.95
Allowed after true-up in this order	671.88	675.14	675.14	675.14	676.95

Interest on Working Capital (IWC)

46. The Petitioner is entitled to IWC as per Regulation 28 of the 2014 Tariff Regulations as under:

(i) Receivables

Receivables have been worked out on the basis of 2 months of annual transmission charges.

(ii) Maintenance spares

Maintenance spares have been worked out based on 15% of O&M Expenses.

(iii) O & M expenses

O&M Expenses have been considered for one month of the allowed O&M Expenses.

(iv) Rate of interest on working capital

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

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses (O&M Expenses for one month)	22.25	22.99	23.75	24.54	25.36



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares (15% of O&M)	40.04	41.39	42.75	44.17	45.64
Receivables (Equivalent to two months of annual transmission charges)	316.50	309.86	302.65	216.55	215.90
Total	378.79	374.24	369.16	285.26	286.89
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	51.14	50.52	49.84	38.51	38.73

48. Accordingly, IWC approved vide order dated 11.12.2015 in Petition No. 433/TT/2014, IWC claimed in the instant petition and true up IWC in respect of the transmission asset are shown in the table below:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 11.12.2015 in Petition No.433/TT/2014	50.70	50.02	49.34	37.79	38.00
As claimed by the Petitioner in the instant petition	51.15	50.53	49.84	38.51	38.73
Allowed after true-up in this order	51.14	50.52	49.84	38.51	38.73

Operation & Maintenance Expenses (O&M Expenses)

49. The details of the O&M Expenses claimed by the Petitioner for the transmission asset are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Line					
400 kV Kahalgaon-Biharsharif 2 nd D/C Transmission Line (Double Circuit Double Conductor) (km)	207	207	207	207	207
Norms (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
O&M Expenses Transmission Line	146.35	151.32	156.29	161.46	166.84
Sub-station					
No. of 400 kV Bays at Kahalgaon Sub-station	2	2	2	2	2
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
O&M Expenses Sub-station	120.60	124.60	128.74	133.02	137.42
Total O&M Expenses (₹ in lakh)	266.95	275.92	285.03	294.48	304.26



50. The O&M expenses as claimed by the Petitioner are within norms specified under the 2014 Tariff Regulations. The allowable O&M expenses are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Line					
400 kV Kahalgaon-Biharsharif 2 nd D/C Transmission Line (Double Circuit Double Conductor) (km)	207	207	207	207	207
Norms (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
O&M Expenses Transmission Line	146.35	151.32	156.29	161.46	166.84
Sub-station					
No. of 400kV Bays at Kahalgaon Sub-station	2	2	2	2	2
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
O&M Expenses Sub-station	120.60	124.60	128.74	133.02	137.42
Total O&M Expenses (₹ in lakh)	266.95	275.92	285.03	294.48	304.26

51. Accordingly, O&M Expenses approved earlier, claimed in the instant petition and trued up in respect of the transmission asset are shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 11.12.2015 in Petition No.433/TT/2014	266.95	275.92	285.03	294.48	304.26
As claimed by the Petitioner in the instant petition	266.95	275.92	285.03	294.48	304.26
Allowed after true up in this order	266.95	275.92	285.03	294.48	304.26

Approved Annual Fixed Charges for the 2014-19 Tariff Period

52. The trued up annual fixed charges allowed for the transmission asset for the 2014-19 tariff period are as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	653.24	653.24	653.24	172.59	172.59
Interest on Loan	255.81	204.33	152.68	118.58	102.87
Return on Equity	671.88	675.14	675.14	675.14	676.95
Interest on Working Capital	51.14	50.52	49.84	38.51	38.73
O&M Expenses	266.95	275.92	285.03	294.48	304.26
Total	1899.01	1859.14	1815.91	1299.29	1295.40



53. Accordingly, the details of the Annual Transmission Charges as approved vide order dated 11.12.2015 in Petition No. 433/TT/2014, claimed by the Petitioner in the instant petition and as approved after truing up in the instant order are shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 11.12.2015 in Petition No.433/TT/2014	1879.62	1836.65	1793.83	1267.42	1263.02
As claimed by the Petitioner in the instant petition	1899.54	1859.49	1815.92	1299.29	1295.39
Allowed after true-up in this order	1899.01	1859.14	1815.91	1299.29	1295.40

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

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	172.58	172.58	172.58	172.59	172.58
Interest on Loan	109.83	95.78	81.71	67.64	53.57
Return on Equity	676.95	676.95	676.95	676.95	676.95
Interest on Working Capital	25.24	25.46	25.64	25.83	25.98
O&M Expenses	248.20	256.87	265.84	275.09	284.63
Total	1232.80	1227.64	1222.72	1218.10	1213.71

55. The Petitioner has claimed the following IWC for the 2019-24 period in respect of the transmission asset:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	20.68	21.41	22.15	22.92	23.72
Maintenance Spares	37.23	38.53	39.88	41.26	42.69
Receivables	151.57	151.35	150.75	150.18	149.23
Total	209.48	211.29	212.78	214.36	215.64
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	25.24	25.46	25.64	25.83	25.98



Capital Cost

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

“(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 GrameenVidyutikaranYojana (RGGVY) and DeendayalUpadhyaya Gram JyotiYojana (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.”

57. The Petitioner has claimed capital cost of ₹12356.69 lakh for transmission asset as on 31.3.2019, which is the same as worked out by the Commission.



Accordingly, the capital cost of ₹12356.69 lakh for the transmission asset has been considered as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure

58. The Petitioner has not claimed any ACE for the 2019-24 tariff period for the transmission asset in the instant petition.

Debt-Equity Ratio

59. Regulation 18 of the 2019 Tariff Regulations provides as under:

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

Provided that:

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

(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."

60. The details of the debt-equity ratio considered for the purpose of tariff of the 2019-24 tariff period are as follows:

Funding	Capital cost as on 1.4.2019 (₹ in lakh)	(%)	Total cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	8930.47	72.27	8930.47	72.27
Equity	3426.22	27.73	3426.22	27.73
Total	12356.69	100.00	12356.69	100.00

Depreciation

61. Regulation 33 of the 2019 Tariff Regulations provides as under:

"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."

62. WAROD (Annexure-II to this order) is allowed after taking into account the depreciation rates of asset as prescribed 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 worked out for the transmission asset is as follows:



(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	12356.69	12356.69	12356.69	12356.69	12356.69
Addition during 2019-24 due to projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	12356.69	12356.69	12356.69	12356.69	12356.69
Average Gross Block	12356.69	12356.69	12356.69	12356.69	12356.69
Balance useful life at the beginning of the year	21	20	19	18	17
Depreciable Value	11121.02	11121.02	11121.02	11121.02	11121.02
Rate of Depreciation (%)	Spreading	Spreading	Spreading	Spreading	Spreading
Depreciation during the year	172.59	172.59	172.59	172.59	172.59
Cumulative Aggregate Depreciation	7669.30	7841.89	8014.47	8187.06	8359.65
Remaining Aggregate Depreciable Value	3451.72	3279.13	3106.55	2933.96	2761.37

Interest on Loan (IoL)

63. Regulation 32 of the 2019 Tariff Regulations provides as under:

“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”.

64. BSPHCL has submitted that IOL may be calculated as per Regulation 32 of the 2019 Tariff Regulations. It has further submitted that nothing in the 2019 Tariff Regulations permits change in interest rate due to floating rate of interest applicable, if any, to be adjusted/claimed over the tariff block of five years directly from/with the beneficiaries.

65. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period may be adjusted.

66. 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. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	8930.47	8930.47	8930.47	8930.47	8930.47
Cumulative Repayments up to Previous Year	7496.72	7669.30	7841.89	8014.47	8187.06



Net Loan-Opening	1433.75	1261.17	1088.58	916.00	743.41
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	172.59	172.59	172.59	172.59	172.59
Net Loan-Closing	1261.17	1088.58	916.00	743.41	570.82
Average Loan	1347.46	1174.87	1002.29	829.70	657.12
Weighted Average Rate of Interest on Loan (%)	8.151	8.152	8.152	8.152	8.152
Interest on Loan	109.83	95.78	81.71	67.64	53.57

Return on Equity (RoE)

67. Regulations 30 and 31 of the 2019 Tariff Regulations specify as under:

“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 rates 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 truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”



68. 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 is as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	3426.22	3426.22	3426.22	3426.22	3426.22
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	3426.22	3426.22	3426.22	3426.22	3426.22
Average Equity	3426.22	3426.22	3426.22	3426.22	3426.22
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	643.51	643.51	643.51	643.51	643.51

Interest on Working Capital (IWC)

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

“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;”

70. 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 interest on working capital as 12.05%.

71. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of IWC 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 thereon allowed for the transmission asset is as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses (O&M Expenses for one month)	20.56	21.28	22.03	22.80	23.59
Maintenance Spares (20% of O&M)	37.00	38.30	39.65	41.03	42.46
Receivables (Equivalent to 45 days of annual transmission charges)	147.20	146.77	146.16	145.58	144.65
Total	204.76	206.35	207.83	209.42	210.70
Rate of Interest on working capital (%)	12.05	11.25	11.25	11.25	11.25
Interest of Working Capital	24.67	23.21	23.38	23.56	23.70

Operation & Maintenance Expenses (O&M Expenses)

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

“35. Operation and Maintenance Expenses:

...

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000)	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."

73. The Petitioner has claimed O&M Expenses for the 2019-24 tariff period as

follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line					
400 kV Kahalgaon-Biharsharif 2 nd D/C Transmission Line (Double Circuit Double Conductor) (km)	207	207	207	207	207
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
O&M Expenses Transmission Line	182.37	188.78	195.41	202.24	209.28
Sub-station					
No. of 400kV Bays at Kahalgaon	2	2	2	2	2



Sub-station					
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
O&M Expenses Sub-station	64.30	66.56	68.90	71.32	73.82
Communication System (PLCC)					
Project Cost (₹ in lakh)	76.36	76.36	76.36	76.36	76.36
Norm (%)	2	2	2	2	2
O&M Expenses PLCC	1.53	1.53	1.53	1.53	1.53
Total O&M Expenses (₹ in lakh)	248.19	256.87	265.84	275.09	284.62

74. We have considered the submission 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 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. 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.

75. The O&M Expenses allowed out for the transmission asset covered in the instant petition are as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line					
400 kV Kahalgaon-Biharsharif 2 nd D/C Transmission Line (Double Circuit Double Conductor) (km)	207	207	207	207	207
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
O&M Expenses Transmission Line	182.37	188.78	195.41	202.24	209.28
Sub-station					
No. of 400 kV Bays at Kahalgaon Sub-station	2	2	2	2	2
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
O&M Expenses Sub-station	64.30	66.56	68.90	71.32	73.82
Total O&M Expenses (₹ in lakh)	246.67	255.34	264.31	273.56	283.10

Annual Fixed Charges for the 2019-24 Tariff Period

76. The transmission charges allowed for the transmission asset for the 2019-24 tariff period are as below:



(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	172.59	172.59	172.59	172.59	172.59
Interest on Loan	109.83	95.78	81.71	67.64	53.57
Return on Equity	643.51	643.51	643.51	643.51	643.51
Interest on Working Capital	24.67	23.21	23.38	23.56	23.70
O&M Expenses	246.67	255.34	264.31	273.56	283.10
Total	1197.27	1190.43	1185.49	1180.85	1176.47

Filing Fee and Publication Expenses

77. BSPHCL has submitted that grant of filing fee and expenses incurred is upon the discretion of the Commission and need not necessarily be allowed in all cases. Further, nothing beyond what is contemplated by the 2019 Tariff Regulations may be granted.

78. In response, the Petitioner has submitted that it has prayed for reimbursement of expenditure by the beneficiaries towards petition filing fee and publication expense, in terms of Regulation 70(1) of Tariff Regulations, 2019.

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 has requested to allow it to bill and recover License fee and RLDC fees and charges, separately from the Respondents.

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



Security Expenses

82. 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.

83. 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.

Goods and Services Tax (GST)

84. BSPHCL has submitted that Regulation 56 of the 2019 Regulations contemplates recovery of statutory charges by generating company and not by



transmission licensee and in any case the claim of the Petitioner is premature. Therefore, the claim for GST is liable to be rejected.

85. In response, the Petitioner has submitted that under CGST Act, 2017 implemented w.e.f. 1.7.2017, the Government of India has exempted the charges of transmission of electricity vide notification no. 12/2017 - Central Tax (Rate) dated 28.6.2017 at serial no. 25 under the heading 9969 "Transmission or distribution of electricity by an electric transmission or distribution utility" by giving applicable GST rate as NIL. Hence, the transmission charges as indicated in the instant petition are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future on transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the petitioner and the same shall be charged & billed separately by the petitioner. Further additional taxes, if any, paid by the Petitioner on account of demand from Government/ Statutory authorities, may also be allowed to be recovered from the beneficiaries.

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

Capital Spares

87. 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

88. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the 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.

89. To summarise, the revised Annual Fixed Charges allowed for the transmission asset for the 2004-09 and 2009-14 tariff periods are as under:

Particulars	(₹ in lakh)				
	2004-05 (<i>pro rata</i> for 4 months)	2005-06	2006-07	2007-08	2008-09
Annual Fixed Charges	548.18	1674.82	1665.15	1745.34	1997.34

90. The consequential revision of Annual Fixed Charges allowed for the transmission asset for the 2009-14 tariff period are as under:

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Annual Fixed Charges	2080.13	2072.41	2037.41	2001.18	1973.76

91. The trued-up Annual Fixed Charges allowed for the transmission asset for 2014-19 tariff period are as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	1899.01	1859.14	1815.91	1299.29	1295.40

92. The Annual Fixed Charges allowed for the transmission asset for 2019-24 tariff period in this order are as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	1197.27	1190.43	1185.49	1180.85	1176.47



93. This order disposes of Petition No. 357/TT/2019. Two Annexures attached hereinafter to the order form part of it.

sd/-
(P.S. Mhaske)
Member (Ex-officio)

sd/-
(Pravas Kumar Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I.S. Jha)
Member

sd/-
(P.K. Pujari)
Chairperson



Annexure-I

Asset	Particulars	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
Asset	Land	0.00	0.00	0.00	0.00	0.00	0.00		
	Building	0.00	0.00	3.34	0.00	0.00	0.00		
	Transmission Line	11738.80	11738.80	5.28	619.81	619.81	619.81		
	Sub Station	541.53	541.53	5.28	28.59	28.59	28.59		
	PLCC	76.36	76.36	6.33	4.83	4.83	4.83		
	Leasehold Land	0.00	0.00	3.34	0.00	0.00	0.00		
	IT Equipment and software	0.00	0.00	15.00	0.00	0.00	0.00		
	TOTAL	12356.69	12356.69		653.24	653.24	653.24	172.59	172.59
				Average Gross Block (₹ in lakh)	12356.69	12356.69	12356.69	12356.69	12356.69
				Weighted Average Rate of Depreciation (%)	5.29	5.29	5.29	Spreading	Spreading



Annexure-II

Asset	Particulars	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	Land	0.00	0.00	0.00					
	Building	0.00	0.00	2.17					
	Transmission Line	11738.80	11738.80	1.16					
	Sub Station	541.53	541.53	1.16					
	PLCC	76.36	76.36	0.61					
	Leasehold Land	0.00	0.00	2.17					
	IT Equipment and software	0.00	0.00	0.00					
	TOTAL	12356.69	12356.69		172.59	172.59	172.59	172.59	172.59
		Average Gross Block (₹ in lakh)			12356.69	12356.69	12356.69	12356.69	12356.69
		Weighted Average Rate of Depreciation			Spreading	Spreading	Spreading	Spreading	Spreading

