## CENTRAL ELECTRICITY REGULATORY COMMISSION

#### **NEW DELHI**

# Petition No. 354/TT/2019

Coram:

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

Date of order: 14.05.2021

#### In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and revision of transmission tariff of the 2004-09 and 2009-14 tariff periods and truing up of transmission tariff of the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2019 for LILO of both the circuit of Patratu-Hatia-Chandil 220 kV D/C line at Ranchi Sub-station associated with 220 kV Interconnection with Jharkhand State Electricity Board (JSEB) System at Ranchi Sub-Station in the Eastern Region.

#### And in the matter of:

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

.....Petitioner

#### Versus

- 1. Bihar State Power (Holding) Company Ltd., Vidyut Bhavan, Bailey Road, Patna-800001.
- West Bengal State Electricity Distribution Company Ltd., Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II, Salt Lakecity, Calcutta-700091.
- 3. Grid Corporation of Orissa Ltd., Shahid Nagar, Bhubaneswar-751007.



4. Jharkhand State Electricity Board, in front of Main Secretariat, Doranda, Ranchi – 834002.

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

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

...Respondent(s)

For Petitioner: Shri S. S. Raju, PGCIL

> Shri B. Dash, PGCIL Shri V. P. Rastogi, PGCIL Shri A. K. Verma, PGCIL

For Respondent: Ms. Rohini Prasad, Advocate, BSPHCL

## **ORDER**

The instant petition has been filed by Power Grid Corporation of India Ltd. (hereinafter referred to as "the Petitioner") for revision of transmission tariff of the 2004-09 and 2009-14 tariff periods and truing of the capital expenditure for the period from 1.4.2014 to 31.3.2019 under 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 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 for LILO of both the circuit of Patratu-Hatia-Chandil 220 kV D/C line at Ranchi Sub-station associated with 220 kV Interconnection with Jharkhand State Electricity Board (JSEB) System at Ranchi Sub-Station (hereinafter referred to as "the transmission asset") in the Eastern Region.

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

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

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

- 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
- 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.
- 7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 10.5 above.
- 8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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



# **Background**

- The brief facts of the case are as under:
  - a. The Investment Approval for the transmission assets was accorded by the Board of Directors of the Petitioner's Company *vide* memorandum dated 9.2.2007 at an estimated cost of ₹1248 lakh, which included IDC of ₹0.16 lakh.
  - b. The LILO of 1<sup>st</sup> Circuit and 2<sup>nd</sup> Circuit of the transmission asset was put into commercial operation on two different dates in the 2004-09 tariff period and they were combined in the 2009-14 tariff period. The details of the assets as considered in the 2004-09 tariff period are as follows:

Assets	Date of commercial operation (COD)
Asset-I: LILO of 1st Circuit of Patratu-Hatia-Chandil	
220 kV D/C line at Ranchi Sub-station	
Asset-II: LILO of 2 <sup>nd</sup> Circuit of Patratu-Hatia-Chandil	1.9.2007
220 kV D/C line at Ranchi Sub-station	

- c. The transmission tariff for the period from 1.4.2004 to 31.3.2009 was allowed vide order dated 6.5.2009 in Petition No. 4/2009, further the transmission tariff was revised vide order dated 10.5.2010 in Petition No. 6/2010; and the transmission tariff for the period from 1.4.2009 to 31.3.2014 was allowed vide order dated 8.12.2010 in Petition No. 203/2010. The tariff of the 2009-14 period was trued up and tariff of the period from 1.4.2014 to 31.3.2019 was determined vide order dated 4.12.2015 in Petition No. 173/TT/2014.
- d. The Petitioner has sought revision of transmission tariff approved for the 2004-09 tariff period on account of change in Interest on Loan (IoL) and Interest on Working Capital (IWC) to the extent of revision in IoL and in Maintenance Spares in terms of the Appellate Tribunal for Electricity (hereinafter referred to as ""APTEL") judgment dated 22.1.2007 and 13.6.2007 in Appeal No. 81/2005 and 139/2006 respectively. The Petitioner has sought consequential revision of tariff allowed for the 2009-14 tariff period and truing up of tariff of 2014-19 tariff period and determination of tariff of the 2019-24 tariff period.
- e. The APTEL, *vide* judgement dated 22.1.2007 in Appeal No.81/2005 and other related Appeals, and judgement dated 13.6.2007 in Appeal No.



139/2006 pertaining to generating stations of NTPC decided inter alia on the following issues:-

- (a) Computation of interest on loan
- (b) Consequences of refinancing of loan
- (c) Depreciation as deemed repayment
- (d) Admissibility of depreciation up to 90% of the value of the assets
- (e) Consideration of maintenance of spares for working capital
- (f) Depreciation of assets.
- f. The Commission and certain beneficiaries filed Appeals against the APTEL's judgments before the Hon'ble Supreme Court in 2007. The Appeals were admitted and initially stay was granted by the Hon'ble Supreme Court. Subsequently, on an assurance by NTPC that the issues under Appeal would not be pressed for implementation during the pendency of the Appeals, the stay was vacated by the Hon'ble Supreme Court.
- g. The Petitioner based on the APTEL's judgments dated 22.1.2007 and 13.6.2007, sought re-determination of tariff of its transmission assets for the tariff blocks 2001-04 and 2004-09 in Petition No. 121/2007. The Commission after taking into consideration the pending Appeals before the Hon'ble Supreme Court adjourned the matter sine die and directed to revive the same after the disposal of the Civil Appeals by the Hon'ble Supreme Court.
- h. The Hon'ble Supreme Court dismissed the Civil Appeals filed against the APTEL's said judgments *vide* its order dated 10.4.2018.
- i. Consequent to the Hon'ble Supreme Court's order dated 10.4.2018 in NTPC matters, the Petition No. 121/2007 was listed for hearing on 8.1.2019. The Commission, vide order dated 18.1.2019 in Petition No. 121/2007, directed the Petitioner to submit its claim separately for the assets at the time of filing of truing up of the petitions for the period 2014-19 in respect of concerned transmission assets.
- j. The instant petition was heard on 24.3.2021 and in view of APTEL's judgments dated 22.1.2007 and 13.6.2007 and the order of Hon'ble Supreme Court dated 10.4.2018, tariff of the 2004-09 and 2009-14 tariff periods is being revised. Although, period-wise transmission tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods, suitable assumptions at certain places, if any, are being applied which are being indicated.

- k. The complete scope of the work as per Investment Approval is covered in the instant petition.
- I. The tariff for the 2004-09 tariff period was worked out based on the admitted capital cost as on COD of ₹383.98 lakh for Asset-I and ₹413.16 lakh for Asset-II. Accordingly, considering the admitted capital cost, tariff is being revised for the 2004-09 and 2009-14 tariff periods in terms of the APTEL's judgements dated 22.1.2007 and 13.6.2007.
- 4. The Respondents are distribution licensees and power departments, which are procuring transmission service from the Petitioner, mainly beneficiaries of the Eastern Region.
- 5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. Bihar State Power Holding Company Limited (BSPHCL), Respondent No. 1, has filed its reply vide affidavit dated 2.3.2021, inter alia raised issues like Return on Equity, IoL, filing fee and the publication expenses and effect of GST. The Petiitoner has filed its rejoinder, to the reply of BSPHCL, vide affidavit dated 15.3.2021
- 6. This order is issued considering the submissions made by the Petitioner dated 20.8.2019, 31.7.2020, 15.3.2021 and BSPHCL's reply vide affidavit dated 2.3.2021.
- 7. The hearing in this matter was held on 24.3.2021 through video conference and the order was reserved.
- 8. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.
- 9. The Petitioner has sought revision of the computation of the interest on loan, maintenance spares for working capital and depreciation allowed for the 2004-09 period on the basis of the judgements of the Appellate Tribunal for Electricity (APTEL)

dated 22.1.2007 in Appeal No.81 of 2005 and 13.6.2007 in Appeal No.139/2006. The APTEL while dealing with the issue of computation of interest on loan, in judgement 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 judgement dated 14.11.2006 in Appeal Nos. 94 and 96 of 2005. APTEL in its judgement 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 judgement of 14.11.2006 is 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. The APTEL in judgement dated 13.6.2007 in Appeal No.139 of 2006 and others held that additional capitalisation after the date of commercial operation should also be considered for computation of maintenance spares as follows:

### "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 is 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 judgement 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 judgement is as follows:

## "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 assets, less salvage (if any), over the estimated useful life of the unit (which may be a group of assets) 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. Accordingly, in view of the above directions of APTEL, the outstanding loan allowed for the transmission assets for the 2004-09 period is revised in the instant order.
- 14. We have considered the submissions. The revision of tariff allowed for 2004-09 tariff periods necessitates the revision of tariff allowed for 2009-14 period, which is also allowed in the instant order. The implementation of the directions of APTEL in

case of the Petitioner was kept pending awaiting for the outcome of the Civil Appeals filed before the Hon'ble Supreme Court. We have further considered 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 2001-04, 2004-09 and 2009-14 tariff periods. Therefore, we direct that the Petitioner will neither claim nor pay any carrying cost from/to the beneficiaries for the difference, if any, in the tariff allowed earlier and the tariff being allowed in the instant order. Further, the said difference in tariff shall be recovered/ paid over a period of six months from the date of issue of this order.

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

# 2004-09 Period

15. The Commission in order dated 6.5.2009 in Petition No. 4/2009 and order dated 10.5.2010 in Petition No. 6/2010 had approved the following transmission charges for Asset-I and Asset-II for the 2004-09 period:

## Asset-I

(₹ in lakh)

		(* III Iakii)
Particulars	Particulars 2007-08 (Pro-rata 10 months)	
Depreciation	8.80	12.50
Interest on Loan	22.28	29.54
Return on Equity	14.35	19.65
Advance against Depreciation	0.00	0.00
Interest on Working Capital	1.45	1.94
O&M Expenses	3.43	4.29
Total	50.31	67.91

#### Asset-II

Particulars	2007-08 (Pro-rata 7 months)	2008-09
Depreciation	6.73	13.50
Interest on Loan	16.69	31.70
Return on Equity	10.75	20.44
Advance against Depreciation	0.00	0.00

Total	2.06 <b>37.31</b>	3.68 <b>71.34</b>
O&M Expenses	2.06	2 60
Interest on Working Capital	1.08	2.02

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

Asset-I

(₹ in lakh)

Particulars	2007-08 (Pro-rata 10 months)	2008-09
Depreciation	8.80	12.50
Interest on Loan	22.63	30.98
Return on Equity	14.35	19.65
Advance against Depreciation	0.00	0.00
Interest on Working Capital	1.50	2.06
O&M Expenses	3.43	4.29
Total	50.71	69.48

## **Asset-II**

Particulars	2007-08 (Pro-rata 7 months)	2008-09
Depreciation	6.73	13.50
Interest on Loan	16.87	33.01
Return on Equity	10.75	20.44
Advance against Depreciation	0.00	0.00
Interest on Working Capital	1.10	2.02
O&M Expenses	2.06	3.68
Total	37.51	72.65

- 17. We have considered the Petitioner's claim. The tariff is allowed for the transmission assets on the basis of the following:
  - a) Admitted capital cost of ₹383.98 lakh for Asset-I and ₹413.16 lakh for Asset-II.
  - b) Weighted Average Rate of Interest on actual loan, Weighted Average Rate of Depreciation, Rate of IWC and O&M Expenses as per order dated 6.5.2009 in Petition No. 4/2009 and order dated 10.5.2010 in Petition No. 6/2010.
  - c) With respect to calculation of IoL, during the year 2007-08 and 2008-09 moratorium period was availed by the Petitioner and no actual repayment of Ioan was done. Therefore, depreciation provided during 2007-08 and 2008-09 has

been considered as loan repayment in accordance with Regulation 56(i)(f) of 2004 Tariff Regulations. The relevant extracts of the Regulation 56(i)(f) of 2004 Tariff Regulations is reproduced below:

## "27 (i) Interest on Loan Capital

- (f) In case any moratorium period is availed of by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly;"
- d) Earlier, the Commission vide order dated 6.5.2009 in Petition No. 4/2009 and order dated 10.5.2010 in Petition No. 6/2010 had considered depreciation provided during 2007-08 and 2008-09 as loan repayment. Therefore, during 2007-08 and 2008-09 wherein no actual repayment of loan was made by the Petitioner, depreciation provided has been cosndiered as loan repayment.
- 18. In view of the above, the revised transmission charges allowed for Asset-I and Asset-II for the 2004-09 tariff period is as follows:

Asset-I

(₹ in lakh)

Particulars	Particulars 2007-08 (Pro-rata 10 months)	
Depreciation	8.80	12.50
Interest on Loan	22.28	29.54
Return on Equity	14.35	19.65
Advance against Depreciation	0.00	0.00
Interest on Working Capital	1.58	2.02
O&M Expenses	3.44	4.29
Total	50.45	68.00

#### **Asset-II**

(₹ in lakh)

Particulars	2007-08 (Pro-rata 7 months)	2008-09
Depreciation	6.73	13.50
Interest on Loan	16.69	31.70
Return on Equity	10.75	20.44
Advance against Depreciation	0.00	0.00
Interest on Working Capital	1.34	2.11
O&M Expenses	2.06	3.68
Total	37.57	71.43

19. The AFC allowed vide order dated 6.5.2009 in Petition No. 4/2009 for 2007-08 tariff period and order dated 10.5.2010 in Petition No. 6/2010 for 2008-09 tariff period,



the revised AFC claimed in the instant petition and AFC allowed in the instant order is as follows:

# Asset-I

(₹ in lakh)

Particulars	2007-08 (Pro-rata 10 months)	2008-09
AFC approved <i>vide</i> order dated 6.5.2009 in Petition No. 4/2009 and order dated 10.5.2010 in Petition No. 6/2010	50.31	67.91
AFC claimed by the Petitioner in the instant Petition	50.71	69.48
AFC allowed in the instant order	50.45	68.00

# Asset-II

(₹ in lakh)

Particulars	2007-08 (Pro-rata 7 months)	2008-09
AFC approved <i>vide</i> order dated 6.5.2009 in Petition No. 4/2009 and order dated 10.5.2010 in Petition No. 6/2010	37.31	71.34
AFC claimed by the Petitioner in the instant petition	37.51	72.65
AFC allowed in the instant order	37.57	71.43

# 2009-14 Period

20. The Commission *vide* order dated 8.12.2010 in Petition No. 203/2010 approved the transmission tariff for the transmission asset for the 2009-14 period and in order dated 4.12.2015 in Petition No 173/TT/2014 had trued-up the transmission tariff allowed for the 2009-14 tariff period which is as follows:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	53.39	53.39	53.39	53.39	53.39
Interest on Loan	60.52	55.52	50.44	45.34	40.23
Return on Equity	56.00	58.05	58.11	58.11	58.81
Interest on Working Capital	3.74	3.69	3.60	3.51	3.43
O&M Expenses	4.03	4.26	4.51	4.77	5.04
Total	177.68	174.91	170.05	165.11	160.89

21. The Petitioner has claimed the following revised transmission charges for the transmission asset for the 2009-14 tariff period in the instant petiton:

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	53.39	53.39	53.39	53.39	53.39
Interest on Loan	64.51	59.52	54.45	49.34	44.24
Return on Equity	56.00	58.05	58.11	58.11	58.81
Interest on Working Capital	3.83	3.78	3.68	3.59	3.51
O&M Expenses	4.03	4.26	4.51	4.77	5.04
Total	181.76	178.99	174.14	169.20	164.99

- 22. We have considered the Petitioner's claim. The transmission tariff is allowed for the transmission asset on the basis of the following:
  - a) Admitted capital cost of ₹1000.58 lakh as on 1.4.2009.
  - b) Weighted Average Rate of Interest on actual loan and Weighted Average Rate of Depreciation has been considered from order dated 4.12.2015 in Petition No 173/TT/2014.
- 23. In view of the above, the revised transmission charges allowed for the transmission assets for the 2009-14 tariff period is as follows.

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	53.39	53.39	53.39	53.39	53.39
Interest on Loan	60.52	55.52	50.44	45.34	40.23
Return on Equity	56.00	58.05	58.11	58.11	58.81
Interest on Working Capital	3.74	3.69	3.60	3.51	3.43
O&M Expenses	4.03	4.26	4.51	4.77	5.04
Total	177.68	174.91	170.05	165.11	160.89

24. The AFC allowed earlier for 2009-14 period *vide* order dated 4.12.2015 in Petition No. 173/TT/2014, the revised AFC claimed in the instant petition and AFC allowed in the instant order is as follows:

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
AFC approved <i>vide</i> order dated 4.12.2015 in Petition No. 173/TT/2014	177.68	174.91	170.05	165.11	160.89
AFC claimed by the Petitioner in the instant petition	181.76	178.99	174.14	169.20	164.99
AFC allowed in the instant order	177.68	174.91	170.05	165.11	160.89

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

25. The details of the transmission charges claimed by the Petitioner in respect of the transmission asset is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	53.38	53.38	53.38	53.38	53.38
Interest on Loan	39.13	34.03	28.93	23.82	18.72
Return on Equity	58.85	59.12	59.09	59.09	59.25
Interest on Working Capital	3.74	3.63	3.52	3.41	3.31
O&M Expenses	4.55	4.70	4.85	5.01	5.18
Total	159.65	154.86	149.77	144.71	139.84

26. The details of the IWC claimed by the Petitioner in respect of the transmission asset are as follows:

(₹ in lakh)

Particular	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	0.38	0.39	0.40	0.42	0.43
Maintenance Spares	0.68	0.71	0.73	0.75	0.78
Receivables	26.61	25.81	24.96	24.12	23.31
Total Working Capital	27.67	26.91	26.09	25.29	24.52
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	3.74	3.63	3.52	3.41	3.31

# **Capital Cost**

27. The capital cost of the existing project has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations. The Commission *vide* order 4.12.2015 in Petition No. 173/TT/2014 had allowed capital cost of ₹1000.58 lakh as on 1.4.2014 and the same has been considered as capital cost as on 1.4.2014. The Petitioner has not claimed any ACE in 2014-19 tariff period. Accordingly, the capital cost considered for determination of tariff for the 2014-19 tariff period for transmission asset is as follows:

		/ · · · · · · · · · · · · · · · · · · ·
Capital Cost as on 1.4.2014	ACE	Capital Cost as on 31.3.2019
Capital Cost as on 1.4.2014	2014-19	
1000.58	0.00	1000.58

# **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 debt-equity ratio for the period ending on 31.3.2014, considered for the purpose of determination of tariff of the 2014-19 tariff period has been considered for the purpose of truing up of the tariff for the 2014-19 tariff period. The details of the debt-equity ratio as on 1.4.2014 and 31.3.2019 of the transmission asset is as follows:

Funding	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	700.71	70.03	700.71	70.03
Equity	299.87	29.97	299.87	29.97
Total	1000.58	100.00	1000.58	100.00

# **Depreciation**

29. The Gross Block during the tariff period 2014-19 has been depreciated at weighted average of depreciation (WAROD). The WAROD at Annexure-I has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and trued up depreciation approved is as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	1000.58	1000.58	1000.58	1000.58	1000.58
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	1000.58	1000.58	1000.58	1000.58	1000.58
Average Gross Block	1000.58	1000.58	1000.58	1000.58	1000.58
Rate of Depreciation (%)	5.34	5.34	5.34	5.34	5.34
Depreciable Value	538.66	485.27	431.89	378.50	325.11
Balance useful life of the asset (Year)	28	28	27	26	25
Lapsed life (Year)	6	7	8	9	10
Depreciation during the year	53.39	53.39	53.39	53.39	53.39

Cumulative Depreciation	361.86	415.25	468.64	522.02	575.41
Remaining Depreciable Value Total	538.66	485.27	431.89	378.50	325.11

30. The details of depreciation approved *vide* order dated 4.12.2015 in Petition No. 173/TT/2014, depreciation claimed by the Petitioner and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 4.12.2015 in Petition No. 173/TT/2014	53.39	53.39	53.39	53.39	53.39
Claimed by the Petitioner in the instant petition	53.38	53.38	53.38	53.38	53.38
Allowed after true-up in this order	53.39	53.39	53.39	53.39	53.39

# Interest on Loan (IoL)

31. The Petitioner has claimed the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rate submitted by the Petitioner and in accordance with Regulation 26 of the 2014 Tariff Regulations. Trued up IoL approved for the transmission asset is as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan					
Gross Normative Loan	700.71	700.71	700.71	700.71	700.71
Cumulative Repayments up to Previous Year	308.64	362.03	415.42	468.81	522.19
Net Loan-Opening	392.07	338.68	285.29	231.90	178.52
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	53.39	53.39	53.39	53.39	53.39
Net Loan-Closing	338.68	285.29	231.90	178.52	125.13
Average Loan	365.37	311.99	258.60	205.21	151.82
Weighted Average Rate of Interest on Loan (%)	9.6134	9.6212	9.6319	9.6468	9.6699
Interest on Loan	35.12	30.02	24.91	19.80	14.68

32. The details of loL approved *vide* order dated 4.12.2015 in Petition No. 173/TT/2014, loL claimed by the Petitioner and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order					
dated 4.12.2015 in	35.12	30.02	24.91	19.80	14.68
Petition No. 173/TT/2014					
Claimed by the Petitioner	39.13	34.03	28.93	23.82	18.72
in the instant petition	39.13	34.03	20.93	23.02	10.72
Allowed after true-up	35.12	30.02	24.91	19.80	14.68
in this order	33.12	30.02	24.91	19.60	14.00

# **Return on Equity (ROE)**

33. The Petitioner has claimed Return on Equity for the transmission asset in terms of Regulation 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that they are 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

34. BSPHCL has submitted that as provided in Regulation 25(3) of the 2014 Tariff 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. BSPHCL has further submitted that instant petition is silent on whether the tax and interest paid by the Petitioner is indeed after such adjustment and exclusive of the impermissible claims as stated hereinabove. BSPHCL has further submitted that the grossed up rate of RoE has to be trued up every financial year based on actual tax

paid as stated in Regulations 25(3) of the 2014 Tariff Regulations and Regulations also does not contemplate claim of differential tariff on this account directly from the beneficiaries. Thus, the differential tariff on this account should not be permitted to be claimed directly from the beneficiaries.

- 35. In response, the Petitioner has submitted that the effective rate of tax considered for 2014-15 and 2015-16 are based on Assessment Orders issued by Income-Tax authorities, for the purpose of grossing up of RoE rate and that the effective rate of tax considered for 2016-17 and 2017-18 are based on the Income Tax returns filed, for the purpose of grossing up of RoE rate of respective years. Further, for 2018-19, pending filing of ITR during filing of instant petition, effective tax rate is calculated based the applicable MAT rate (i.e. MAT 18.50% +. Surcharge 12.00% + Cess 4%) for the purpose of grossing up of rate of RoE. The Petitioner has further 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 2019 Tariff Regulations.
- 36. We have considered the submissions of the Petitioner and BSPHCL. As regards BSPHCL's contention that the grossed up rate of RoE for the period 2016-17 to 2018-19 is not based on the MAT rates approved by the Income Tax Authorities, it is observed that the effective rate of tax considered by the Petitioner for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by Income Tax authorities and the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed for the purpose of grossing up the RoE rate of respective years. In view of the clarification given by the Petitioner, we are of the view that there is no merit in the contention of BSPHCL.

- 37. The Commission in order dated 27.4.2020 in Petition No.274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given in the table below. The relevant portion of the order dated 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	Effective tax (in %)
	(inclusive of surcharge & cess)	
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

,

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

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

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	299.87	299.87	299.87	299.87	299.87
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	299.87	299.87	299.87	299.87	299.87
Average Equity	299.87	299.87	299.87	299.87	299.87
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	58.80	59.09	59.09	59.09	59.25

40. The details of RoE approved *vide* order dated 4.12.2015 in Petition No. 173/TT/2014, RoE claimed by the Petitioner and trued up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order					
dated 4.12.2015	58.81	58.81	58.81	58.81	58.81
in Petition No. 173/TT/2014					
Claimed by the Petitioner	58.85	59.12	59.09	59.09	59.25
in the instant petition	36.63	39.12	59.09	59.09	59.25
Allowed after true-up	58.80	59.09	59.09	59.09	59.25
in this order	36.60	59.09	59.09	59.09	59.25

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

41. The O&M Expenses claimed by the Petitioner are as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Transmission Lines							
LILO Patratu- Hatia-Chandil Ckt I (8.07 km) D/C Single Conductor							
LILO Patratu-Hatia-Chandil (	Ckt II (6.92 k	m) D/C Singl	e Conductor				
Claimed by the Petitioner in the instant petition	4.55	4.70	4.85	5.01	5.18		

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

Element	Norms for 2014-15	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19
D/C (Single Conductor)	₹0.303	₹0.313	₹0.324	₹0.334	₹0.346
D/C (Single Conductor)	lakh/km	lakh/km	lakh/km	lakh/km	lakh/km

43. We have considered the submissions of the Petitioner. The trued up O&M Expenses allowed for the transmission asset for the 2014-19 tariff period are as follows:

(₹ in lakh)

					(
Details	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Lines 14.99 km D/C (Single Conductor)	4.54	4.69	4.86	5.01	5.19
Total	4.54	4.69	4.86	5.01	5.19

44. The details of O&M Expenses approved *vide* order dated 4.12.2015 in Petition No. 173/TT/2014, O&M Expenses claimed by the Petitioner and as trued up in the instant order is as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 4.12.2015 in	4.54	4.69	4.86	5.01	5.19
Petition No. 173/TT/2014					
Claimed by the Petitioner in the instant petition	4.55	4.70	4.85	5.01	5.18
Allowed after true-up in this order	4.54	4.69	4.86	5.01	5.19

# **Interest on Working Capital (IWC)**

45. The IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and trued up IWC approved for 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 1 month)	0.38	0.39	0.40	0.42	0.43
Maintenance Spares (15% of O&M Expenses)	0.68	0.70	0.73	0.75	0.78
Receivables (Equivalent to 2 months of fixed cost)	25.92	25.12	24.28	23.43	22.62
Total Working Capital	26.98	26.22	25.41	24.60	23.83
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	3.64	3.54	3.43	3.32	3.22

46. The details of IWC approved *vide* order dated 4.12.2015 in Petition No. 173/TT/2014, IWC claimed by the Petitioner and trued-up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 4.12.2015 in Petition No. 173/TT/2014	3.64	3.53	3.42	3.31	3.21
Claimed by the Petitioner in the instant petition	3.74	3.63	3.52	3.41	3.31
Allowed after true-up in this order	3.64	3.54	3.43	3.32	3.22

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

47. The trued-up annual fixed charges approved for the transmission asset for the 2014-19 tariff period are as follows:

Particulars	2014-15	2015-16	2016-17	2017–18	2018-19
Depreciation	53.39	53.39	53.39	53.39	53.39
Interest on Loan	35.12	30.02	24.91	19.80	14.68
Return on Equity	58.80	59.09	59.09	59.09	59.25
Interest on Working Capital	3.64	3.54	3.43	3.32	3.22
O & M Expenses	4.54	4.69	4.86	5.01	5.19
Total	155.50	150.72	145.67	140.60	135.72

48. Accordingly, the Annual Transmission Charges approved vide order dated 4.12.2015 in Petition No. 173/TT/2014, claimed by the Petitioner and approved after truing up in the instant order is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 4.12.2015 in Petition No. 173/TT/2014	155.50	150.43	145.38	140.31	135.27
Claimed by the Petitioner in the instant petition	159.65	154.86	149.77	144.71	139.84
Allowed after true-up in this order	155.50	150.72	145.67	140.60	135.72

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

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	53.38	12.35	12.35	12.35	12.35
Interest on Loan	13.61	10.51	9.39	8.17	6.95
Return on Equity	59.25	59.25	59.25	59.25	59.25
Interest on Working Capital	2.19	1.54	1.53	1.52	1.51
O&M Expenses	6.71	6.93	7.12	7.34	7.55
Total	135.14	90.58	89.64	88.63	87.61

50. The details of the IWC claimed by the Petitioner for the 2019-24 period are as under:

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	0.56	0.58	0.59	0.61	0.63
Maintenance Spares	1.01	1.04	1.07	1.10	1.13
Receivables	16.62	11.17	11.05	10.93	10.77
Total Working Capital	18.19	12.79	12.71	12.64	12.53
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	2.19	1.54	1.53	1.52	1.51

# **Capital Cost**

51. Regulation 19 of the 2019 Tariff Regulations provide as under:



- "19 Capital Cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.
- (2) The Capital Cost of a new project shall include the following:
  - (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
  - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
  - (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
  - (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
  - (e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;
  - (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
  - (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
  - (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
  - (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
  - (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
  - (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
  - (I) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
  - (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
  - (n) Expenditure on account of change in law and force majeure events; and
  - (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (3) The Capital cost of an existing project shall include the following:
  - (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
  - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
  - (c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
  - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;



- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."
- (4) The capital cost in case of existing or new hydro generating station shall also include:
  - (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
  - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- "(5) The following shall be excluded from the capital cost of the existing and new projects:
  - (a) The assets forming part of the project, but not in use, as declared in the tariff petition;
  - (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."
- 52. The Petitioner has claimed capital cost of ₹1000.58 lakh as on 31.3.2019 for the transmission asset. The same has been worked out by the Commission as on 31.3.2019 and considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.



53. The Petitioner has not projected any ACE during 2019-24 for the transmission asset. Accordingly, the capital cost considered for the 2019-24 tariff period is as follows:

(₹ in lakh)

Total Capital Cost	Projected ACE	Total Capital Cost as on 31.3.2024		
as on 1.4.2019	2019-24	7		
1000.58	0.00	1000.58		

# **Debt-Equity ratio**

- 54. 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.

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

- (2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.
- (3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30%

of the capital cost, equity in excess of 30%shall not be taken into account for tariff computation;

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

- (4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.
- (5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation."
- 55. The debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period as under:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	700.71	70.03	700.71	70.03
Equity	299.87	29.97	299.87	29.97
Total	1000.58	100.00	1000.58	100.00

# **Depreciation**

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

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

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of Page 28 of 44



commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis"

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

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

57. 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 transmission project has completed more than 12 years of useful life as on 1.4.2020. Accordingly for the computation of depreciation, the remaining depreciable value at the beginning of the year is spread over the balance useful life of the asset in the 2019-24 period as prescribed in Regulation 33(5) of the 2019 Tariff Regulations The depreciation allowed for the Combined Asset for the 2019-24 period is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	1000.58	1000.58	1000.58	1000.58	1000.58
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	1000.58	1000.58	1000.58	1000.58	1000.58
Average Gross Block	1000.58	1000.58	1000.58	1000.58	1000.58
Rate of Depreciation (%)	5.34	1.23	1.23	1.23	1.23
Balance useful life of the asset (Year)	23	22	21	20	19
Lapsed life (Year)	11	12	13	14	15
Depreciation during the year	53.39	12.35	12.35	12.35	12.35
Cumulative Depreciation	628.80	641.15	653.50	665.85	678.20
Remaining Depreciable Value Total	271.73	259.37	247.02	234.67	222.32

# Interest on Loan (IoL)

- 58. 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 assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.
- (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.
- (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing."
- 59. The weighted average rate of loL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted.
- 60. BSPHCL has submitted that interest on loan may be calculated as contemplated by Regulation 32 of the 2019 Tariff Regulations. Nothing in the Regulations permit the change in interest rate due to floating rate of interest applicable, if any, to be adjusted/claimed over the tariff period directly from/with the beneficiaries. In response, the Petitioner has submitted that IoL has been calculated on the basis of interest rates prevailing as on 1.4.2019 for respective loans. The change in interest rate due to floating rate of interest applicable, if any, for the project

needs to be claimed / adjusted over the tariff period directly from / with the beneficiaries.

61. We have considered the submission of Petitioner and BSPHCL. The floating rate of interest, if any, shall be considered at the time of true up. Therefore, loL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations and it is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	700.71	700.71	700.71	700.71	700.71
Cumulative Repayments up to Previous Year	575.58	628.97	641.32	653.67	666.02
Net Loan-Opening	125.13	71.74	59.39	47.04	34.69
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	53.39	12.35	12.35	12.35	12.35
Net Loan-Closing	71.74	59.39	47.04	34.69	22.34
Average Loan	98.44	65.57	53.22	40.87	28.51
Weighted Average Rate of Interest on Loan (%)	9.7098	9.7950	9.8876	9.8872	9.8872
Interest on Loan	9.56	6.42	5.26	4.04	2.82

# **Return on Equity (RoE)**

- 62. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provides 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 rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.
- (2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

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

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

#### Illustration-

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

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

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



- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1.000 crore:
- (b) Estimated Advance Tax for the year on above is Rs 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%:
- (d) Rate of return on equity = 15.50/(1-0.24) = 20.395%.
- (3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."
- 63. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. Accordingly, the 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. The RoE allowed for the Combined Asset is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	299.87	299.87	299.87	299.87	299.87
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	299.87	299.87	299.87	299.87	299.87
Average Equity	299.87	299.87	299.87	299.87	299.87
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	56.32	56.32	56.32	56.32	56.32

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

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Lines 14.99 km D/C (Single Conductor)	5.65	5.87	6.06	6.28	6.49
PLCC					
Capital Cost	53.00	53.00	53.00	53.00	53.00
2% of Capital Cost	1.06	1.06	1.06	1.06	1.06

Total	6.71	6.93	7.12	7.34	7.55

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

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays	∣ s (₹ Lakh pe	r bay)			
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹	Lakh per M	VA)			
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 lin	es (₹ Lakh	per km)			
Single Circuit (Bundled Conductor with six or more	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500	834	864	894	925	958
Gazuwaka HVDC Back- to-Back station (₹ Lakh	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath- Agra HVDC bipole	2,563	2,653	2,746	2,842	2,942

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

#### Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW)shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three year
- (b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.
- (c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

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

- (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."
- 66. 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 substation. 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.



67. The O&M Expenses allowed for the transmission asset is as follows:

	2019-20	2020-21	2021-22	2022-23	2023-24			
O&M Expenses								
Transmission Lines 14.99 km D/C (Single Conductor)								
Norms (₹ lakh/km)	0.377	0.391	0.404	0.419	0.433			
Total (₹ in lakh)	5.65	5.86	6.06	6.28	6.49			
Total O&M Expenses allowed (₹ in lakh)	5.65	5.86	6.06	6.28	6.49			

## Interest on Working Capital (IWC)

68. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specifies 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;"
- 69. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. The IWC is worked out in accordance with Page 37 of 44

Regulation 34 of the 2019 Tariff Regulations. The ROI considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, ROI for 2020-21 onwards has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and interest thereon allowed is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	0.47	0.49	0.50	0.52	0.54
(O&M Expenses for 1 month)					
Maintenance Spares	0.85	0.88	0.91	0.94	0.97
(15% of O&M Expenses)	0.00	0.00	0.01	0.01	0.07
Receivables					
(Equivalent to 45 days of annual	15.61	10.14	10.02	9.90	9.74
transmission charges)					
Total Working Capital	16.93	11.51	11.43	11.36	11.26
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	2.04	1.29	1.29	1.28	1.27

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

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	53.39	12.35	12.35	12.35	12.35
Interest on Loan	9.56	6.42	5.26	4.04	2.82
Return on Equity	56.32	56.32	56.32	56.32	56.32
Interest on Working Capital	2.04	1.29	1.29	1.28	1.27
O & M Expenses	5.65	5.86	6.06	6.28	6.49
Total	126.96	82.25	81.28	80.27	79.25

## Filing Fee and the Publication Expenses

71. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BSPHCL has submitted that grant of filing fee and expenses incurred is in the discretion of the Commission and need not necessarily be allowed in all cases. In response, the Petitioner has submitted that reimbursement of expenditure by the beneficiaries towards petition filing fee and publication expense, in

terms of Regulation 70(1) of the 2019 Tariff Regulations. The Petitioner has further submitted that the Commission *vide* order dated 28.3.2016 in Petition No. 137/TT/2015 allowed the recovery of petition filing fee and publication of notices from the beneficiaries on pro-rata basis.

72. We have considered the submissions of the Petitioner and BSPHCL. Regulation 70(1) of the 2019 Tariff Regulations provides for reimbursement of filing fees and publication paid by the Petitioner. Accordingly, the Petitioner is entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

# **Licence Fee & RLDC Fees and Charges**

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

## **Goods and Services Tax**

- 74. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.
- 75. BSPHCL has submitted that Regulation 56 of the 2019 Tariff Regulations contemplates recovery of statutory charges by generating company and not by transmission licensee. In response, the Petitioner has submitted that, if GST is levied

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

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

# **Security Expenses**

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

No.260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

# **Capital Spares**

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

# **Sharing of Transmission Charges**

80. 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.

#### 81. To summarise:

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

		(₹ in lakh)
	Asset I	
Particulars	2007-08 (Pro-rata 10 months)	2008-09
Annual Fixed Charges	50.45	68.00

(₹ in lakh)

Asset II					
Particulars	2007-08 (Pro-rata 7 months)	2008-09			
Annual Fixed Charges	37.57	71.43			

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

(₹ in lakh)

Particulars	2009-10	2010-11	2012-13	2013-14	2014-15
<b>Annual Fixed Charges</b>	177.68	174.91	170.05	165.11	160.89

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017–18	2018-19
<b>Annual Fixed Charges</b>	155.50	150.72	145.67	140.60	135.72

(d) The Annual Fixed Charges allowed for the transmission asset for the 2019-24 tariff period in this order are:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	126.96	82.25	81.28	80.27	79.25

- 82. Annexure-I and II enclosed hereinafter form part of the order.
- 83. This order disposes of Petition No. 354/TT/2019 in terms of the above discussion and findings.

sd/- sd/- sd/-

Pravas Kumar Singh Arun Goyal I.S. Jha P.K. Pujari (Member) (Member) (Chairperson)

# **Annexure-I**

2014-19	Capital Cost as on	ACE (₹ in lakh)	Admitted Rate of Depreciation					itions	
Capital Expenditure	1.4.2014 / COD (₹ in lakh)	2014-19	as on 31.3.2019 (₹ in lakh)	as per Regulations	2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Building Civil Works & Colony	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
Transmission Line	896.58	0.00	896.58	5.28%	47.34	47.34	47.34	47.34	47.34
Sub Station	51.00	0.00	51.00	5.28%	2.69	2.69	2.69	2.69	2.69
PLCC	53.00	0.00	53.00	6.33%	3.35	3.35	3.35	3.35	3.35
IT Equipment (Incl. Software)	0.00	0.00	0.00	15.00%	0.00	0.00	0.00	0.00	0.00
Total	1000.58	0.00	1000.58	Total	53.39	53.39	53.39	53.39	53.39
	Average Gross Block (₹ in lakh)		1000.58	1000.58	1000.58	1000.58	1000.58		
	V	Veighted Av	erage Rate of	Depreciation	5.34%	5.34%	5.34%	5.34%	5.34%

# **Annexure-II**

2019-24	Combined Admitted Capital Cost as on	ACE (₹ in lakh)	Admitted Capital Cost	Rate of Depreciatio	Annual Depreciati on as per
Capital Expenditure	1.4.2019 / COD (₹ in lakh)	2019-20	Capital Cost as on 31.3.2024 (₹ in lakh)       Rate of Depreciation as per Regulation         00       0.00         00       0.00         00       0.00         00       0.00         00       3.34%         00       896.58         5.28%         00       51.00         5.28%         00       53.00         6.33%         00       15.00%         100       1000.58         Total	n as per Regulations	2019-20
Land - Freehold	0.00	0.00	0.00	-	0.00
Land - Leasehold	0.00	0.00	0.00	3.34%	0.00
Building Civil Works & Colony	0.00	0.00	0.00	3.34%	0.00
Transmission Line	896.58	0.00	896.58	5.28%	47.34
Sub Station	51.00	0.00	51.00	5.28%	2.69
PLCC	53.00	0.00	53.00	6.33%	3.35
IT Equipment (Incl. Software)	0.00	0.00	0.00	15.00%	0.00
Total	1000.58	0.00	1000.58	Total	53.39
Average Gross Block (₹ in lakh)					
Weighted Average Rate of Depreciation					

The transmission asset has completed 12 years of life as on 31.3.2020, the remaining depreciable value of ₹271.73 lakh as on 31.3.2020 has been spread across the balance useful life of 22 years in accordance with Regulation 33(5) of the 2019 Tariff Regulations. The annual depreciation from the year 2020-21 and onwards is ₹12.35 lakh.