# **CENTRAL ELECTRICITY REGULATORY COMMISSION**

## **NEW DELHI**

## Petition No. 136/TT/2020

### Coram:

### Shri I. S. Jha, Member Shri Arun Goyal, Member

### Date of Order : 24.01.2021

### In the Matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of **Asset-I**: 315 MVA, 400/220 kV ICT at Mandola and **Asset-II**: 315 MVA, 400/220 kV ICT at Ludhiana under "Spare ICT Scheme in the Northern Region".

#### And in the Matter of:

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

#### .....Petitioner

### Versus

- Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Vidyut Bhawan, Vidyut Marg, Jaipur-302005 (Rajasthan).
- Ajmer Vidyut Vitran Nigam Ltd., 132 kV, GSS RVPNL Sub-Station Building, Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
- Jaipur Vidyut Vitran Nigam Ltd., 132 kV, GSS RVPNL Sub-Station Building, Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
- Jodhpur Vidyut Vitran Nigam Ltd., 132 kV, GSS RVPNL Sub-Station Building,



Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).

- Himachal Pradesh State Electricity Board, Vidyut Bhawan, Kumar House Complex Building II, Shimla-171004 (Himachal Pradesh).
- Punjab State Electricity Board, Thermal Shed Tia, Near 22 Phatak, Patiala-147001 (Punjab).
- Haryana Power Purchase Centre, Shakti Bhawan, Sector-6, Panchkula-134109 (Haryana)
- Power Development Department, Government of Jammu & Kashmir, Mini Secretariat, Jammu.
- Uttar Pradesh Power Corporation Ltd., Shakti Bhawan Extn., 14, Ashok Marg, Lucknow - 226001.
- 10. Delhi Transco Ltd., Shakti Sadan, Kotla Road, New Delhi-110002.
- BSES Yamuna Power Ltd., B Block, Shakti Kiran Bldg. (Near Karkadooma Court), Karkadooma, 2nd Floor, Delhi-110092.
- BSES Rajdhani Power Ltd., (Delhi Discom),
   BSES Bhawan, Nehru Place, New Delhi-110 019.
- 13. Tata Power Delhi Distribution Ltd. (TPDDL), NDPL House, Hudson Lines Kingsway Camp, Delhi-110009.
- 14. Chandigarh Administration, Sector-9, Chandigarh.
- 15. Uttarakhand Power Corporation Ltd., Urja Bhawan, Kanwali Road, Dehradun (Uttarakhand).



- 16. North Central Railway, Allahabad (Uttar Pradesh).
- 17. New Delhi Municipal Council, Palika Kendra, Sansad Marg, New Delhi-110002.

### ...Respondents

For Petitioner: Shri A.K. Verma, PGCIL Shri S.S. Raju, PGCIL Shri B. Dash, PGCIL Shri Abhay Choudhary, PGCIL

For Respondent: Shri R.B. Sharma, Advocate, BRPL

#### **ORDER**

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as "the Petitioner"), a deemed transmission licensee, for truing up of tariff of the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as the "the 2014 Tariff Regulations") and for determination of tariff for the 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of **Asset-I**: 315 MVA, 400/220 kV ICT at Mandola; and **Asset-II**: 315 MVA, 400/220 kV ICT at Ludhiana (hereinafter referred to as the "transmission assets/ Combined Asset)" under "Spare ICT Scheme in the Northern Region" (hereinafter referred to as "the transmission scheme"):

2. The Petitioner has made the following prayers:

*"1)* 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 5 and 6 above.

2) 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 Hon'ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 5 and 6 above for respective block.

3) 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.

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

5) 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 beneficiaries.

6) 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 6.6 above.

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

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

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

### **Background**

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

a) The Investment Approval for the transmission scheme was accorded by the Board of Directors of the Petitioner Company on 8.10.2010 at an estimated cost of ₹2778.00 lakh, including IDC of ₹109.00 lakh (based on 2<sup>nd</sup> Quarter 2010 price level). The scope of work covered under the scheme is as follows:

Sub-stations:

- (i) Mandola 400/220 kV Sub-station-400/220 IV, 315 MVA ICT
- (ii) Ludhiana 400/220 kV Sub-station- 400/220 kV, 315 MVA ICT

b) Both the elements covered in the transmission scheme are covered in the instant petition. The transmission assets were scheduled to be put under commercial operation on 1.7.2012 and Assets-I and II were put into commercial



operation on 1.11.2010 and 1.12.2011 respectively. Thus, there is no time overrun in case of the transmission assets.

c) The tariff for the transmission assets from the COD to 31.3.2014 was approved vide order dated 6.1.2015 in Petition No. 113/TT/2012.

d) While truing up tariff for 2009-14 tariff period in Petition No. 191/TT/2015, the Petitioner claimed the date of commercial operation (COD) of Asset-II as 1.12.2011 as per approved COD in order dated 6.1.2015 in Petition No. 113/TT/2012. However, since the Petitioner had capitalized expenditure from 1.3.2012 and no liability was created before the COD, the Commission had considered the COD of Asset-II as 1.3.2012 for computation of tariff in order dated 26.2.2016 in Petition No. 191/TT/2015.

e) Annual Fixed Charges (AFC) for the transmission assets were trued-up and transmission tariff was allowed for the 2014-19 period vide order dated 26.2.2016 in Petition No. 191/TT/2015, the details of which are as under:

(₹ in lakh) **Particulars** 2018-19 2014-15 2015-16 2016-17 2017-18 AFC approved vide order dated 26.2.2016 323.03 323.10 312.71 302.34 291.97 in Petition No. 191/TT/2015 AFC claimed by the Petitioner in the instant 323.41 312.98 292.61 322.96 302.62 petition based on truing up

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing 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. Uttar Pradesh Power Corporation Ltd. (UPPCL), Respondent No.9, has filed its reply vide affidavit dated 14.7.2020. UPPCL has raised the issues of additional capitalization, time over-run, cost over-run, Interest on Loan (IoL), Return on Equity and license fees. BSES Rajdhani Power Ltd. (BRPL), Respondent No.12, has filed its reply vide affidavits dated 24.9.2020. BRPL has raised the issues of validity of determination of tariff of Spare ICTs which are not in use, adoption of Indian Accounting Standard 101, computation of income tax, Return on Equity (RoE), Deferred Tax Liability, recovery of tax on truing-up exercise of RoE, applicability and recovery of GST, Interest on Working Capital (IWC), recovery of security expenses, passing of tax benefits to consumers and recovery of application filing fee and the expenses. The Petitioner vide affidavit dated 4.5.2020 has filed reply to the Technical Validation (TV) letter dated 20.3.2020 and vide affidavits dated 11.8.2020 and 13.8.2020 has filed rejoinder to the reply of UPPCL and BRPL respectively. The issues raised by Respondents and the clarifications given by the Petitioner are considered in the relevant portions of this order.

6. This order is issued considering the submissions made by the Petitioner in the Petition and the Petitioner's reply to the TV letter, replies filed by UPPCL and BRPL and the Petitioner's rejoinder to the replies of the Respondents UPPCL and BRPL.

7. The hearing in this matter was held on 28.7.2020 through video conference and the order was reserved.

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



9. BRPL has submitted that representation of consumer's interest and their participation in the tariff determination proceedings is an integral part of the hearing. Referring to Regulation 18 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, BRPL has submitted that some Association, Forum or body Corporate recognized by the Commission may be asked to represent the interest of consumers during hearings of the instant petition. BRPL has further submitted that one of the said agencies may be instructed to represent the consumer's interest in the instant case and the same is also provided for in section 94(3) of the Electricity Act, 2003.

10. We have considered the above submissions of the BRPL. In terms of Regulation 3 (6) and (8) of Central Electricity Regulatory Commission (Procedure for Making of Application for Determination of Tariff, Publication of Application and Other Related Matters) Regulations, 2004 (hereinafter referred to as 'the 2004 Application Regulations"). Accordingly, the Petitioner has published Notice in the newspapers and vide affidavit dated 5.3.2020 has submitted that it has carried out the publication of the present tariff application in the newspapers dated 24.1.2020 in various languages. Further, the instant petition has been uploaded on the Petitioner's website. The Notice published in newspaper contained a statement that the application made for determination of tariff is posted on the website of the applicant and the address of the website has also been given. The said Notice contained a statement that "suggestions or objections, if any, on the tariff proposals for determination of tariff may be filed by any person including the beneficiary in the Office of the Secretary, Central Electricity Regulatory Commission with a copy to the applicant at is Corporate Office within 30 days of publication of the notice. No suggestions/objections with regard to the present tariff petitions were received by the Commission before listing of the present petition for hearing. In view of the above, we are of the view that there is no need to engage any agency to represent the interest of consumers.

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

11. The Petitioner has claimed the following trued up tariff for the Combined Asset

for the period from 1.4.2014 to 31.3.2019:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	102.85	105.83	105.83	105.83	105.83
Interest on Loan	98.16	91.76	81.63	61.40	61.40
Return on Equity	114.68	118.54	118.48	118.80	118.80
Interest on Working	7.27	7.28	7.04	6.58	6.58
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	322.96	323.41	312.98	302.62	292.61

12. The Petitioner has claimed the following trued up Interest on Working Capital

(IWC) for the Combined assets for the period from 1.4.2014 to 31.3.2019:

	- <u>r</u>				(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	53.83	53.90	52.16	50.44	48.77
Total Working Capital	53.83	53.90	52.16	50.44	48.77
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	7.27	7.28	7.04	6.81	6.58

13. BRPL has submitted that the transmission assets are spare ICTs and the tariff in respect of such assets may not be granted as they are lying as spares and are not in use. BRPL has submitted that in accordance with Regulation 7(1) of the 2009 Tariff Regulations and Regulation 9(6)(a) of the 2014 Tariff Regulations, the assets forming part of the project but not in use are required to be removed from the capital costs. BRPL has further submitted that APTEL in its judgments dated 25.4.2016 in Appeal No. 98 of 2015 observed that the transformers that stand replaced, till the time they are requisitioned by any beneficiary State, they would remain and be treated as spare transformers, but 'asset not in use'. BRPL has further submitted that APTEL in its judgment dated 8.5.2014 in Appeal No. 173 of 2013 titled as NTPC Ltd. Vs. CERC &



. . . .

Ors. and judgment dated 1.5.2015 in Appeal No. 97 of 2013 titled NTPC Ltd. Vs. CERC & Ors. disallowed the capitalization of spares/ additional transformers. BRPL has submitted that APTEL in its judgment dated 1.5.2015 in Appeal No. 97 of 2013 has specifically observed that unless there is a specific provision in the regulations permitting capitalization of the cost of spare assets, such assets cannot be included in the capital cost. BRPL has further submitted that the decision to include the cost of spare ICTs is an incorrect decision and an incorrect decision cannot be allowed in perpetuity as observed by APTEL in judgement dated 12.5.2015 in Appeal Nos.129 of 2012 & Ors. In view of the judgements of APTEL, the transmission assets should be removed from the PoC mechanism and the Petitioner should be directed to refund the tariff charges claimed from the beneficiaries.

14. In response, the Petitioner has submitted that the procurement of spare ICTs in the present case at Mandola and at Ludhiana was discussed and agreed in the 14<sup>th</sup> NRPC (Northern Regional Power Committee) meeting held on 19.9.2009. Subsequently, the matter was discussed and agreed in the 28<sup>th</sup> SCM (Standing Committee Meeting) of Northern Region held on 23.2.2010. In the 18<sup>th</sup> NRPC meeting, preponement of procurement of ICT was discussed and agreed because of the ensuing Commonwealth Games (CWG). Accordingly, one transformer was kept as spares at Mandola during CWG as discussed in the NRPC meeting. The Petitioner has furnished the relevant extracts of the 14<sup>th</sup> NRPC meeting dated 19.9.2009, the 28<sup>th</sup> meeting of the Standing Committee of the Northern Region dated 23.2.2010 and 18<sup>th</sup> NRPC meeting regarding delivery and commissioning of the transformers covered in the instant petition.

15. The Petitioner has further submitted that APTEL's judgment dated 25.4.2016 in Appeal No. 98 of 2015 (against order of the Commission dated 6.1.2015 in Petition No.206/TT/2012) cannot be applied to the facts of the present case as the subject matter in the said Appeal and the facts of the present case are entirely different. In the said judgement dated 25.4.2016, the Petitioner had replaced the 3x50 MVA, 220/132 kV transformer by 3x160 MVA 220/132 kV transformer at 400/200/132 kV Malda and Birpara Sub-stations. The Commission in its order dated 6.1.2015 in Petition No. 206/TT/2012 observed that 50 MVA transformers were no longer the assets in use after their replacement and they also had completed their useful life. As such, the three 50 MVA transformers were required to be de-capitalized from the date of replacement and not to be considered as spare transformers.

16. The Petitioner has further submitted that APTEL's judgment dated 1.5.2015 in Appeal No. 97 of 2013 relates to a generator transformer which was in operation in Tanda Power Station for more than 20 years. During the capital overhaul, insulation of the generator transformer was found to be affected due to ageing and fatigue that might have led to failure of generator transformer. Outage of generator transformer may require repair and there would be significant loss of generation during the restoration time. As such, it became necessary to procure one spare generator transformer to be kept in stock.

17. The Petitioner has further submitted that Appeal No. 173 of 2013 was filed by NTPC against the Commission's order dated 28.5.2013 in Petition No. 269 of 2009, wherein the Commission disallowed the capital expenditure on purchase of generator transformer at Kahalgaon STPS (Stage-II) on the ground that the damaged generator transformer was replaced by the spare generator transformer which was available at

the generating station and that the expenditure on the spare transformer had already been considered in the capital cost in the year 2002-03.

18. The Petitioner has also submitted that the spare ICTs in the instant petition were procured for reliability and stability of the Grid based on the discussions before forums such as NRPC and SCM of Northern Region. Subsequently, the Commission approved and trued-up the transmission tariff of the transmission assets in previous orders.

19. We have considered the submissions of BRPL and the Petitioner. BRPL's contentions are two-fold. The first contention of BRPL is that in view of the APTEL's judgements, the tariff for the instant two 315 MVA ICTs in Mandola and Ludhiana, which are spares, should not be granted. The second contention is that in view of Regulation 7(1) of the 2009 Tariff Regulations and Regulation 9(6)(a) of the 2014 Tariff Regulations, the transmission assets which are spares and not in use should not be granted tariff. We deal with the contentions of BRPL in the subsequent paragraphs.

20. As stated in paragraph 3 above, COD of Assets-I and II was approved by the Commission as 1.11.2010 and 1.3.2012 respectively. The tariff for the transmission assets from their COD to 31.3.2014 was approved vide order dated 6.1.2015 in Petition No. 113/TT/2012 and the transmission tariff of the 2009-14 tariff period was trued up and tariff for the 2014-19 period was allowed vide order dated 26.2.2016 in Petition No. 191/TT/2015. The instant petition is for truing up of the tariff of the 2014-19 tariff period and for grant of tariff for the 2019-24 tariff period. It is observed that the procurement of the instant spare ICTs was discussed and agreed in the 14<sup>th</sup> NRPC meeting held on 19.9.2009 and in the 28<sup>th</sup> SCM of Northern Region on 23.2.2010. The



instant ICTs were planned and executed as spares taking into consideration the technical requirements and after having been approved by the beneficiaries in NRPC. In this backdrop, we consider the applicability of the APTEL's judgement dated 25.4.2016 in Appeal No. 98 of 2015 to the present case. Appeal No.98 of 2015 was filed by the Petitioner against the Commission's order dated 6.1.2015 in Petition No.206/TT/2012. The Commission in the said order dated 6.1.2015 did not approve use of the replaced transformers, which had completed their useful life, as spares and the same was upheld by APTEL in its judgement dated 25.4.2016 which has been relied upon by BRPL. In the instant case, the ICTs have been planned, approved and executed as spares to meet eventualities, whereas in Petition No.206/TT/2012, the Petitioner's prayer was to use the transformers, which had completed their useful life, as spares. We are of the considered view that the facts in the instant case are markedly distinct from the facts that were before APTEL in Appeal No. 98 of 2015 and, therefore, the judgement dated 25.4.2016 of APTEL cannot be extended to the present case. It is further observed that BRPL has raised the issue after more than eight years of the commercial operation of the assets and five years of granting initial tariff for the transmission assets.

21. BRPL has further submitted that APTEL in its judgments dated 8.5.2014 in Appeal No. 173 of 2013 and 1.5.2015 in Appeal No. 97 of 2013 disallowed capitalization of spare transformers and accordingly tariff should not be allowed for the instant spare ICTs. APTEL's judgement dated 8.5.2014 in Appeal No. 173 of 2013 was against the Commission's order dated 28.5.2013 in Petition No.269/2009. NTPC in Petition No.269/2009 sought capital expenditure for purchase of a generator transformer at Kahalgaon STPS in addition to the spare generator transformer, which

replaced the damaged transformer. In short, NTPC sought an additional spare generator transformer which was disallowed by the Commission in order dated 28.5.2013 and the same was upheld by APTEL in judgement dated 8.5.2014 in Appeal No. 173 of 2013. In Appeal No. 97 of 2013 relating to NTPC's Tanda Thermal generating station, capitalization of the spare generator transformer sought by NTPC on the ground that it was a takeover plant was disallowed by the Commission as it was after the cut-off date and there was no such provision under the 2009 Tariff Regulations for its capitalization and this was affirmed by APTEL in its judgment dated 1.5.2015 in Appeal No. 97 of 2013. We are of the view that the facts in the instant case are different from the facts and the claims made by NTPC in Petition No.269/2009 and Petition No.329/GT/2014 in respect of Kahalgaon and Tanda generating station respectively. Therefore, we are of the view that the APTEL's judgements dated 8.5.2014 in Appeal No. 173 of 2013 and 1.5.2015 in Appeal No. 97 of 2013 are not applicable to the instant case.

22. BRPL's second contention is that as per Regulation 7(1) of the 2009 Tariff Regulations and Regulation 9(6)(a) of the 2014 Tariff Regulations, the transmission assets which are spares and '*not-in-use*' should not be granted tariff. BRPL has emphasized that the instant spare ICTs are '*not-in-use*' and hence they should be removed from the capital cost and should not be serviced. In our view, this submission of BRPL is misconceived. It is pertinent to mention that these spare ICTs were discussed and agreed in the 14<sup>th</sup> NRPC meeting held on 19.9.2009 and in the 28<sup>th</sup> SCM of Northern Region held on 23.2.2010. Accordingly, these assets have been planned, approved and executed as "spare ICTs". In our view, any asset that is set-up or developed as a standalone spare asset is expected to serve the intended purpose

i.e. 'to be in use as a spare' and cannot be categorized as assets 'not in use" and should be serviced. In this background, we are not inclined to accept the contention of BRPL.

23. As regards the contention of BRPL that a wrong order cannot be allowed in perpetuity, we are of the view that there is no infirmity in the Commission's orders dated 6.1.2015 in Petition No. 113/TT/2012 and order dated 26.2.2016 in Petition No. 191/TT/2015. Hence, question of removal of the transmission assets from the PoC computation and reimbursement of tariff already recovered from the beneficiaries does not arise.

24. To ensure that beneficiaries are not unnecessarily burdened on account of tariff, the 'assets in use' and 'assets in use as spares' have been accorded different treatment as regards O&M Expenses. The regular 'assets in use' have been granted all the five components of tariff i.e. Return on Equity, Depreciation, Interest on Loan, Interest on Working Capital and O&M Expenses. On the other hand, the 'assets in use as spares' have been granted all the components of tariff except the O&M Expenses. Neither the Petitioner claimed nor the Commission allowed O&M Expenses for spare ICTs, transformers, reactors, etc. as by nature they are "spares" and not used throughout the year and are used only in case of any exigency. This is evident from the order dated 6.1.2015 in Petition No. 113/TT/2012 wherein the Petitioner had itself not claimed any O&M Expenses for the transmission assets for the period from the date of commercial operation to 31.3.2014. Similarly, the Petitioner had not claimed any O&M Expenses for the transmission assets for the 2014-19 period wherein tariff was allowed vide order dated 26.2.2016 in Petition No. 191/TT/2015.

25. However, the Petitioner has combined the transmission assets into one Combined Asset in the 2019-24 tariff period and has claimed O&M Expenses for the 2019-24 period for the Combined Asset. The Petitioner has submitted that the O&M Expenses have been claimed under Regulation 35(3)(a) of the 2019 Tariff Regulations based on the MVA rating of transformers. The Petitioner has further submitted that there was no provision for O&M Expenses for transformers based on their ratings in the 2014 Tariff Regulations and therefore no O&M Expenses were claimed in the 2014-19 tariff period. In fact, it is observed that the Petitioner has made similar claims in case of "spares" in other petitions as well. In the instant case, the Petitioner has submitted that there was no provision for O&M Expenses for transformers based on their rating in the 2014 Tariff Regulations and hence no O&M Expenses were claimed for the 2014-19 tariff period and since the 2019 Tariff Regulations provide norms for transformers based on their rating, O&M Expenses are claimed for the Combined Asset for the 2019-24 tariff period.

26. The norms for O&M Expenses are specified in the 2019 Tariff Regulations for various types of transmission elements taking into consideration the mandatory annual maintenance and annual expenditure required for upkeep and maintenance of the various transmission elements. These norms are arrived at on the basis of the historical data submitted by the transmission licensees, including the Petitioner, at the time of framing the 2019 Tariff Regulations. The norms specified in the 2019 Tariff Regulations are for the whole year hence they are applicable for the transmission elements which are put to regular use throughout the year. We are of the considered view that these norms cannot be extended to the spares which are not put to use throughout the year and are put into use only when there is failure of the existing transmission elements and in case of any exigency.

27. In the instant case, the ICTs at Mandola and at Ludhiana are spare transformers which are to be used only in case of any exigency. Hence, we are view that the norms specified in Regulation 35(3) of the 2019 Tariff Regulations for regular transformers cannot be made applicable to the instant spare transformers. Moreover, the Commission is of the consistent view that no O&M Expenses can be allowed for spare transmission elements based on the norms for regular transmission elements, therefore no O&M Expenses were allowed for the spare transmission elements during the 2009-14 and 2014-19 tariff periods and the Petitioner had itself not claimed O&M Expenses for these assets.

28. We are also not convinced with the Petitioner's clarification that it has not claimed O&M Expenses for the 2014-19 tariff period since the 2019 Tariff Regulations provide for O&M Expenses for transformers based on their rating. The norms specified in the 2019 Tariff Regulations are for transmission elements that are in regular use and not for spares which are used only in case of any eventualities. As already stated earlier, the 'assets in use as spares' are being granted tariff only on the basis of consent and approval of the concerned Regional Power Committee and as these assets are not being in regular use, we are of the view that O&M Expenses cannot be granted to the transmission assets. Accordingly, O&M Expenses are not allowed for the Combined Asset for the 2019-24 tariff period. We also feel that it is pertinent to mention here that disallowance of O&M Expenses for the Combined Asset does not mean that they do not need any maintenance and the consequent expenditure. The Combined Asset requires maintenance and the expenditure involved in maintaining them would be miniscule compared to the O&M Expenses in respect of transformers put to regular use. We are also of the view that the Petitioner should meet this expenditure from the O&M Expenses allowed for the regular ICTs installed at Mandola and Ludhiana in Northern Region. In case, the expenses are unusually high and cannot be met from the O&M Expenses allowed for the regular ICTs, the Petitioner may approach the Commission with certification of O&M Expenses from RPC at the time of true-up.

29. To bring in more clarity on issues regarding the spare ICTs/ reactors/ transformers and for knowledge of the beneficiaries, the Petitioner is directed to submit the following information on affidavit within 60 days of issue of this order and also to display the same on its website:

(a) the region-wise approved spare ICTs/ reactors/ transformers;

(b) the details of ICTs/ reactors/ transformers which were initially part of a transmission system or project and later on, they being used as regional spares; and

(c) the usage philosophy of the spare ICTs being followed by the Petitioner, within 30 days of issue of this order.

## Weighted Average Life (WAL) of the transmission project

30. The Combined Asset consists only of sub-stations for which the life stipulated in the 2009 Tariff Regulations is 25 years. Hence, WAL of the Combined Asset is 25 years.

## Initial Spares

31. The Petitioner had claimed Initial Spares of ₹21.07 lakh for Asset-II in Petition No.113/TT/2012 and no claim was made against Asset-I. The Commission had allowed the Petitioner's claim and capitalized the cost of Initial Spares amounting to ₹21.07 lakh in case of Asset-II in order dated 6.1.2015 in Petition No. 113/TT/2012 and the same amount was considered in order dated 26.2.2016 in Petition No.

191/TT/2015. The Petitioner has accounted for admitted Initial Spares while claiming capital cost as on 1.4.2014 and has not made any fresh claim of Initial Spares. The same has been considered in this order.

### Capital Cost

32. The details of the capital cost approved by the Commission in order dated 26.2.2016 in Petition No. 191/TT/2015 are as under:

								(₹ in lakh)	
	Approved	Admitted Capital Cost as on COD in	Additional Capital Expenditure				ture	Capital	
Asset	Capital Cost	order dated 6.1.2015 in Petition No. 113/TT/2012	2010- 11	2011- 12	2012- 13	2013- 14	Total	Cost as on 31.3.2014	
Asset-I	1422.05	1060.63	15.94	30.50	0.00	3.02	49.46	1110.09	
Asset-II	1355.94	751.12	0.00	30.00	0.27*	0.00	30.27	781.39	
Total	2777.99	1811.75	15.94	60.50	0.27	3.02	79.73	1891.48	

\*₹19.69 lakh adjusted due to disallowance of Interest During Construction (IDC)

33. The Petitioner has claimed the capital cost of ₹1891.48 lakh as on 31.3.2014 for the Combined Asset. The capital cost as on 31.3.2014 claimed by the Petitioner for the Combined Asset in the instant petition is same that was allowed in order dated 26.2.2016 in Petition No. 191/TT/2015 and, hence, the same has been considered as opening capital cost as on 1.4.2014 in accordance with Regulation 9 of the 2014 Tariff Regulations.

34. BRPL has submitted that the Petitioner has opted for deemed cost exemption as per para D7 AA of IND AS 101 'First time Adoption' of Indian Accounting Standard which is resulting in mere increase of tariff. The adoption of Indian Accounting Standard is for the purposes of the Companies Act, 2013 and not for the purposes of the Tariff Regulations which provides its own procedure for computation of tariff. In response, the Petitioner vide affidavit dated 13.8.2020 has submitted that the Ministry of Corporate Affairs (MCA), in 2015, had notified the Companies (Indian Accounting Standards (IND AS) Rules 2015, which stipulated mandatory adoption and applicability of IND AS beginning from the accounting period 2016-17 for companies having net worth more than ₹500 crore. Accordingly, the Petitioner adopted IND AS w.e.f. 2015-16. As PGCIL adopted IND AS from 2015-16 onwards, the Gross Block less Accumulated Depreciation as on 1.4.2015 is considered as deemed cost as on the date of transition i.e. 1<sup>st</sup> April 2015 in the books of accounts. As such, in case of assets which achieved COD before 1.4.2015, the gross block of the assets reflects gross block less accumulated depreciation as on 31.3.2015 in the books of accounts. There has been no change in the capital cost or Additional Capital Expenditure (ACE) considered for claiming transmission tariff on account of adoption of IND AS. For the purpose of computation of tariff, the actual capital cost and ACE has been claimed/ considered. Thus, there is no impact in tariff at all on account of adoption of IND AS at any point of time.

35. We have considered the submissions of the Petitioner and BRPL. BRPL has contended that the new accounting standards adopted would result in higher tariffs. The Petitioner in response has clarified that the new standards adopted by it would not have any impact on the tariff to be determined by the Commission. The new accounting standards have been adopted by the Petitioner as per the requirement under the Companies Act, 2013. BRPL has merely stated adoption of new accounting standards would lead to higher tariff and has not stated how it would lead to higher tariff. The tariff is determined for the transmission assets owned by the Petitioner on the basis of the applicable tariff regulations, in the instant case the 2014 Tariff Regulations and 2019 Tariff Regulations. As the tariff is determined on the basis of the

tariff regulations, we are of the view that the adoption of the new accounting standards by the Petitioner would not have any impact on the tariff that is determined purely on the basis of the applicable tariff regulations.

# Additional Capital Expenditure (ACE)

36. The Petitioner has claimed ACE of ₹112.79 lakh during 2014-15 for the Combined Asset towards Balance and Retention Payments towards works executed within the cut-off date.

37. The Petitioner has further submitted Auditor Certificates dated 30.7.2019 certifying actual ACE during 2014-15 as follows:

	(₹ in lakh)
Asset	Actual ACE during 2014-15 as per Auditor Certificates dated 30.7.2019
Asset-I	2.48
Asset-II	110.31

38. The Commission vide order dated 26.2.2016 in Petition No. 191/TT/2015 had allowed ACE of ₹2.48 lakh for Asset-I during 2014-15 towards Price Variation (PV) clause in the sub-contract(s) of the Petitioner and had allowed ACE of ₹110.31 lakh for Asset-II during 2014-15 towards balance and retention payments. The Auditor Certificates submitted by the Petitioner certify actual ACE of ₹2.48 lakh for Asset-I during 2014-15 towards PV and actual ACE of ₹110.31 lakh for Asset-II during 2014-15 towards PV and actual ACE of ₹110.31 lakh for Asset-II during 2014-15 towards PV and actual ACE of ₹110.31 lakh for Asset-II during 2014-15.

39. We have considered the submissions of the Petitioner. The claim with respect to ACE made in the instant petition is the same that was approved in order dated 26.2.2016 in Petition No. 191/TT/2015. The date of commercial operation for Asset-I was 1.11.2010 and hence the cut-off date was 31.3.2013. The date of commercial

operation for Asset-II is considered as 1.3.2012 and hence the cut-off date is 31.3.2015. The ACE claimed is within the original scope of work and also within the approved cost of the Combined Asset and hence ACE allowed from 1.4.2014 to 31.3.2019 in respect of the transmission assets in the instant petition is as under:

Asset	ACE allowed for 2014-19 (₹ in lakh)	Reason
Asset-I	2.48	Liability on account of PV under Regulation 14(3)v of the 2014 Tariff Regulations
Asset-II	110.31	Balance and retention payments under Regulation 14(1)(i) of the 2014 Tariff Regulations
Combined Asset	112.79	

40. The capital cost considered for the Combined Asset for the 2014-19 tariff period is as under:

			(₹ in lakh)
FR Apportioned	Capital Cost as on	ACE	Capital Cost as on
Approved Cost	1.4.2014	2014-15	31.3.2019
2778.00	1891.48	112.79	2004.27

41. UPPCL vide affidavit dated 14.7.2020 has submitted that the details of cost over-run and time over-run have not been submitted by the Petitioner. In response, the Petitioner vide affidavit dated 11.8.2020 has submitted that the capital cost as on 31.3.2014 claimed by the Petitioner for the Combined Asset in the instant petition is same as that was allowed by the Commission in the order dated 26.2.2016 in Petition No. 191/TT/2015 and has been considered as opening capital cost as on 1.4.2014. The Petitioner has further submitted that in the instant case, there was no time over-run in case of any of the assets. We have considered the submissions of the Petitioner and UPPCL. There is neither cost over-run nor time over-run in case of the transmission assets. Thus, there is no merit in the contention of UPPCL.

# Effective Date of Commercial Operation (ECOD)

42. The Commission had approved COD of Asset-I and Asset-II as 1.11.2010 and 1.3.2012 respectively. The Petitioner has considered the effective COD for the Combined Asset as 1.5.2011 and has claimed the transmission charges for the Combined Asset as per effective COD of 1.5.2011. However, the effective COD is computed as 21.5.2011 as shown hereunder:

Asset	Capital Cost as on COD (₹ in lakh)	COD considered for computation of tariff	No. of days for COD of Asset from COD of last Asset	Weight of cost	Weighted days		
Asset-I	1060.63	1.11.2010	486	58.54%	280.51		
Asset-II	751.12	1.3.2012	0	41.46%	0.00		
Combined Asset	1811.75			100%			
	Effective COD-21.5.2011						

# Debt-Equity ratio

43. The Petitioner has claimed Debt-Equity ratio of 70:30 as on the date of commercial operation. Debt-Equity ratio of 70:30 is considered as provided in Regulation 19 of the 2014 Tariff Regulations. The details of Debt-Equity ratio in respect of the Combined Asset as on 1.4.2014 and as on 31.3.2019 are as under:-

Dentioulana	Capital Cost as on 1.4.2014		ACE during 2014-19 period		Capital Cost as on 31.3.2019	
Particulars	Amount (₹ in lakh)	% age	Amount (₹ in lakh)	% age	Amount (₹ in lakh)	% age
Debt	1324.03	70.00	78.96	70.00	1402.99	70.00
Equity	567.45	30.00	33.83	30.00	601.28	30.00
Total	1891.48	100.00	112.79	100.00	2004.27	100.00

# Interest on Loan (IoL)

44. The Petitioner has claimed the Weighted Average Rate of IoL (WAROI) based on its actual loan portfolio and rate of interest.

45. UPPCL has requested to examine the validity of derivation of weighted average Rate of Interest. In response, the Petitioner has submitted that the capital cost of Combined Asset claimed as on 1.4.2014 is ₹1891.48 lakh with Debt-Equity Ratio as 70:30. The debt works out to be ₹1324.03 lakh. The detailed calculation of weighted average rate of interest on loan for 2014-19 tariff period has been provided in Tariff Forms 9E and 9C in the instant petition.

46. IoL has been calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL allowed in respect of the Combined Asset is as under:-

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1324.04	1402.99	1402.99	1402.99	1402.99
Cumulative Repayments upto Previous Year	284.02	386.87	492.69	598.52	704.34
Net Loan-Opening	1040.02	1016.12	910.30	804.47	698.64
Additions	78.95	0.00	0.00	0.00	0.00
Repayment during the year	102.85	105.83	105.83	105.83	105.83
Net Loan-Closing	1016.12	910.30	804.47	698.64	592.82
Average Loan	1028.07	963.21	857.38	751.56	645.73
Weighted Average Rate of Interest on Loan (%)	9.5477	9.5269	9.5205	9.5141	9.5084
Interest on Loan	98.16	91.76	81.63	71.50	61.40

47. The details of IoL approved in order dated 26.2.2016 in Petition No. 191/TT/2015, trued up IoL claimed by the Petitioner in the instant petition and trued up

IoL allowed in the instant order are shown in the table as under:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.2.2016 in Petition No. 191/TT/2015	98.32	92.09	81.94	71.80	61.66
Claimed by the Petitioner in the instant petition	98.16	91.76	81.63	71.50	61.40
Allowed after true-up in this order	98.16	91.76	81.63	71.50	61.40

## Return on Equity (RoE)

48. The Petitioner is entitled to RoE for the transmission assets in terms of Regulations 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 period:

Year	Claimed effective tax (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

49. BRPL has submitted that the information regarding Income Tax Assessment submitted by the Petitioner is in respect of the entire PGCIL and not in respect of the tax on the transmission business in respect of the Northern Region. Accordingly, the said information is not the relevant information for the purposes of effective tax rate. BRPL has submitted that on the basis of the financial statements of the Petitioner in public domain, BRPL has worked out the effective tax rate of the Petitioner which stands at 8.70% for 2014-15 and 'NIL' in 2015-16, 2016-17, 2017-18 and 2018-19. BRPL has submitted that the actual tax rate applicable to the transmission licensee was to be trued up along with truing up of tariff to be determined in accordance with Regulation 6 of the 2009 Tariff Regulations and based on the truing up of tariff if the recovered tariff exceeded the tariff approved, the Petitioner should have refunded to beneficiaries along with simple interest. BRPL has submitted that infrastructure transmission companies have been allowed huge tax benefits under the Income Tax Act, 1961 (hereinafter referred to as "1961 Act") in the form of Tax Holiday for enterprises engaged in infrastructure development etc. as per Section 80IA of the 1961 Act and other benefits like the higher depreciation allowed in initial years. BRPL has submitted that the Petitioner has already stated on affidavit that the effective tax rate is zero and accordingly the effective tax rate for the earlier tariff period (2009-14) would also be zero since the benefits of the tax holiday under Section 80IA of the 1961 Act and other benefits like the higher depreciation etc. were also applicable during earlier tariff period. Regulation 49 of the 2014 Tariff Regulations restricts the claim of tax amount only to deferred tax liabilities up to 31.3.2009 whenever it will materialize. BRPL has also submitted that the claims of deferred tax are required to be adjusted for the tariff period 2004-09.

In response, the Petitioner has submitted that that the Petitioner does not file 50. income tax return on transmission business in respect of particular region as the company is having a single PAN and there is no provision in the 1961 Act to file separate returns on the basis of nature of business being undertaken by any entity. All the documents in support of Income tax (either returns or assessment orders) are for the Petitioner's company as a whole. The Auditor's certificate clearly showing income from transmission income and income from other segments along with copy of assessment order/ income return which is relevant to derive the effective tax rate has already been submitted in Petition No. 24/TT/2020. The Petitioner has submitted that it has computed effective tax rate based on actual tax paid pursuant to assessment orders for years 2014-15, 2015-16 and 2016-17. The income tax due for 2017-18 and 2018-19 has been deposited and tax returns have already been filled. However, assessment orders are yet to be received. The Petitioner has further submitted that after deducting depreciation and tax holiday benefit under normal provision, the income tax for the respective year has been calculated along with surcharge and cess, which works out to be in the range of 33.99% to 34.944% during financial years 2014-15 to 2018-19. In case, the tax computed under normal provision is less than the tax calculated on book profit at the percentage prescribed under Section 115JB (Minimum Alternate Tax), the Company has to pay tax computed as per the provisions of section 115JB of the 1961 Act which works out between 20.96% to 21.5488% (including surcharge and cess). Hence, the Petitioner Company is paying MAT. The Petitioner has further submitted that Regulation 15(3) of the 2009 Tariff Regulations provide that RoE shall be grossed up with MAT/Corporate Income tax rate of the transmission licensee and not the tax rate of the assets or region. The Petitioner has submitted that Form-3 is a system generated form and due to a system error/ constraint the header in Form-3 displays 0.00 instead of blank as the effective tax rate is mentioned in the following rows. The aforementioned error has been rectified. The Petitioner has submitted that it is eligible for claiming the deferred tax liabilities for the period up to 31.3.2009 on materialization on subsequent period i.e. financial year 2009-10 onwards. The Petitioner is only claiming the reimbursement of Income tax liability, discharged as per the provisions of Income Tax Act.

51. UPPCL has submitted 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. In response, the Petitioner has submitted that the effective rate of tax considered for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by Income Tax authorities, for the purpose of grossing up of RoE rate. Further, 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. The Petitioner has submitted that the authenticated tax rates have been considered for calculation of RoE.

52. We have considered the contentions of BRPL and UPPCL and the clarifications given by the Petitioner. BRPL has contended that details of the income tax submitted

by the Petitioner are in respect of the Petitioner's company as a whole and it does not pertain to the transmission business in Northern Region. The Petitioner has clarified that every registered company has only one single PAN and it has to file one single return and the Petitioner cannot file income tax separately for each region. BRPL has contended that as per the information available in public domain, the Petitioner has to pay the effective tax rate for 2014-15 @8.70% and for the period 2015-19, it is zero and that the excess recovery made by the Petitioner should be returned to the beneficiaries along with simple interest as provided in Regulation 6 of the 2009 Tariff Regulations. The Petitioner has clarified that the effective tax rate was shown as zero for the period 2015-19 inadvertently due to technical reasons and the Petitioner has paid income tax for the said period. The Petitioner has also clarified that as per the provisions of the 1961 Act, tax has to be computed under normal provisions of Income Tax Rules, 1962 and as per MAT provisions under the section 115JB of the 1961 Act and the assessee will have to pay tax higher of the two. As per the submission, during the tariff period 2014-19, the Petitioner calculated the income tax under regular provisions of the 1961 Act (with tax rates of 33.99% to 34.944%) and the tax was worked out to be lower than the tax payable under MAT rates due to deductions under section 80IA and availability of accelerated depreciation under Income Tax. Thus, the Petitioner has been assessed and paid tax under MAT. We are satisfied with the clarifications given by the Petitioner and convinced that the Petitioner has acted prudently and has complied with the provisions of the 1961 Act and the provisions of the tariff regulations.

53. As regards UPPCL'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 UPPCL.

54. 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. 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 (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



55. The same MAT rates as considered in 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 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

56. RoE is trued up on the basis of the MAT rate applicable for the respective years and is allowed as under:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	567.44	601.28	601.28	601.28	601.28
Additions	33.84	0.00	0.00	0.00	0.00
Closing Equity	601.28	601.28	601.28	601.28	601.28
Average Equity	584.36	601.28	601.28	601.28	601.28
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	114.60	118.49	118.49	118.49	118.80

57. Accordingly, RoE approved vide order dated 26.2.2016 in Petition No. 191/TT/2015, claimed by the Petitioner in the instant petition and trued up RoE allowed in this order is shown in the table below:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.2.2016 in Petition No. 191/TT/2015	114.60	117.91	117.91	117.91	117.91
Claimed by the Petitioner in the instant petition	114.68	118.54	118.48	118.48	118.80
Allowed after true-up in this order	114.60	118.49	118.49	118.49	118.80



## **Depreciation**

58. The Gross Block during the tariff period 2014-19 has been depreciated at Weighted Average Rate of Depreciation (WAROD). The Weighted Average Rate of Depreciation (WAROD) has been worked out (as placed in Annexure-I) after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2014-19 is as under:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	1891.48	2004.27	2004.27	2004.27	2004.27
Additional Capitalisation	112.79	0.00	0.00	0.00	0.00
Closing Gross Block	2004.27	2004.27	2004.27	2004.27	2004.27
Average Gross Block	1947.88	2004.27	2004.27	2004.27	2004.27
Weighted Average Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year	23	22	21	20	19
Elapsed life at the beginning of the year	2	3	4	5	6
Aggregate Depreciable Value	1753.09	1803.84	1803.84	1803.84	1803.84
Depreciation during the year	102.85	105.83	105.83	105.83	105.83
Aggregate Cumulative depreciation	386.87	492.69	598.52	704.34	810.17
Aggregate Remaining Depreciable Value	1366.22	1311.15	1205.32	1099.50	993.67

59. Accordingly, depreciation approved vide order dated 26.2.2016 in Petition No.

191/TT/2015, claimed by the Petitioner in the instant petition and trued up depreciation

allowed in this order is shown in the table below:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.2.2016 in Petition No. 191/TT/2015	102.85	105.83	105.83	105.83	105.83
Claimed by the Petitioner in the instant petition	102.85	105.83	105.83	105.83	105.83
Allowed after true-up in this order	102.85	105.83	105.83	105.83	105.83

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

60. The Petitioner has not claimed O&M Expenses for the transmission assets for

the 2014-19 tariff period.



# Interest on Working Capital (IWC)

61. IWC for the 2014-19 period has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and allowed as under:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	53.81	53.89	52.16	50.44	48.77
Total Working Capital	53.81	53.89	52.16	50.44	48.77
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	7.26	7.28	7.04	6.81	6.58

62. Accordingly, IWC approved vide order dated 26.2.2016 in Petition No. 191/TT/2015, claimed by the Petitioner in the instant petition and trued up IWC allowed is shown in the table below:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.2.2016 in Petition No. 191/TT/2015	7.27	7.27	7.04	6.80	6.57
Claimed by the Petitioner in the instant petition	7.27	7.28	7.04	6.81	6.58
Allowed after true-up in this order	7.26	7.28	7.04	6.81	6.58

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

63. The trued up annual fixed charges for the transmission assets for the 2014-19

period:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	102.85	105.83	105.83	105.83	105.83
Interest on Loan	98.16	91.76	81.63	71.50	61.40
Return on Equity	114.60	118.49	118.49	118.49	118.80
Interest on Working Capital	7.26	7.28	7.04	6.81	6.58
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	322.87	323.35	312.98	302.62	292.61

64. Accordingly, the Annual Fixed Charges approved vide order dated 26.2.2016

in Petition No. 191/TT/2015, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is shown in the table below:



				(₹	t in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 26.2.2016 in Petition No. 191/TT/2015	323.03	323.10	312.71	302.24	291.97
Claimed by the Petitioner in the instant petition	322.96	323.41	312.98	302.62	292.61
Allowed after true-up in this order	322.87	323.35	312.98	302.62	292.61

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

65. The Petitioner has claimed following transmission charges for the Combined

Asset for the 2019-24 tariff period:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	105.83	105.83	105.83	105.83	105.83
Interest on Loan	51.31	41.23	31.15	21.09	11.04
Return on Equity	112.93	112.93	112.93	112.93	112.93
Interest on Working Capital	13.89	14.12	14.32	14.56	14.74
O&M Expenses	225.54	233.73	241.92	250.74	258.93
Total	509.50	507.84	506.15	505.15	503.47

66. The Petitioner has claimed the following IWC for the Combined Asset for the

2019-24 tariff period:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	18.80	19.48	20.16	20.90	21.58
Maintenance Spares	33.83	35.06	36.29	37.61	38.84
Receivables	62.64	62.61	62.40	62.28	61.90
Total Working Capital	115.27	117.15	118.85	120.79	122.32
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	13.89	14.12	14.32	14.56	14.74

### Capital Cost

67. Regulation 19 of the 2019 Tariff Regulations provides 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



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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 renovation and modernisation as admitted by this Commission in accordance with these regulations;
  - (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 upto 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 de-capitalised 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."

68. The Petitioner has claimed capital cost of ₹2004.27 lakh as on 31.3.2019 for the Combined Asset as per the Auditor Certificates dated 30.7.2019. The same has been allowed by the Commission and has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations

2019 Tariff Regulations.

# Additional Capital Expenditure (ACE)

69. The Petitioner has not claimed any ACE for the Combined Asset during the 2019-24 period. Accordingly, the capital cost considered for the 2019-24 tariff period is ₹2004.27 lakh.

#### Debt-Equity ratio

70. 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."

71. The details of debt-equity considered for the purpose of computation of tariff for

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	1402.99	70.00	1402.99	70.00
Equity	601.28	30.00	601.28	30.00
Total	2004.27	100.00	2004.27	100.00

the 2019-24 tariff period for the Combined Asset is as under:

## <u>Return on Equity (RoE)</u>

72. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide 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-ofriver 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 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."

73. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. BRPL has submitted that as per Regulation 31(3) of the 2019 Tariff Regulations, the Petitioner has a statutory duty to undertake the true up of the grossed-up rate of RoE at the end of every financial year based on actual tax paid. The above statutory function delegated to the transmission licensee cannot be exercised unilaterally but required to be conducted in most impartial manner by summoning all the Respondent-beneficiaries.

74. In response, the Petitioner vide affidavit dated 13.8.2020 has submitted that the Petitioner pays the income tax and files income tax returns in a timely manner. The final tax demand including additional tax, interest, penalty and adjustment for refunds if any is decided by the Income Tax Authority through its assessment orders, which are beyond the Petitioner's control. The Petitioner has further submitted that for the 2014-19 tariff period, the Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has approved effective tax rate as notified MAT rates and for 2019-24 tariff period tariff has been admitted with grossing of rate of ROE at 18.782% considering MAT rate of 17.472%. Further, any under-recovery or over-recovery of grossed up rate on RoE is taken up at the time of true up for the 2019-24 period.

75. UPPCL has submitted that the gross rate of Return on Equity for the 2019-24 period is same as that of the rate ending in 2019-20 which is not based on MAT rates approved by the Income Tax authorities. In response, the Petitioner vide affidavit dated 11.8.2020 has submitted that RoE has been calculated at the rate of 18.782% after grossing up RoE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given as per Regulation 31(2) of the 2019 Tariff

Regulations for 2019-24 period. The Petitioner has further submitted that as per Regulation 31(3) of the 2019 Tariff Regulations, the grossed up rate of RoE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year.

76. We have considered the submissions of the Petitioner, BRPL and UPPCL. The MAT rate applicable for 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 Combined Asset is as under:

					₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	601.28	601.28	601.28	601.28	601.28
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	601.28	601.28	601.28	601.28	601.28
Average Equity	601.28	601.28	601.28	601.28	601.28
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	112.93	112.93	112.93	112.93	112.93

### Interest on Loan (IoL)

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

**"32. Interest on Ioan 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 decapitalization 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."

78. UPPCL has requested to examine the validity of weighted average rates of interest on loan. UPPCL has further submitted that the Petitioner has already negotiated the loan portfolios bearing fixed rate of interest and hence the apprehension of the Petitioner regarding imposition of floating rate of interest is premature.

79. In response, the Petitioner vide affidavit dated 11.8.2020 has submitted that in the instant petition, the loans deployed are of fixed interest rate (Bonds). Therefore, the impact of interest on loan due to change in interest rate on account of floating rate of interest is not applicable in the instant petition.

80. We have considered the submissions of UPPCL and the Petitioner. The Weighted Average Rate of IoL (WAROI) has been considered on the basis of rate prevailing as on 1.4.2019. Further, the Petitioner has submitted, vide affidavit dated 11.8.2020, that the loans deployed for the transmission assets are of fixed nature.



Therefore, IoL has been allowed for the Combined Asset in accordance with Regulation 32 of the 2019 Tariff Regulations and the same is as under:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	1402.99	1402.99	1402.99	1402.99	1402.99
Cumulative Repayments upto Previous Year	810.17	916.00	1021.82	1127.65	1233.47
Net Loan-Opening	592.82	486.99	381.17	275.34	169.52
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	105.83	105.83	105.83	105.83	105.83
Net Loan-Closing	486.99	381.17	275.34	169.52	63.69
Average Loan	539.91	434.08	328.26	222.43	116.60
Weighted Average Rate of Interest on Loan (%)	9.5036	9.4977	9.4903	9.4810	9.4688
Interest on Loan	51.31	41.23	31.15	21.09	11.04

#### **Depreciation**

81. 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 assets 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 assets 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 assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31<sup>st</sup> 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.

(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 upto 31.3.2019 from the gross depreciable value of the assets.

(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 assets 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."

82. The depreciation has been worked out considering the admitted ACE as on

31.3.2019 and accumulated depreciation up to 31.3.2019. The Weighted Average

Rate of Depreciation (WAROD) has been worked out (as placed in Annexure-II). The

depreciation allowed for the Combined Asset is as under:

					(₹ in lakh)
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
ning Gross Block	2004.27	2004.27	2004.27	2004.27	2004.27
tion during the year					
-24 due to projected	0.00	0.00	0.00	0.00	0.00
ing Gross Block	2004.27	2004.27	2004.27	2004.27	2004.27
age Gross Block	2004.27	2004.27	2004.27	2004.27	2004.27
age Gross Block	2004.27	2004.27	2004.27	2004.27	2



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Weighted average rate of Depreciation (WAROD) (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life at the beginning of the year	18	17	16	15	14
Elapsed life at the beginning of the year	7	8	9	10	11
Aggregated Depreciable Value	1803.84	1803.84	1803.84	1803.84	1803.84
Depreciation during the year	105.83	105.83	105.83	105.83	105.83
Aggregate Cumulative Depreciation	916.00	1021.82	1127.65	1233.47	1339.30
Remaining Aggregated Depreciable Value	887.85	782.02	676.20	570.37	464.55

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

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

## "35. Operation and Maintenance Expenses:

. . .

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Norms for sub-station Bays (₹ Lakh per bay)						
765 kV	45.01	46.60	48.23	49.93	51.68	
400 kV	32.15	33.28	34.45	35.66	36.91	
220 kV	22.51	23.30	24.12	24.96	25.84	
132 kV and below	16.08	16.64	17.23	17.83	18.46	
Norms for Transformers (₹ Lakh per M\	<u>/A)</u>					
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	ber km)					
Single Circuit (Bundled Conductor	0.881	0.912	0.944	0.977	1.011	
with six or more sub-conductors)						
Single Circuit (Bundled conductor	0.755	0.781	0.809	0.837	0.867	
with four sub-conductors)						
Single Circuit (Twin & Triple	0.503	0.521	0.539	0.558	0.578	
Conductor)						
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289	
Double Circuit (Bundled	1.322	1.368	1.416	1.466	1.517	
conductor with four or more sub-						
Double Circuit (Twin & Triple	0.881	0.912	0.944	0.977	1.011	
Conductor)						
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433	
Multi Circuit (Bundled Conductor with	2.319	2.401	2.485	2.572	2.662	
four or more sub-conductor)						



Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

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

84. The O&M Expenses claimed by the Petitioner for the Combined Asset for the

2019-24 period are as under:

O&M Expenses					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Substation (Conventional)					
No. of 400 kV transformers	2	2	2	2	2
Total O&M Expenses (₹ in lakh)	225.54	233.73	241.92	250.74	258.93

85. As already observed in para 28 above, no O&M Expenses are allowed for the

Combined Asset for the 2019-24 tariff period.

### Interest on Working Capital (IWC)

86. Regulations 34(1)(c), 34(3), 34(4) and Regulation 3(7) of the 2019 Tariff

Regulations provide as under:

"34. Interest on Working Capital: (1) The working capital shall cover:

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

(i) Receivables equivalent to 45 days of annual 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 1<sup>st</sup> 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. - In these regulations, unless the context otherwise requires:-

(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;"

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

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	33.70	32.50	31.24	29.99	28.65
Total Working Capital	33.70	32.50	31.24	29.99	28.65
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	4.06	3.66	3.51	3.37	3.22

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

88. The Annual Fixed Charges allowed for the Combined Asset for the 2019-24 tariff period are as below:



					(* 111 iakii)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	105.83	105.83	105.83	105.83	105.83
Interest on Loan	51.31	41.23	31.15	21.09	11.04
Return on Equity	112.93	112.93	112.93	112.93	112.93
Interest on Working Capital	4.06	3.66	3.51	3.37	3.22
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	274.13	263.64	253.42	243.22	233.02

(₹ in lakh)

### Filing Fee and the Publication Expenses

89. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that though the Commission can allow filing fee and publication expenses at its discretion under Regulation 70(1) of the 2019 Tariff Regulations, but the exercise of such discretion is a judicial discretion in the adjudication of tariff for which no justification has been filed by the Petitioner. BRPL also referred to the Commission's order dated 11.9.2008 in Petition No. 129 of 2005 where it declined the claim of Central Power Sector undertakings for allowing the reimbursement of the application filing fee. In response, the Petitioner vide affidavit dated 13.8.2020 has submitted that it has requested for reimbursement of expenditure by the beneficiaries towards petition filing fee and publication expense, in terms of Regulation 70(1) of the 2019 Tariff Regulations. Further, the Petitioner also placed reliance on the Commission's order dated 28.3.2016 in Petition No. 137/TT/2015 where it allowed the recovery of petition filing fee and expenditure for publication of notices from beneficiaries on *pro-rata* basis.

90. We have considered the submissions of the Petitioner and BRPL. 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

91. UPPCL has submitted that the Licence Fee is onus of the Petitioner. In response, the Petitioner has submitted that the Regulation 70(3) and (4) of the 2019 Tariff Regulations authorize the Petitioner to bill and recover licensee fee from the beneficiaries. License fee is to be reimbursed directly by beneficiaries as per manner specified in Tariff Regulations.

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

### Goods and Services Tax

93. 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.

94. BRPL has submitted that the demand of the Petitioner is premature and need not be considered at this juncture. In response, the Petitioner vide affidavit dated



13.8.2020 submitted that currently transmission of electricity by an electric transmission utility is exempt from GST. Hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately.

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

#### Security Expenses

96. 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.

97. BRPL has submitted that the approach adopted by the Petitioner towards claim of security expenses does not warrant the need for IWC as the same is claimed in advance. The Petitioner, in response has submitted that the expenses are not claimed in the instant petition and shall be claimed separately in a separate petition along with other assets.

98. We have considered the submissions of the Petitioner and BRPL. 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

99. The Petitioner has sought reimbursement of capital spares at the end of tariff block. UPPCL has submitted that the claim of capital spares at the end of the tariff block is permissible only to the extent of the provision of the concerned tariff regulation which is the ceiling value. Therefore, if the value actual capital spares is more than what is provided in the regulation may not be allowed. In response, the Petitioner has submitted that the capital spares shall be claimed at the end of tariff block as per actual. Accordingly, the Petitioner has not claimed capital spares the instant petition and has informed that the same shall be claimed in a separate petition along with all other assets in accordance with the 2019 Tariff Regulations.

100. We have considered the submissions of the Petitioner and UPPCL. The Petitioner's claim towards capital spares, if any, will be dealt in accordance with the provisions of the 2019 Tariff Regulations.



# Sharing of Transmission Charges

101. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 period.

102. To summarise, the trued-up Annual Fixed Charges allowed for the Combined Asset for the 2014-19 tariff period are as under:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	322.87	323.35	312.98	302.62	292.61

The Annual Fixed Charges allowed for the Combined Asset for the 2019-24 tariff period in this order are as under:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	274.13	263.64	253.42	243.22	233.02

103. This order disposes of Petition No. 136/TT/2020.

Sd/	Sd/
(Arun Goyal)	(I. S. Jha)
Member	Member



# Annexure-I

$ \begin{array}{                                    $	Petition No.: Period	136/TT/2020 2014-19 Tariff										
$ \frac{1}{10000000000000000000000000000000000$											Anr	Annexure-I
Table as on ( $\frac{1.4.2014.001}{1.4.2014.001}$ Total         Total         as on ( $\frac{1.4.2014.001}{1.4.2014.001}$ Constant         Solution         Constant         Solution         Constant         Solution         Constant         Solution         Constant         Constant <th>2014-19</th> <th>Admitted Capital</th> <th>Additio</th> <th>onal Capita (₹ in lakh)</th> <th>lisation</th> <th>Admitted Capital Cost</th> <th>Rate of</th> <th>Annı</th> <th>ual Deprec</th> <th>iation as p∉ (₹ in lakh)</th> <th>er Regulati</th> <th>ions</th>	2014-19	Admitted Capital	Additio	onal Capita (₹ in lakh)	lisation	Admitted Capital Cost	Rate of	Annı	ual Deprec	iation as p∉ (₹ in lakh)	er Regulati	ions
bid	Capital Expenditure	(₹ in lakh)	2015-16	2016-17	Total	as on 31.3.2019 (₹ in lakh)	Preprediction as per Regulations	2014-15	2015-16	2016-17	2017-18	2018-19
hold $   -$ </td <td>Land - Freehold</td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td>,</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Land - Freehold		•				,					
multiplication	Land - Leasehold		•	•	•	•	3.34%					
n Line $\cdot$ <	Building Civil Works & Colony				•	I	3.34%					
	Transmission Line		'			ı	5.28%		ı		ı	
ent (ncl.       .       .       .       6.33%       .	Sub Station	1891.48	'		112.79	2004.27	5.28%		105.83	105.83	105.83	105.83
ent (Incl.       .	PLCC		•	•	•		6.33%				•	
1891.48     -     -     112.79     2004.27     102.85     105.83     105.83     105.83     105.83       Average Gross Block     1947.88     2004.27     2004.27     2004.27       Weighted Average Rate     5.28%     5.28%     5.28%     5.28%	П Equipment (hcl. Software)	1			ı	I	5.28%	ı	ı		ı	ı
1947.88         2004.27         2004.27         2004.27           5.28%         5.28%         5.28%         5.28%	Total	1891.48	'	•	112.79	2004.27		102.85		-	105.83	105.83
5.28% 5.28% 5.28%		а П				Average ( (₹ in	Gross Block lakh)	1947.88		2004.27	2004.27	2004.27
						Weighted	Average Rate reciation	5.28%	5.28%			5.28%



	Period	2019-24 Tariff								Ann	Annexure-II
apital Expenditure         (₹ in lakh)         Regulations         2019-20         Total         2019-20         2020-21         2021-22         2           Freehold         -	2019-24	Admitted Capital Cost as on	Projected Capital (₹ in	Additional lisation lakh)	Admitted Capital Cost as	Rate of Depreciation	Anna	I Deprecia (₹	tion as per f in lakh)	Regulation	s
Freehold         ·<	Capital Expenditure	(₹ in lakh)	2019-20	Total	(≹ in lakh)	Regulations	2019-20	2020-21	2021-22	2022-23	2023-24
Leasehold $\cdot$	Land - Freehold										
Clive       Clive <t< td=""><td>Land - Leasehold</td><td>•</td><td>ı</td><td>•</td><td>1</td><td>3.34%</td><td></td><td></td><td></td><td>•</td><td>ı</td></t<>	Land - Leasehold	•	ı	•	1	3.34%				•	ı
ission Line $\  \  \  \  \  \  \  \  \  \  \  \  \ $	Building Civil Works & Colony	•	ı	•	ı	3.34%	ı	ı	•	•	
ation $2004.27$ $\cdot$ $\cdot$ $2004.27$ $\cdot$ </td <td>Transmission Line</td> <td></td> <td>ı</td> <td>•</td> <td>ı</td> <td>5.28%</td> <td>ı</td> <td></td> <td></td> <td>•</td> <td></td>	Transmission Line		ı	•	ı	5.28%	ı			•	
ment (Incl. Software) $\cdot$	Sub Station	2004.27	ı		2004.27	5.28%	105.83	105.83	105.83	105.83	105.83
Jipment (Incl. Software)     -     -     -     15.00%     -     -     -       2004.27     -     -     2004.27     -     2004.27     105.83     105.83     105.83       Average Gross Block     2004.27     2004.27     2004.27     2004.27     2004.27     2004.27	PLCC	•	ı		ı	6.33%	ı		•	•	
2004.27     -     -     2004.27     105.83     105.83     105.83       Average Gross Block     2004.27     2004.27     2004.27     2004.27     2       Weighted Average Rate     5.28%     5.28%     5.28%	IT Equipment (Incl. Software)				ı	15.00%	ı			•	
2004.27         2004.27         2004.27           5.28%         5.28%         5.28%	Total	2004.27	-		2004.27		105.83	105.83	105.83	105.83	105.83
5.28% 5.28% 5.28%					Average G (₹ in I	ross Block akh)	2004.27	2004.27	2004.27	2004.27	2004.27
					Weighted A of Depre	verage Rate sciation	5.28%	5.28%	5.28%	5.28%	5.28%

139/TT/2020

Petition No.:

# Annexure-II