

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 495/TT/2019**

**Coram:**

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

**Date of order : 14.05.2021**

**In the matter of:**

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and revision of transmission tariff of the 2001-04, 2004-09 and 2009-14 tariff periods and truing up of transmission tariff of the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Asset-I: 220 kV D/C Unchahar-Kanpur transmission line-I with associated bays, Asset-II: 220 kV D/C Unchahar-Kanpur transmission line-II with associated bays, and Asset-III: LILO of one circuit of 220 kV D/C Panki-Mainpuri line-II of transmission system associated with Unchahar Stage-II in the Northern Region.

**And in the matter of:**

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

**.....Petitioner**

**Versus**

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



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

5. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan,  
Kumar House Complex Building II,  
Shimla-171004
6. Punjab State Electricity Board,  
The Mall, Patiala-147001
7. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector-6,  
Panchkula (Haryana)-134109
8. Power Development Department,  
Government of Jammu & Kashmir,  
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Ltd.  
(Formerly Uttar Pradesh State Electricity Board),  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow-226001
10. Delhi Transco Ltd.,  
Shakti Sadan, Kotla Road,  
New Delhi-110 002
11. BSES Yamuna Power Ltd.,  
Bses Bhawan, Nehru Place ,  
New Delhi
12. BSES Rajdhani Power Ltd.,  
Bses Bhawan, Nehru Place,  
New Delhi
13. Tata Power Delhi Distribution Ltd.,  
33 kV Substation, Building  
Hudson Lane  
Kingsway Camp  
North Delhi-110009
14. Chandigarh Administration,  
Sector-9, Chandigarh.
15. Uttarakhand Power Corporation Ltd.,  
Urja Bhawan,  
Kanwali Road,  
Dehradun



16. North Central Railway,  
Allahabad

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

...Respondent(s)

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

**For Respondent:** Shri R. B. Sharma, Advocate, BRPL  
Ms. Megha Bajpeyi, BRPL

### **ORDER**

The instant petition has been filed by Power Grid Corporation of India Ltd. (hereinafter referred to as “the Petitioner”) for revision of transmission tariff of the 2001-04, 2004-09 and 2009-14 tariff periods and truing of transmission tariff for the period from 1.4.2014 to 31.3.2019 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and determination of transmission tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) for the period from 1.4.2019 to 31.3.2024 in respect of the following assets under transmission system associated with Unchahar Stage-II in the Northern Region (hereinafter referred to as the “transmission project’):

**Asset-I:** 220 kV D/C Unchahar-Kanpur Transmission Line-I with associated bays;

**Asset-II:** 220 kV D/C Unchahar-Kanpur Transmission Line-II with associated bays;



**Asset-III:** LILO of one circuit of 220 kV D/C Panki-Mainpuri Transmission Line-II (hereinafter collectively referred to as “the transmission assets/Combined Asset”).

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

*“1) Approve the revised Transmission Tariff for 2001-04 block, 2004-09 block and transmission tariff for 2009-14 block for the assets covered under this petition, as per para 8 above.*

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

*3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff regulations 2014 and tariff regulation’19 as per para 9.0 & 10 above for respective block.*

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

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

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

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

*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 adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.*

*9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is withdrawn from negative list at any*



*time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*

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

### **Background**

3. The brief facts of the case are as follows:
  - a. The Investment Approval for the project was accorded by the Ministry of Power *vide* letter dated 3.4.1996 at an estimated cost of ₹16831 lakh including IDC of ₹2937 lakh. The notional date of the commercial operation of the transmission asset is 1.12.2000.
  - b. The transmission tariff from 1.4.2001 to 31.3.2004 for the transmission assets was allowed *vide* order dated 27.5.2004 in Petition No. 68/2002 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001. Further, the tariff was revised *vide* order dated 8.2.2008 by way of implementation of the judgment of the Hon'ble Appellate Tribunal for Electricity dated 4.10.2006 in Appeal No. 135 of 2005.
  - c. The transmission tariff of the transmission assets for the period from 1.4.2004 to 31.3.2009 allowed *vide* order dated 3.2.2006 in Petition No. 82/2004 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004. Further, the transmission tariff was revised *vide* order dated 19.5.2008 by way of implementation of the judgment of the Hon'ble Appellate Tribunal for Electricity dated 4.10.2006 in Appeal No. 135 of 2005.
  - d. The transmission tariff of the 2009-14 tariff period was allowed *vide* order dated 27.4.2011 in Petition No. 285/2010 based on admitted capital cost of ₹11138.09 lakh for the transmission assets as on 31.3.2009 in accordance with the 2009 Tariff Regulations.
  - e. The transmission tariff of the 2009-14 tariff period was trued-up and transmission tariff for the 2014-19 tariff period was determined *vide* order dated 28.1.2016 in Petition No. 432/TT/2014.



- f. The Petitioner has sought revision of transmission tariff approved for the 2001-04 and 2004-09 tariff periods on account of change in Interest on Loan (IoL) and Interest on Working Capital (IWC) to the extent of revision in IoL and in Maintenance Spares in terms of the Appellate Tribunal for Electricity (hereinafter referred to as "APTEL") judgment dated 22.1.2007 and 13.6.2007 in Appeal No. 81/2005 and 139/2006 respectively. The Petitioner has sought consequential revision of transmission tariff allowed for the 2009-14 tariff period and truing up of tariff of the 2014-19 tariff period and determination of transmission tariff of the 2019-24 tariff period for the transmission system associated with Unchahar Stage-II in the Northern Region.
- g. The APTEL, *vide* judgements dated 22.1.2007 in Appeal No.81/2005 and other related Appeals, and judgement dated 13.6.2007 in Appeal No. 139/2006 pertaining to generating stations of NTPC decided on, mainly, the following issues:
- (a) Computation of interest on loan;
  - (b) Consequences of refinancing of loan;
  - (c) Depreciation as deemed repayment;
  - (d) Admissibility of depreciation up to 90% of the value of the assets;
  - (e) Consideration of maintenance of spares for working capital; and
  - (f) Depreciation of assets.
- h. The Commission and certain beneficiaries filed Appeals against the APTEL's judgments before the Hon'ble Supreme Court in 2007. The Appeals were admitted and initially stay was granted by the Hon'ble Supreme Court. Subsequently, on an assurance by NTPC that the issues under Appeal would not be pressed for implementation during the pendency of the Appeals, the stay was vacated by the Hon'ble Supreme Court.
- i. Based on the APTEL's judgments dated 22.1.2007 and 13.6.2007, the Petitioner has sought re-determination of transmission tariff of its transmission assets of the 2001-04 and 2004-09 tariff periods in Petition No. 121/2007. The Commission after taking into consideration the pending Appeals before the Hon'ble Supreme Court adjourned the matter sine die and directed to revive the same after the disposal of the Civil Appeals by the Hon'ble Supreme Court.
- j. The Hon'ble Supreme Court dismissed the said Civil Appeals filed against the APTEL's said judgments *vide* order dated 10.4.2018.



- k. Consequent to the Hon'ble Supreme Court's order dated 10.4.2018 in NTPC matters, the Petition No. 121/2007 was listed for hearing on 8.1.2019. The Commission, *vide* order dated 18.1.2019 in Petition No. 121/2007, directed the petitioner to submit its claim separately for the assets at the time of filing of truing up of the petitions for the 2014-19 tariff period in respect of concerned transmission assets.
- l. The instant petition was heard on 24.3.2021 and in view of APTEL's judgments dated 22.1.2007 and 13.6.2007 and the order of Hon'ble Supreme Court dated 10.4.2018, tariff is being revised. Although, period-wise transmission tariff is being re-worked based on the Tariff Regulations applicable for the respective tariff periods, suitable assumptions at certain places, if any, are being applied which are being indicated.
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 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 28.12.2019. UPPCL has raised the issues of IoL, depreciation, Return on Equity (RoE) and O&M Expenses. BSES Rajdhani Power Limited (BRPL), Respondent No. 12, has filed its reply *vide* affidavit dated 23.3.2021 in which it has objected to reopening of the tariff of 2001-04, 2004-09 and 2009-14 periods based on the APTEL's judgements stating that the Commission has become "functus officio". Further, BRPL has raised issues of RoE, Deffered Tax Liability, recovery of tax on truing-up exercise of RoE, adoption of Indian Accounting Standard 101, applicability and recovery of GST recovery of security expenses, IWC and





recovery of application filing fee and the expenses. The Petitioner, vide affidavit dated 22.3.2021, has filed rejoinder to the reply of UPPCL. The issues raised by UPPCL and BRPL and the clarifications given by the Petitioner are considered in the relevant portions of this order.

6. During the hearing of the matter on 24.3.2021, the learned counsel for BRPL requested that his arguments advanced during the hearing today regarding revision of tariff, tax during the 2009-14 tariff period, tax on transmission business during 2014-19 tariff period and Indian Accounting Standards in Petition No. 358/TT/2019 and reply filed on 23.3.2021 in this matter may be taken into consideration.

7. The learned counsel of BRPL in Petition No. 358/TT/2019 submitted as follows:

*“Learned counsel for BRPL submitted that the reply has been filed vide affidavit dated 23.3.2021 and made oral submissions on the issues like revision of tariff, tax during the 2009-14 tariff period, tax on transmission business during 2014-19 tariff period, Indian Accounting Standards and procedural guidelines. He submitted that tariff in respect of the asset which is not in use should not be granted. He submitted that the income tax towards transmission business should be considered and as the Petitioner has submitted the effective tax rate as 0% in Form-3 of the instant petition, the same may be considered by the Commission for grossing up of RoE. He submitted that retrospective revision of tariff already allowed for previous years cannot be allowed. He further requested the Commission to reexamine the issue of revising the tariff in the light of the judgment of the Hon’ble Supreme Court of India in the matter of UPPCL vs NTPC reported in (2009) 6 SCC 235. He also requested to revisit the order dated 6.11.2019 in Petition Nos. 288/TT/2019, 300/TT/2019, 301/TT/2019 and 305/TT/2019 in view of the facts and legal positions and judgment of the Hon’ble Supreme Court of India.”*

8. After hearing the arguments of the learned counsel for BRPL, the Commission observed as follows:

*“the said issue has already been deliberated upon and a considered view has been taken by the Commission in order dated 6.11.2019 and it has attained finality.”*

9. Relevant extract of the order dated 6.11.2019 is as follows:

*“11. We have examined the above contentions of the parties. It is apparent from the record that the Central Commission and other beneficiaries filed Civil Appeal No. 5622 of 2007 and batch before the Hon’ble Supreme Court against the judgment dated 22.1.2007 in Appeal No. 81 of 2005 and other related appeals and judgment dated 13.6.2007 in Appeal No. 139 of 2006 of Appellate Tribunal for Electricity. In the meantime, the Petitioner filed a Petition No. 121 of 2007 in the year 2007 for extending the benefit of judgements dated 22.1.2007 and 13.6.2007 of the Appellate Tribunal in the case of appeals filed by NTPC, on the issue of (a) Computation of Interest on Loan,*

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*(b) Consequence of Refinancing of Loan, (c) Depreciation as Deemed Repayment, (d) Admissibility of Depreciation with specific reference to the interpretation of Tariff Regulations as propounded in Appellate Tribunal's Judgments. As the said appeals against the Appellate Tribunal's Judgments were then pending adjudication before Hon'ble Supreme Court, the Commission adjourned the proceedings sine die in Petition No. 121 of 2007 vide RoP dated 12.8.2008. The relevant portion of the ROP dated 12.8.2008 is extracted hereunder:-*

*"4. Request made by the learned counsel was allowed by the Commission. The application was adjourned sine die. The applicant may get the application revived after decision of the Hon'ble Supreme Court in the appeals pending"*

*This was done for the reason that the regulations as interpreted by Appellate Tribunal were under challenge before the Hon'ble Supreme Court. The Hon'ble Supreme Court vide order dated 10.4.2018 dismissed Civil Appeal No. 5622 of 2007 and batch filed by the Commission and other beneficiaries. Thus, the Appellate Tribunal's Judgments attained finality. As the spirit of the regulations in question has authoritatively been interpreted in the Appellate Tribunal's Judgments, the Commission is duty bound to apply the regulations uniformly to all without any discrimination. Accordingly, on dismissal of the said appeals by the Hon'ble Supreme Court, the Commission disposed of Petition No. 121 of 2007 vide order dated 18.1.2019 permitting the Petitioner to submit their claims, wherever applicable, along with truing up petitions for the 2014-19 period.*

*"6. Considering the submissions of the learned counsel for the petitioner, we dispose of the present petition with the direction that the petitioner shall separately submit its claim in the light of the APTEL's judgments dated 22.1.2007 and 13.6.2007 along with the truing up petitions wherever applicable to be filed for the period 2014-19 in respect of concerned transmission assets."*

*It is well settled law that an order or judgment from which review and/or appeal is allowed but not preferred by the aggrieved party attains finality. The said principle cannot be applied to the instant petitions as during the pendency of Petition No.121 of 2007, the Petitioner was not in a position to take up other legal remedies available to it under the law. Thus, we do not agree with the contentions of learned counsel for BRPL and BSPHCL that the present petitions cannot be entertained as the final orders passed therein have attained finality. In our opinion, the present matter significantly differs with the settled law wherein uniform treatment based regulations as interpreted by higher Courts is required to be given effect to without any discrimination to meet the ends of justice. For these reasons, we reject the said contentions of BRPL and BSPHCL and hold that in the facts and circumstances of this case, the general law that an order or judgment from which review and/or appeal is allowed but not preferred by the aggrieved party attains finality is not applicable here."*

10. In view of the above, the preliminary objection of BRPL is rejected.

11. This order is issued considering the submissions made by the Petitioner vide affidavits dated 27.9.2019, 22.7.2020, 17.11.2020 and 22.3.2021 and the UPPCL and BRPL affidavits dated 28.12.2019 and 23.3.2021 respectively.



12. The hearing in this matter was held on 24.3.2021 and the Commission reserved the order in the matter.

13. 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.

14. 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'), the Petitioner has published Notice in the newspapers and vide affidavit dated 7.11.2019 has submitted that it has carried out the publication of the present tariff application in the newspapers dated 7.10.2019 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 its 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. As sufficient opportunity has been given to the general public to submit their comments as provided under the Electricity Act, 2003, we are of the view that there is no need to engage any agency to represent the interest of consumers.

15. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.

16. The Petitioner has sought revision of the computation of the IoL, maintenance spares for working capital and depreciation allowed for the 2001-04 and 2004-09 periods on the basis of the judgements of the Appellate Tribunal for Electricity (APTEL) dated 22.1.2007 in Appeal No. 81 of 2005 and 13.6.2007 in Appeal No.139/2006. The APTEL while dealing with the issue of computation of IoL, in judgement dated 22.1.2007, observed that IoL for the period from 1.4.1998 to 31.3.2001 shall be computed only on normative loan repayment as per its judgement dated 14.11.2006 in Appeal Nos.94 and 96 of 2005. APTEL in its judgement dated 14.11.2006 set aside the Commission's methodology of computation of loan on the actual repayment basis or normative repayment whichever is higher. The relevant portions of the judgement of 14.11.2006 is as follows:

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

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



14. *In the instant case since the normative debt-equity ratio of 50:50 has been adopted in the financing plan, the loan repayment should be computed based on normative debt. This is to ensure that whatever normative debt has been considered, tariff should ensure the recovery of the same normative debt and interest thereon.*
- “18. *In its Tariff Regulation of 2004 the Central Commission perhaps recognizing the aforesaid anomaly has dispensed with the practice of adopting higher of actual or normative repayment and has corrected the method of determination of quantum of debt repayment only on the basis of the normative debt with effect from 01.04.2004*
19. *In view of the above, the Central Commission is required to adopt normative debt repayment methodology for working out the interest on loan liability for the period 01.04.1998 to 31.03.2001.*”

In view of the above, the interest allowed for the 2001-04 and 2004-09 tariff periods is revised on the basis of the normative debt repayment methodology.

17. The APTEL in judgement dated 13.6.2007 in Appeal No.139 of 2006 and others held that additional capital expenditure (ACE) after the date of commercial operation should also be considered for computation of maintenance spares as follows:

#### ***“Analysis and Decision***

*We are not inclined to agree with the contention of the respondents that escalation of 6% will take care of the additional capitalization. Escalation is meant to factor inflation and is allowed as per CERC Regulations whether or not additional capitalization takes place. Question before us is that: can the historical cost be frozen with the Commissioning of the station. It is quite normal and prudent to ensure earliest operation of the plant without necessarily 100% completion of plants and works, of course not at the cost of safety of the plant. Adding some of the plants and works after the commercial operation will reduce interest during construction. If technically it is possible to delay some of the plants or works, it is only prudent to do so. For example it is common to build redundancies in the plant at a little later stage. CERC’s own regulations rightly recognized additional capitalization. It is pertinent to set out excerpts pertaining to additional capitalization from CERC (Terms & Conditions of Tariff) Regulation, 2004 Clause 18 as below:-*

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

- (i) Deferred liabilities*
- (ii) Works deferred for execution*
- (iii) Procurement of initial capital spares in the original scope of work, subject to ceiling specified in regulation 17.*
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
- (v) On account of change in law.*

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



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

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

18. In view of the above, the maintenance spares to be considered for computation of working capital for the 2001-04 and 2004-09 tariff periods are also required to be revised taking into consideration the ACE after the date of commercial operation. We observe that, in the instant petition, there has been no ACE after the date of commercial operation during the 2001-2009 period which, otherwise, would have necessitated a revision in maintenance spares.

19. As regards depreciation, APTEL in its judgement dated 13.6.2007 in Appeal No.139 of 2006 observed that depreciation is an expense and it cannot be deployed for deemed repayment of loan and accordingly directed the Commission to compute the outstanding loan afresh. The relevant portion of the judgement is as follows:

***“Analysis and Decision***

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

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

*“The cost of a productive facility is one of the costs of the service it renders during its useful economic life. Generally accepted accounting principles require that this cost be spread over the expected useful life of the facility in such a way*



*as to allocate it as equitably as possible to the periods during which services are obtained from the use of the facility. This procedure is known as depreciation accounting, a system of accounting which aims to distribute the cost or other basic value of tangible capital assets, less salvage (if any), over the estimated useful life of the unit (which may be a group of assets) in a systematic and rational manner. It is a process of allocation, not of valuation”*

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

20. Accordingly, in view of the above directions of APTEL, the outstanding loan allowed for the transmission assets for the 2001-04 and 2004-09 periods is revised in the instant order.

21. We have considered the submissions. The revision of transmission tariff allowed for the 2001-04 and 2004-09 tariff periods necessitates the revision of tariff allowed for the 2009-14 period, which is also allowed in the instant order. The implementation of the directions of the APTEL in case of the Petitioner has been kept pending waiting for the outcome of the Civil Appeals filed before the Hon'ble Supreme Court. Taking into consideration the facts of the case and keeping in view the interest of the consumers, we are of the view that the beneficiaries should not be burdened with the carrying cost for the difference in the tariff allowed earlier and allowed in the instant order for the 2001-04, 2004-09 and 2009-14 tariff periods. Therefore, the Petitioner will neither claim nor pay any carrying cost from the beneficiaries for the difference, if any, in the tariff allowed earlier and that allowed in the instant order. Further, the said difference in tariff shall be recovered/ paid over a period of six months from the date of issue of this order.





**REVISION OF TRANSMISSION CHARGES ALLOWED FOR THE 2001-04, 2004-09 AND 2009-14 TARIFF PERIODS**

**2001-04 Period**

22. The Commission *vide* order dated 8.2.2008 in Petition No. 68/2002 had approved the revised transmission charges for Asset-I, Asset-II and Asset-III. The transmission charges allowed for the transmission assets is as follows:

	(₹ in lakh)		
Particulars	2001-02	2002-03	2003-04
<b>Asset-I</b>			
Depreciation	165.54	165.54	165.54
Interest on Loan	466.64	444.71	413.29
Return on Equity	40.24	40.24	40.24
Advance against Depreciation	15.7	41.16	223.30
Interest on Working Capital	26.34	27.18	30.95
O&M Expenses	199.17	211.13	223.79
<b>Total</b>	<b>913.64</b>	<b>929.96</b>	<b>1097.11</b>
<b>Asset-II</b>			
Depreciation	143.82	143.82	143.82
Interest on Loan	414.54	395.06	368.18
Return on Equity	13.70	13.70	13.70
Advance against Depreciation	29.07	51.95	192.73
Interest on Working Capital	23.69	24.48	27.46
O&M Expenses	200.18	212.19	224.92
<b>Total</b>	<b>825.00</b>	<b>841.20</b>	<b>970.81</b>
<b>Asset-III</b>			
Depreciation	19.79	19.79	19.79
Interest on Loan	38.16	36.37	34.40
Return on Equity	23.64	23.64	23.64
Advance against Depreciation	2.06	4.31	6.74
Interest on Working Capital	3.32	3.43	3.55
O&M Expenses	31.37	33.25	35.25
<b>Total</b>	<b>118.34</b>	<b>120.79</b>	<b>123.37</b>

23. The Petitioner has claimed the following revised transmission charges for the transmission assets for the 2001-04 tariff period:

	(₹ in lakh)		
Particulars	2001-02	2002-03	2003-04
<b>Asset-I</b>			
Depreciation	165.54	165.54	165.54
Interest on Loan	471.45	454.72	428.98
Return on Equity	40.24	40.24	40.24





Advance against Depreciation	0.00	0.00	160.50
Interest on Working Capital	26.13	26.57	30.03
O&M Expenses	199.17	211.13	223.79
<b>Total</b>	<b>902.53</b>	<b>898.20</b>	<b>1049.08</b>
<b>Asset-II</b>			
Depreciation	143.82	143.82	143.82
Interest on Loan	418.97	404.30	382.81
Return on Equity	13.70	13.70	13.70
Advance against Depreciation	0.00	0.00	131.86
Interest on Working Capital	23.21	23.64	26.56
O&M Expenses	200.18	212.19	224.92
<b>Total</b>	<b>799.89</b>	<b>797.66</b>	<b>923.66</b>
<b>Asset-III</b>			
Depreciation	19.79	19.79	19.79
Interest on Loan	38.66	37.41	36.02
Return on Equity	23.64	23.64	23.64
Advance against Depreciation	0.00	0.00	0.00
Interest on Working Capital	3.29	3.37	3.45
O&M Expenses	31.37	33.25	35.25
<b>Total</b>	<b>116.75</b>	<b>117.46</b>	<b>118.15</b>

24. UPPCL has submitted that the Petitioner has not submitted the figures of Debt-Equity ratio, cumulative depreciation, weighted average rate of interest and copy of the APTEL judgments referred by the Petitioner. In response, the Petitioner has submitted that the Debt-Equity ratio and weighted average rate of interest considered in order dated 8.2.2008 in Petition No. 68/2002 has been considered. The Petitioner has further submitted that calculation of IoL and figure of cumulative depreciation is given as part of the petition. The Petitioner has further submitted that APTEL judgments have been submitted in Petition No. 255/TT/2019 and also vide affidavit dated 21.8.2020 in rejoinder to UPPCL in Petition No. 473/TT/2019.

25. We have considered the submissions made by the Petitioner and UPPCL. The judgments of APTEL covering the subject matter of present appeals are available in public domain. Moreover, the Petitioner has submitted the same alongwith the rejoinder to the reply of UPPCL. Accordingly, the tariff is allowed for the transmission assets on the basis of the following:



- a. Admitted capital cost as on 1.4.2001 *vide* order dated 8.2.2008 in Petition No. 68/2002 for:
- i. Asset-I: ₹5767.60 lakh;
  - ii. Asset-II: ₹5102.90 lakh;
  - iii. Asset-III: ₹661.29 lakh.
- b. Weighted Average Rate of Interest on actual loan derived/ adopted from order dated 19.5.2008 in Petition No. 82/2004.
- c. Weighted Average Rate of Depreciation, Rate of IWC and O&M Expenses as per order dated 19.5.2008 in Petition No. 82/2004.
- d. As there was no ACE during 2001-04 period, there is no requirement to revise the maintenance spares component for calculating IWC.
- e. Admitted capital cost as on 31.3.2004 *vide* order dated 8.2.2008 in Petition No. 68/2002 for:
- i. Asset-I: ₹5767.60 lakh;
  - ii. Asset-II: ₹5102.90 lakh;
  - iii. Asset-III: ₹661.29 lakh.

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

(₹ in lakh)			
Particulars	2001-02	2002-03	2003-04
<b>Asset-I</b>			
Depreciation	165.54	165.54	165.54
Interest on Loan	471.45	454.72	428.98
Return on Equity	40.24	40.24	40.24
Advance against Depreciation	0.00	0.00	160.50
Interest on Working Capital	26.13	26.57	30.03
O&M Expenses	199.17	211.13	223.79
<b>Total</b>	<b>902.53</b>	<b>898.21</b>	<b>1049.08</b>
<b>Asset-II</b>			
Depreciation	143.82	143.82	143.82
Interest on Loan	418.97	404.30	382.81



Return on Equity	13.70	13.70	13.70
Advance against Depreciation	0.00	0.00	131.86
Interest on Working Capital	23.21	23.64	26.56
O&M Expenses	200.18	212.19	224.92
<b>Total</b>	<b>799.89</b>	<b>797.65</b>	<b>923.66</b>
<b>Asset-III</b>			
Depreciation	19.79	19.79	19.79
Interest on Loan	38.66	37.41	36.02
Return on Equity	23.64	23.64	23.64
Advance against Depreciation	0.00	0.00	0.00
Interest on Working Capital	3.29	3.37	3.45
O&M Expenses	31.37	33.25	35.25
<b>Total</b>	<b>116.75</b>	<b>117.45</b>	<b>118.15</b>

27. The AFC allowed for the 2001-04 tariff period *vide* order dated 8.2.2008 in Petition No. 68/2002, the revised AFC claimed in the instant petition and the revised AFC allowed in the instant order is as follows:

Particulars	2001-02	2002-03	2003-04
<b>Asset-I</b>			
AFC approved <i>vide</i> order dated 8.2.2008 in Petition No. 68/2002	913.64	929.96	1097.11
AFC claimed by the Petitioner in the instant petition	902.53	898.20	1049.08
AFC allowed in the instant order	902.53	898.21	1049.08
<b>Asset-II</b>			
AFC approved <i>vide</i> order dated 8.2.2008 in Petition No. 68/2002	825.00	841.20	970.81
AFC claimed by the Petitioner in the instant petition	799.89	797.66	923.66
AFC allowed in the instant order	799.89	797.65	923.66
<b>Asset-III</b>			
AFC approved <i>vide</i> order dated 8.2.2008 in Petition No. 68/2002	118.34	120.79	123.37
AFC claimed by the Petitioner in the instant petition	116.75	117.46	118.15
AFC allowed in the instant order	116.70	117.41	118.10

### **2004-09 Period**

28. The Commission *vide* order dated 19.5.2008 in Petition No. 82/2004 had approved the following revised transmission charges for transmission assets of the 2004-09 tariff period:



(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
<b>Asset-I</b>					
Depreciation	160.09	160.09	160.09	160.09	160.09
Interest on Loan	344.21	311.32	276.97	240.99	207.40
Return on Equity	35.21	35.21	35.21	35.21	35.21
Advance against Depreciation	0.00	0.00	154.71	260.13	223.91
Interest on Working Capital	21.33	21.39	24.14	26.04	25.56
O&M Expenses	177.65	184.76	192.31	199.73	207.97
<b>Total</b>	<b>738.49</b>	<b>712.77</b>	<b>843.43</b>	<b>922.19</b>	<b>860.14</b>
<b>Asset-II</b>					
Depreciation	138.71	138.71	138.71	138.71	138.71
Interest on Loan	309.01	281.42	252.43	221.89	192.77
Return on Equity	11.99	11.99	11.99	11.99	11.99
Advance against Depreciation	0.00	91.41	204.49	226.09	203.96
Interest on Working Capital	19.54	21.25	23.35	23.85	23.67
O&M Expenses	178.10	185.22	192.79	200.23	208.49
<b>Total</b>	<b>657.35</b>	<b>730.00</b>	<b>823.76</b>	<b>822.76</b>	<b>779.59</b>
<b>Asset-III</b>					
Depreciation	19.10	19.10	19.10	19.10	19.10
Interest on Loan	30.04	28.31	26.41	24.31	21.99
Return on Equity	20.68	20.68	20.68	20.68	20.68
Advance against Depreciation	0.00	1.02	7.49	10.22	13.22
Interest on Working Capital	3.53	3.62	3.82	3.95	4.08
O&M Expenses	58.60	60.95	63.40	65.91	68.57
<b>Total</b>	<b>131.95</b>	<b>133.68</b>	<b>140.90</b>	<b>144.17</b>	<b>147.64</b>

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

(₹ in lakh)

Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
<b>Asset-I</b>					
Depreciation	160.09	160.09	160.09	160.09	160.09
Interest on Loan	359.13	324.61	288.56	250.84	215.67
Return on Equity	35.21	35.21	35.21	35.21	35.21
Advance against Depreciation	0.00	0.00	142.17	280.81	241.42
Interest on Working Capital	21.59	21.62	24.12	26.57	26.01
O&M Expenses	177.65	184.76	192.31	199.73	207.97
<b>Total</b>	<b>753.67</b>	<b>726.29</b>	<b>842.47</b>	<b>953.24</b>	<b>886.36</b>



<b>Asset-II</b>					
Depreciation	138.71	138.71	138.71	138.71	138.71
Interest on Loan	323.20	294.27	263.87	231.86	201.37
Return on Equity	11.99	11.99	11.99	11.99	11.99
Advance against Depreciation	0.00	83.16	221.07	243.80	219.89
Interest on Working Capital	19.79	21.33	23.83	24.33	24.09
O&M Expenses	178.10	185.22	192.79	200.23	208.49
<b>Total</b>	<b>671.78</b>	<b>734.67</b>	<b>852.27</b>	<b>850.93</b>	<b>804.55</b>
<b>Asset-III</b>					
Depreciation	19.10	19.10	19.10	19.10	19.10
Interest on Loan	31.73	29.90	27.88	25.66	23.23
Return on Equity	20.68	20.68	20.68	20.68	20.68
Advance against Depreciation	0.00	0.00	3.44	11.86	14.67
Interest on Working Capital	3.56	3.63	3.77	4.00	4.13
O&M Expenses	58.60	60.95	63.40	65.91	68.57
<b>Total</b>	<b>133.67</b>	<b>134.26</b>	<b>138.27</b>	<b>147.20</b>	<b>150.38</b>

30. UPPCL has submitted that the Petitioner has not submitted the figures of cumulative depreciation and weighted average rate of interest. In response, the Petitioner weighted average rate of interest has been considered as per order dated 19.5.2008 in Petition No. 82/2004. The Petitioner has further submitted that figure of cumulative depreciation is given in the petition.

31. We have considered the submissions made by the Petitioner and UPPCL. The transmission tariff is allowed for the transmission assets on the basis of the following:

- a. Admitted capital cost as on 1.4.2004 *vide* order dated 19.5.2008 in Petition No. 82/2004 for:
  - i. Asset-I: ₹5577.80 lakh;
  - ii. Asset-II: ₹4921.87 lakh;
  - iii. Asset-III: ₹638.42 lakh.
- b. Weighted Average Rate of Interest on actual loan adopted from order dated 19.5.2008 in Petition No. 82/2004.



- c. Weighted Average Rate of Depreciation, Rate of IWC and O&M Expenses as per order dated 19.5.2008 in Petition No. 82/2004.
- d. There was ACE during 2004-09 period, hence, it necessitates revision of maintenance spares component for calculating IWC.

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

	(₹ in lakh)				
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
<b>Asset-I</b>					
Depreciation	160.09	160.09	160.09	160.09	160.09
Interest on Loan	359.13	324.61	288.56	250.84	215.67
Return on Equity	35.21	35.21	35.21	35.21	35.21
Advance against Depreciation	0.00	0.00	142.16	280.80	241.41
Interest on Working Capital	21.59	21.62	24.12	26.57	26.01
O&M Expenses	177.65	184.76	192.31	199.73	207.97
<b>Total</b>	<b>753.68</b>	<b>726.30</b>	<b>842.47</b>	<b>953.24</b>	<b>886.37</b>
<b>Asset-II</b>					
Depreciation	138.71	138.71	138.71	138.71	138.71
Interest on Loan	323.20	294.26	263.88	231.87	201.37
Return on Equity	11.99	11.99	11.99	11.99	11.99
Advance against Depreciation	0.00	83.16	221.08	243.80	219.89
Interest on Working Capital	19.79	21.33	23.83	24.33	24.09
O&M Expenses	178.10	185.22	192.79	200.23	208.49
<b>Total</b>	<b>671.79</b>	<b>734.67</b>	<b>852.28</b>	<b>850.93</b>	<b>804.54</b>
<b>Asset-III</b>					
Depreciation	19.10	19.10	19.10	19.10	19.10
Interest on Loan	31.73	29.90	27.87	25.65	23.23
Return on Equity	20.68	20.68	20.68	20.68	20.68
Advance against Depreciation	0.00	0.00	3.45	11.86	14.67
Interest on Working Capital	3.56	3.63	3.77	4.00	4.13
O&M Expenses	58.60	60.95	63.40	65.91	68.57
<b>Total</b>	<b>133.67</b>	<b>134.26</b>	<b>138.27</b>	<b>147.20</b>	<b>150.38</b>

33. The AFC allowed for 2004-09 tariff period *vide* order dated 19.5.2008 in Petition No. 82/2004, the revised AFC claimed in the instant petition and revised AFC allowed in the instant order is as follows:



Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
<b>Asset-I</b>					
AFC approved <i>vide</i> order dated 19.5.2008 in Petition No. 82/2004	738.49	712.77	843.43	922.19	860.14
AFC claimed by the Petitioner in the instant petition	753.67	726.29	842.47	953.24	886.36
AFC allowed in the instant order	753.68	726.30	842.47	953.24	886.37
<b>Asset-II</b>					
AFC approved <i>vide</i> order dated 19.5.2008 in Petition No. 82/2004	657.35	730.00	823.76	822.76	779.59
AFC claimed by the Petitioner in the instant petition	671.78	734.67	852.27	850.93	804.55
AFC allowed in the instant order	671.79	734.67	852.28	850.93	804.54
<b>Asset-III</b>					
AFC approved <i>vide</i> order dated 19.5.2008 in Petition No. 82/2004	131.95	133.68	140.90	144.17	147.64
AFC claimed by the Petitioner in the instant petition	133.67	134.26	138.27	147.20	150.38
AFC allowed in the instant order	133.67	134.26	138.27	147.20	150.38

### **2009-14 Period**

34. The transmission assets were combined with effect from 1.4.2009. The Commission *vide* order dated 27.4.2011 in Petition No. 285/2010 had approved the transmission tariff for the Combined Asset of the 2009-14 tariff period and in order dated 28.1.2016 in Petition No 432/TT/2014 had trued-up the transmission tariff allowed for the 2009-14 tariff period that was allowed in order dated 27.4.2011 in Petition No. 285/2010 and the same is as follows:

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	585.64	585.64	585.64	585.64	115.43
Interest on Loan	312.36	238.91	204.93	180.13	179.78
Return on Equity	90.55	93.87	93.96	95.27	108.43
Interest on Working Capital	44.54	44.44	45.20	46.23	38.31
O&M Expenses	478.53	505.81	534.98	565.48	597.77
<b>Total</b>	<b>1511.62</b>	<b>1468.67</b>	<b>1464.71</b>	<b>1472.75</b>	<b>1039.72</b>

(₹ in lakh)





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

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	585.64	585.64	585.64	585.64	115.43
Interest on Loan	326.50	251.21	217.16	192.86	193.39
Return on Equity	90.55	93.87	93.96	95.27	108.43
Interest on Working Capital	44.83	44.70	45.45	46.50	38.60
O&M Expenses	478.53	505.81	534.98	565.48	597.77
<b>Total</b>	<b>1526.05</b>	<b>1481.23</b>	<b>1477.20</b>	<b>1485.75</b>	<b>1053.62</b>

36. UPPCL has submitted that the rate of interest considered by the Petitioner is not justified and cumulative depreciation considered is not consistent with the cumulative depreciation worked out by UPPCL.

37. We have considered the submissions made by the Petitioner and UPPCL. The transmission tariff for the 2009-14 tariff period is revised for the Combined Asset on the basis of the following:

- a) Admitted capital cost of ₹11138.09 lakh as on 1.4.2009.
- b) Weighted Average Rate of Interest on actual loan derived/ adopted from order dated 28.1.2016 in Petition No. 432/TT/2014.
- c) Weighted Average Rate of Depreciation as per order dated 28.1.2016 in Petition No. 432/TT/2014.
- d) Actual ACE ₹45.19 lakh for 2012-13 and ₹363.09 lakh for 2013-14 that had been approved by the Commission *vide* order dated 28.1.2016 in Petition No. 432/TT/2014 towards freehold land and gravel filling work in Kanpur Sub-station.

38. In view of the above, the revised transmission charges allowed for the Combined Asset for the 2009-14 tariff period is as follows.

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	585.64	585.64	585.64	585.64	126.39
Interest on Loan	326.49	251.21	217.16	192.85	193.05
Return on Equity	90.55	93.87	93.96	95.27	108.43
Interest on Working Capital	44.83	44.70	45.45	46.50	38.82
O&M Expenses	478.53	505.81	534.98	565.48	597.77
<b>Total</b>	<b>1526.05</b>	<b>1481.22</b>	<b>1477.19</b>	<b>1485.74</b>	<b>1064.45</b>



39. The AFC allowed for the 2009-14 tariff period *vide* order dated 28.1.2016 in Petition No. 432/TT/2014, the revised AFC claimed in the instant petition and the revised AFC allowed in the instant order is as follows:

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
AFC approved <i>vide</i> order dated 28.1.2016 in Petition No. 432/TT/2014	1511.62	1468.67	1464.71	1472.75	1039.71
AFC claimed by the Petitioner in the instant petition	1526.05	1481.23	1477.20	1485.75	1053.62
AFC allowed in the instant order	1526.05	1481.22	1477.19	1485.74	1064.45

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

40. The details of the transmission charges claimed by the Petitioner in respect of the Combined Asset is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	135.57	135.57	135.56	135.57	135.56
Interest on Loan	208.85	199.77	190.68	181.60	172.52
Return on Equity	119.20	119.74	119.68	119.68	120.01
Interest on Working Capital	40.99	41.79	42.63	43.48	44.41
O&M Expenses	548.72	566.91	585.93	605.11	625.50
<b>Total</b>	<b>1053.33</b>	<b>1063.78</b>	<b>1074.48</b>	<b>1085.44</b>	<b>1098.00</b>

41. The details of the IWC claimed by the Petitioner for the Combined Asset is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	45.73	47.24	48.83	50.43	52.13
Maintenance Spares	82.31	85.04	87.89	90.77	93.83
Receivables	175.56	177.30	179.08	180.91	183.00
<b>Total Working Capital</b>	<b>303.60</b>	<b>309.58</b>	<b>315.80</b>	<b>322.11</b>	<b>328.96</b>
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on Working Capital</b>	<b>40.99</b>	<b>41.79</b>	<b>42.63</b>	<b>43.48</b>	<b>44.41</b>



## **Capital Cost**

42. UPPCL has submitted that the capital cost considered by the Petitioner is not consistent with the capital cost specified in the body of the petition.

43. The capital cost of the existing project has been calculated in accordance with Regulation 9(3) of 2014 Tariff Regulations. The Commission vide order dated 28.1.2016 in Petition No. 432/TT/2014 had allowed capital cost of ₹11546.37 lakh as on 1.4.2014 and 31.3.2019 for determination of tariff for the 2014-19 tariff period for the Combined Assets shown in the following table:

(₹ in lakh)		
Admitted Capital Cost as on 31.3.2014	Admitted ACE during 2014-19	Admitted Capital Cost as on 31.3.2019
11546.37	0.00	11546.37

44. 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 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.

45. We have considered the submissions of BRPL. The Commission vide order dated 24.1.2021 in Petition No. 136/TT/2020 has already dealt with the concerns of the BRPL. The relevant portion of the order are extracted as follows:

*"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."*



46. In view of the above, the submissions made by BRPL are rejected.

47. The Petitioner has not claimed any ACE in the instant petition. Accordingly, the details of the approved capital cost is as follows:

(₹ in lakh)		
Capital Cost as on 31.3.2014	ACE during 2014-19	Capital Cost as on 31.3.2019
11546.37	0.00	11546.37

### **Debt-Equity ratio**

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

Particulars	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	10938.99	94.74	10938.99	94.74
Equity	607.38	5.26	607.38	5.26
<b>Total</b>	<b>11546.37</b>	<b>100.00</b>	<b>11546.37</b>	<b>100.00</b>

### **Depreciation**

49. UPPCL has submitted that the cumulative depreciation and annual depreciation considered by the Petitioner is not consistent with the depreciation worked out by UPPCL. In response, the Petitioner has submitted that the depreciation has been computed as per the 2014 Tariff Regulations.

50. We have considered the submissions of the Petitioner and UPPCL. The Combined Asset has completed 12 years of life as on 31.3.2013 and from 2013-14 onwards the remaining depreciable value has been spread across the balance useful



life of 19 years in accordance with Regulation 27(5) of the 2014 Tariff Regulations. The Gross Block during the tariff period 2014-19 has been depreciated accordingly and the trued-up depreciation is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Depreciation</b>					
Opening Gross Block	11546.37	11546.37	11546.37	11546.37	11546.37
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	11546.37	11546.37	11546.37	11546.37	11546.37
Average Gross Block	11546.37	11546.37	11546.37	11546.37	11546.37
Weighted Average Rate of Depreciation (%)	1.169	1.169	1.169	1.169	1.169
Aggregate Depreciable Value	10329.89	10329.89	10329.89	10329.89	10329.89
Balance useful life of the asset ( Year)	19	18	17	16	15
Lapsed life (Year)	13	14	15	16	17
<b>Depreciation during the year</b>	<b>134.99</b>	<b>134.99</b>	<b>134.99</b>	<b>134.99</b>	<b>134.99</b>
Cumulative depreciation	7900.11	8035.10	8170.08	8305.07	8440.06
Remaining Depreciable Value	2429.79	2294.80	2159.81	2024.82	1889.83

51. The details of depreciation approved *vide* order dated 28.1.2016 in Petition No. 432/TT/2014, depreciation claimed by the Petitioner and trued-up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 28.1.2016 in Petition No. 432/TT/2014	124.03	124.03	124.03	124.03	124.03
Claimed by the Petitioner in the instant petition	135.57	135.57	135.56	135.57	135.56
Allowed after true-up in this order	134.99	134.99	134.99	134.99	134.99

### **Interest on Loan (IoL)**

52. UPPCL has submitted that the capital cost and cumulative repayment of loan as on 31.3.2014 considered by the Petitioner is not justified. In response, the



Petitioner has submitted that the IoL has been computed as per the 2014 Tariff Regulations.

53. We have considered the submission of the Petitioner and UPPCL. IoL has been calculated based on actual interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. Trued-up IoL allowed for the Combined Asset for the 2014-19 tariff period is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Interest on Loan</b>					
Gross Normative Loan	10938.99	10938.99	10938.99	10938.99	10938.99
Cumulative Repayments up to Previous Year	7765.12	7900.11	8035.10	8170.08	8305.07
Net Loan-Opening	3173.87	3038.88	2903.89	2768.91	2633.92
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	134.99	134.99	134.99	134.99	134.99
Net Loan-Closing	3038.88	2903.89	2768.91	2633.92	2498.93
Average Loan	3106.38	2971.39	2836.40	2701.41	2566.42
Weighted Average Rate of Interest on Loan (%)	6.7002	6.7002	6.7002	6.7002	6.7002
<b>Interest on Loan</b>	<b>208.13</b>	<b>199.09</b>	<b>190.04</b>	<b>181.00</b>	<b>171.96</b>

54. The details of IoL approved *vide* order dated 28.1.2016 in Petition No. 432/TT/2014, IoL claimed by the Petitioner and trued up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 28.1.2016 in Petition No. 432/TT/2014	187.86	179.84	171.81	163.79	155.76
Claimed by the Petitioner in the instant petition	208.85	199.77	190.68	181.60	172.52
Allowed after true-up in this order	208.13	199.09	190.04	181.00	171.96

### **Return on Equity (ROE)**

55. The Petitioner has claimed Return on Equity for the Combined Asset in terms of Regulation 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted



that they are liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period:

<b>Year</b>	<b>Claimed effective tax rate (in %)</b>	<b>Grossed up ROE [Base Rate/(1-t)] (in %)</b>
2014-15	21.018	19.625
2015-16	21.382	19.715
2016-17	21.338	19.705
2017-18	21.337	19.705
2018-19	21.549	19.758

56. 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 RoE rate of respective years. The Petitioner has submitted that the authenticated tax rates have been considered for calculation of RoE.

57. The Petitioner has submitted that the Commission has granted trued-up tariff of 2014-19 tariff period vide order dated 27.4.2020 in Petition No. 274/TT/2019 and various other similar orders, wherein effective tax rate based (for 2014-19 tariff period) on notified MAT rates are considered for the purpose of grossing-up of rate of RoE.

58. BRPL has submitted that the information regarding Income Tax Assessment submitted by the Petitioner is in respect of the Petitioner Company as a whole 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 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 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.

59. We have considered the submissions of the Petitioner and BRPL and UPPCL. The Commission vide order dated 24.1.2021 in Petition No. 136/TT/2020 has already dealt with the concerns of BRPL and UPPCL. The relevant portion of the order dated 24.1.2021 is as follows:

*“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."

60. In view of the above, the submissions made by the UPPCL and BRPL cannot be acceded to.

61. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given in the table below. The relevant portion of the order dated 27.4.2020 is as follows:

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

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

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

”



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

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

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

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	607.38	607.38	607.38	607.38	607.38
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	607.38	607.38	607.38	607.38	607.38
Average Equity	607.38	607.38	607.38	607.38	607.38
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
<b>Return on Equity</b>	<b>119.11</b>	<b>119.68</b>	<b>119.68</b>	<b>119.68</b>	<b>120.01</b>

64. The details of RoE approved *vide* order dated 28.1.2016 in Petition No. 432/TT/2014, RoE claimed by the Petitioner and trued up in the instant order is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 28.1.2016 in Petition No. 432/TT/2014	119.11	119.11	119.11	119.11	119.11
Claimed by the Petitioner in the instant petition	119.20	119.74	119.68	119.68	120.01
Allowed after true-up in this order	119.11	119.68	119.68	119.68	120.01



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

65. The trued up O&M Expenses claimed by the Petitioner for the Combined Asset are as follows.

<b>O&amp;M Expenses</b>					
<b>Combined Asset</b>					
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Sub-station</b>					
220 kV Kanpur:Unchahar-I, II, III & IV bay					
Number of bays	4	4	4	4	4
220 kV Kanpur:ICT-I & II bay					
Number of bays	2	2	2	2	2
220 kV Kanpur:Panki and Mainpuri bay					
Number of bays	2	2	2	2	2
400 kV Kanpur:ICT-I & II bay					
Number of bays	2	2	2	2	2
<b>Transmission lines</b>					
Unchahar Kanpur Ckt-I & II					
D/C Single Conductor (km)	143.553	143.553	143.553	143.553	143.553
Unchahar Kanpur Ckt-III & IV					
D/C Single Conductor (km)	144.533	144.533	144.533	144.533	144.533
LILO of Panki Mainpuri Line at Kanpur					
D/C Single Conductor (km)	10.40	10.40	10.40	10.40	10.40
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>548.72</b>	<b>566.91</b>	<b>585.93</b>	<b>605.11</b>	<b>625.50</b>

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

<b>Element</b>	<b>Norms for 2014-15</b>	<b>Norms for 2015-16</b>	<b>Norms for 2016-17</b>	<b>Norms for 2017-18</b>	<b>Norms for 2018-19</b>
D/C (Single Conductor) (₹ lakh/km)	0.303	0.313	0.324	0.334	0.346
220 kV Sub-station (₹ lakh/ bay)	42.21	43.61	45.06	46.55	48.10
400 kV Sub-station (₹ lakh/ bay)	60.30	62.30	64.37	66.51	68.71

67. UPPCL has submitted that the O&M Expenses considered by the Petitioner are not consistent with the O&M Expenses worked out by UPPCL. In response, the



Petitioner has submitted that the O&M Expenses have been computed as per the 2014 Tariff Regulations.

68. We have considered the submissions made by the Petitioner and UPPCL. The O&M Expenses are allowed under Regulation 29(3) of the 2014 Tariff Regulations and are as follows:

(₹ in lakh)					
Details	2014-15	2015-16	2016-17	2017-18	2018-19
8 Numbers 220 kV Sub-station bays	337.68	348.88	360.48	372.40	384.80
2 Numbers of 400 kV Sub-station bays	120.60	124.60	128.74	133.02	137.42
298.486 km D/C (Single Conductor) transmission line	90.44	93.43	96.71	99.69	103.28
<b>Total</b>	<b>548.72</b>	<b>566.91</b>	<b>585.93</b>	<b>605.11</b>	<b>625.50</b>

69. The details of O&M Expenses approved *vide* order dated 28.1.2016 in Petition No. 432/TT/2014, O&M Expenses claimed by the Petitioner and tried-up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 28.1.2016 in Petition No. 432/TT/2014	548.72	566.91	585.93	605.11	625.50
Claimed by the Petitioner in the instant petition	548.72	566.91	585.93	605.11	625.50
Allowed after true-up in this order	548.72	566.91	585.93	605.11	625.50

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

70. The IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and tried-up IWC has been allowed for the Combined Asset as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Interest on Working Capital</b>					
O&M Expenses (O&M Expenses for 1 month)	45.73	47.24	48.83	50.43	52.12
Maintenance Spares (15% of O&M Expenses)	82.31	85.04	87.89	90.77	93.82



Receivables (Equivalent to 2 months of annual fixed cost)	175.32	177.07	178.88	180.71	182.80
<b>Total Working Capital</b>	<b>303.35</b>	<b>309.35</b>	<b>315.59</b>	<b>321.90</b>	<b>328.75</b>
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest on Working Capital</b>	<b>40.95</b>	<b>41.76</b>	<b>42.60</b>	<b>43.46</b>	<b>44.38</b>

71. The details of IWC approved *vide* order dated 28.1.2016 in Petition No. 432/TT/2014, IWC claimed by the Petitioner and trued up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 28.1.2016 in Petition No. 432/TT/2014	40.23	41.05	41.92	42.79	43.74
Claimed by the Petitioner in the instant petition	40.99	41.79	42.63	43.48	44.41
Allowed after true-up in this order	40.95	41.76	42.60	43.46	44.38

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

72. The trued up annual fixed charges approved for the Combined Asset for the 2014-19 tariff period are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	134.99	134.99	134.99	134.99	134.99
Interest on Loan	208.13	199.09	190.04	181.00	171.96
Return on Equity	119.11	119.68	119.68	119.68	120.01
Interest on Working Capital	40.95	41.76	42.60	43.46	44.38
O&M Expenses	548.72	566.91	585.93	605.11	625.50
<b>Total</b>	<b>1051.90</b>	<b>1062.43</b>	<b>1073.25</b>	<b>1084.24</b>	<b>1096.83</b>

73. Accordingly, the Annual Transmission Charges approved *vide* order dated 28.1.2016 in Petition No. 432/TT/2014, claimed by the Petitioner and approved after truing up in the instant order is shown in the table below:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 28.1.2016 in Petition No. 432/TT/2014	1019.95	1030.93	1042.79	1054.83	1068.13
Claimed by the Petitioner in the instant petition	1053.33	1063.78	1074.48	1085.44	1098.00



Allowed after true-up in this order	1051.90	1062.43	1073.25	1084.24	1096.83
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### **DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD**

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	135.58	135.55	135.58	135.55	135.58
Interest on Loan	163.43	154.35	145.27	136.18	127.10
Return on Equity	120.01	120.01	120.01	120.01	120.01
Interest on Working Capital	31.75	32.57	33.35	34.19	34.97
O&M Expenses	584.07	605.02	625.99	648.43	670.33
<b>Total</b>	<b>1034.84</b>	<b>1047.50</b>	<b>1060.20</b>	<b>1074.36</b>	<b>1087.99</b>

75. The details of the IWC claimed by the Petitioner for the 2019-24 period for the Combined Asset are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	48.67	50.42	52.17	54.04	55.86
Maintenance Spares	87.61	90.75	93.90	97.26	100.55
Receivables	127.23	129.14	130.71	132.46	133.77
Total Working Capital	263.51	270.31	276.78	283.76	290.18
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>31.75</b>	<b>32.57</b>	<b>33.35</b>	<b>34.19</b>	<b>34.97</b>

### **Capital Cost**

76. Regulation 19 of the 2019 Tariff Regulations provide as follows:

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

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

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

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





or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

(c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;

(e) Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;

(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;

(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;

(h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;

(i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;

(k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;

(l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;

(m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;

(n) Expenditure on account of change in law and force majeure events; and

(o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

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

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;

(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;

(c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and

(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”

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



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

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

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

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

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

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

77. The Petitioner has claimed a capital cost of ₹11546.37 lakh as on 31.3.2019 for the Combined Asset. The same has been worked out by the Commission as on 31.3.2019 and considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

78. The Petitioner has not claimed ACE during 2019-24 tariff period for the combined asset.

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



(₹ in lakh)

Total Capital Cost as on 1.4.2019	Total Capital Cost as on 31.3.2024
11546.37	11546.37

### **Debt-Equity ratio**

80. Regulation 18 of the 2019 Tariff Regulations provides as follows:

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

*Provided that:*

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

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

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

*Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;*

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



(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”

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

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	10938.99	94.74	10938.99	94.74
Equity	607.38	5.26	607.38	5.26
<b>Total</b>	<b>11546.37</b>	<b>100.00</b>	<b>11546.37</b>	<b>100.00</b>

### **Depreciation**

82. Regulation 33(1), (2) and (5) of the 2019 Tariff Regulations provides as follows:

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

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

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

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



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

83. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The Combined Asset has completed 12 years of life as on 31.3.2013 and the annual depreciation from 2014-15 onwards is ₹134.99 lakh The depreciation allowed for the Combined Asset for the 2019-24 period is as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Depreciation</b>					
Opening Gross Block	11546.37	11546.37	11546.37	11546.37	11546.37
Addition during the year 2019-24 due to projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	11546.37	11546.37	11546.37	11546.37	11546.37
Average Gross Block	11546.37	11546.37	11546.37	11546.37	11546.37
Weighted average rate of Depreciation (WAROD) (%)	1.169	1.169	1.169	1.169	1.169
Balance useful life at the beginning of the year (Year)	14	13	12	11	10
Lapsed life of the asset (Year)	18	19	20	21	22
Depreciable Value	10329.89	10329.89	10329.89	10329.89	10329.89
<b>Depreciation during the year</b>	<b>134.99</b>	<b>134.99</b>	<b>134.99</b>	<b>134.99</b>	<b>134.99</b>
Cumulative Depreciation	8575.05	8710.04	8845.02	8980.01	9115.00
Remaining Depreciable Value	1754.85	1619.86	1484.87	1349.88	1214.89

### **Interest on Loan (IoL)**

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

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

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

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



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

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

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

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

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

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

85. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. The IoL allowed for the Combined Asset for the 2019-24 tariff period is as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	10938.99	10938.99	10938.99	10938.99	10938.99
Cumulative Repayments up to Previous Year	8440.06	8575.05	8710.04	8845.02	8980.01
Net Loan-Opening	2498.93	2363.94	2228.95	2093.97	1958.98
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	134.99	134.99	134.99	134.99	134.99
Net Loan-Closing	2363.94	2228.95	2093.97	1958.98	1823.99
Average Loan	2431.44	2296.45	2161.46	2026.47	1891.48
Weighted Average Rate of Interest on Loan (%)	6.7002	6.7002	6.7002	6.7002	6.7002
<b>Interest on Loan</b>	<b>162.91</b>	<b>153.87</b>	<b>144.82</b>	<b>135.78</b>	<b>126.73</b>





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

86. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provides as follows:

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

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

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

*Provided further that:*

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

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

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

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

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

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

**“31. Tax on Return on Equity:**(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the





concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

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

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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

#### **Illustration-**

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

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

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

- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
- (b) Estimated Advance Tax for the year on above is Rs 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;
- (d) Rate of return on equity =  $15.50 / (1 - 0.24) = 20.395\%$ .

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

87. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company.

88. UPPCL has submitted that the opening normative equity considered by the Petitioner does not match with the computations made by the UPPCL. UPPCL has



further submitted that the grossed up rate of RoE is not based on MAT rates as specified by the Income Tax Authorities. In response to the contentions of UPPCL, the Petitioner has submitted that there is change in MAT rate applicable for the year 2019-20 on account of Taxation Laws (Amendment) Ordinance 2019 published in the Gazette dated 20.9.2019 and submitted that :

a. 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 in Regulation 31(2) of the 2019 Tariff Regulations.

b. As per Regulation 31(3) of the 2019 Tariff Regulations, the grossed up rate of RoE at the end of every financial year should 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. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the transmission licensee.

89. 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. BRPL has further submitted that the Petitioner should clarify whether it is grossing up deferred tax amount while billing to beneficiaries and, if so, the same is required to be refunded to beneficiaries.

90. We have considered the submissions of the Petitioner, UPPCL and BRPL. The MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which



shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed for the Combined Asset for the 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	607.38	607.38	607.38	607.38	607.38
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	607.38	607.38	607.38	607.38	607.38
Average Equity	607.38	607.38	607.38	607.38	607.38
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
<b>Return on Equity</b>	<b>114.08</b>	<b>114.08</b>	<b>114.08</b>	<b>114.08</b>	<b>114.08</b>

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

91. The O&M Expenses claimed by the Petitioner for the Combined Asset for the various elements included in the Combined Asset for the 2019-24 tariff period are as follows:

<b>O&amp;M Expenses</b>					
	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Sub-station</b>					
220 kV Kanpur:Unchahar-I, II, III & IV bay					
Number of bays	4	4	4	4	4
220 kV Kanpur:ICT-I & II bay					
Number of bays	2	2	2	2	2
220 kV Kanpur:Panki and Mainpuri bay					
Number of bays	2	2	2	2	2
400 kV Kanpur:ICT-I & II bay					
Number of bays	2	2	2	2	2
<b>Transformer</b>					
400 kV 315 MVA Kanpur:ICT-I & II					
Number of transformers	2	2	2	2	2
<b>Transmission lines</b>					
Unchahar Kanpur Ckt-I & II					
D/C Single Conductor (km)	143.553	143.553	143.553	143.553	143.553
Unchahar Kanpur Ckt-III & IV					
D/C Single Conductor (km)	144.533	144.533	144.533	144.533	144.533
LILO of Panki Mainpuri Line at Kanpur					
D/C Single Conductor (km)	10.40	10.40	10.40	10.40	10.40



<b>O&amp;M claimed for PLCC</b> (2% of ₹80.87 lakh)	1.62	1.62	1.62	1.62	1.62
<b>Total O&amp;M Expense (₹ in lakh)</b>	<b>584.07</b>	<b>605.02</b>	<b>625.99</b>	<b>648.43</b>	<b>670.33</b>

92. UPPCL has submitted that since the assets covered under both the 2014-19 and 2019-24 tariff periods are same and with no projected ACE, the Petitioner has considered O&M for 2 numbers of ICTs as additional assets.

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

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

<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Norms for sub-station Bays (₹ Lakh per bay)</b>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<b>Norms for Transformers (₹ Lakh per MVA)</b>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<b>Norms for AC and HVDC lines (₹ Lakh per km)</b>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011



Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
<b>Norms for HVDC stations</b>					
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 bi-pole scheme (2000 MW);*
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;*



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

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

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

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

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

**(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.”

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





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

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

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

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

95. We have considered the submissions of the Petitioner and the Respondents.

The O&M expenses have been worked out as per the norms specified in the 2019

Tariff Regulations and the same are as follows:

Details	2019-20	2020-21	2021-22	2022-23	2023-24
8 Numbers 220 kV Sub-station bays	180.08	186.40	192.96	199.68	206.72
2 Numbers of 400 kV Sub-station bays	64.30	66.56	68.90	71.32	73.82
2 Numbers of 400 kV 315MVA transformers	225.54	233.73	241.92	250.74	258.93
298.486 km D/C (Single Conductor) transmission line	112.53	116.71	120.59	125.07	129.24
<b>Total</b>	<b>582.45</b>	<b>603.40</b>	<b>624.37</b>	<b>646.81</b>	<b>668.71</b>





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

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

### ***“34. Interest on Working Capital***

*(1)...*

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

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

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

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

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

### ***“3.Definitions ...***

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

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



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses for 1 month)	48.54	50.28	52.03	53.90	55.73
Maintenance Spares (15% of O&M Expenses)	87.37	90.51	93.66	97.02	100.31
Receivables (Equivalent to 45 days of annual fixed cost)	126.15	127.79	129.35	131.10	132.41
<b>Total Working Capital</b>	<b>262.05</b>	<b>268.59</b>	<b>275.04</b>	<b>282.02</b>	<b>288.45</b>
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
<b>Interest on Working Capital</b>	<b>31.58</b>	<b>30.22</b>	<b>30.94</b>	<b>31.73</b>	<b>32.45</b>

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

98. The transmission charges allowed for the Combined Asset for the 2019-24 tariff period are summarised as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	134.99	134.99	134.99	134.99	134.99
Interest on Loan	162.91	153.87	144.82	135.78	126.73
Return on Equity	114.08	114.08	114.08	114.08	114.08
Interest on Working Capital	31.58	30.22	30.94	31.73	32.45
O & M Expenses	582.45	603.40	624.37	646.81	668.71
<b>Total</b>	<b>1026.00</b>	<b>1036.55</b>	<b>1049.20</b>	<b>1063.38</b>	<b>1076.96</b>

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

99. 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.

100. 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

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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**

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

### **Goods and Services Tax**

102. 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

103. BRPL has submitted that the demand of the Petitioner is premature and need not be considered at this juncture.

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

### **Security Expenses**

105. 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.

106. 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.

107. 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**

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

### **Sharing of Transmission Charges**

109. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

110. To summarise:

- (a) The revised Annual Fixed Charges allowed for the transmission assets for the 2001-04 tariff period as per the APTEL's judgements are:

(₹ in lakh)			
Particulars	2001-02	2002-03	2003-04
Asset-I	902.53	898.21	1049.08
Asset-II	799.89	797.65	923.66
Asset-III	116.70	117.41	118.10

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

(₹ in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Asset-I	753.68	726.30	842.47	953.24	886.37
Asset-II	671.79	734.67	852.28	850.93	804.54
Asset-III	133.67	134.26	138.27	147.20	150.38



(c) The consequential revision of Annual Fixed Charges allowed for the Combined Asset for the 2009-14 tariff period are:

(₹ in lakh)					
Particulars	2009-10	2010-11	2012-13	2013-14	2014-15
Annual Fixed Charges	1526.05	1481.22	1477.19	1485.74	1064.45

(d) The trued-up Annual Fixed Charges allowed for the Combined Asset for the 2014-19 tariff period are:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	1051.90	1062.43	1073.25	1084.24	1096.83

(e) The Annual Fixed Charges approved for the Combined Asset asset for the 2019-24 tariff period are:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	1026.00	1036.55	1049.20	1063.38	1076.96

111. This order disposes of Petition No. 495/TT/2019 in terms of the above discussion and findings.

**sd/-**  
**(Pravas Kumar Singh)**  
**Member**

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

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

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

