CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 468/TT/2020

Coram:

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

Date of Order: 19.08.2021

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of 2014-19 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 of Asset-I: 400/220 kV Ludhiana Sub-station: (+) 600 MVAR/ (-) 400 MVAR SVC, Asset-II: 400/220 kV Kankroli Sub-station: (+) 400 MVAR/ (-) 300 MVAR SVC, Asset-III: 400/220 kV New Wanpoh Sub-station: (+) 300 MVAR/ (-) 200 MVAR SVC under "Static VAR Compensator (SVCs)" in Northern Region.

And in the matter of:

Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2,
Sector 29, Gurgaon-122001, (Haryana) **….Petitioner**

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur – 302005 (Rajasthan)

2. Ajmer Vidyut Vitran Nigam Limited,
132 KV, GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan)

3. Jaipur Vidyut Vitran Nigam Limited,
132 KV, GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan)

4. Jodhpur Vidyut Vitran Nigam Limited,
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 (Himachal Pradesh)

6. Punjab State Electricity Board,
Thermal Shed Tia,
Near 22 Phatak,
Patiala-147001 (Punjab)

7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula- 134109 (Haryana)

8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu

9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226001 (Uttar Pradesh)

10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002

11. BSES Yamuna Power Limited,
B-Block, Shakti Kiran, Bldg. (Near Karkardooma Court),
Karkadooma 2nd Floor, New Delhi-110092

12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110019

13. Tata Power Delhi Distribution Limited,
NDPL House, Hudson Lines Kingsway Camp,
Delhi – 110009

14. Chandigarh Administration,
Sector -9, Chandigarh

15. Uttarakhand Power Corporation Limited,
Urja Bhawan,
Kanwali Road, Dehradun (Uttarakhand)

16. North Central Railway,
Allahabad (Uttar Pradesh)

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

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

For Respondents : Shri R. B. Sharma, Advocate, BRPL
Shri Mohit Mudgal, Advocate, BYPL
Ms. Megha Bajpeyi, BRPL

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd., a deemed transmission licensee, for truing-up of transmission tariff for the period from COD to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and determination of tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following transmission assets under "Static VAR Compensator (SVCs)" in Northern Region (hereinafter referred to as "the transmission project):

Asset-I: 400/220 kV Ludhiana Sub-station: (+) 600 MVAR/ (-) 400 MVAR SVC

Asset-II: 400/220 kV Kankroli Sub-station: (+) 400 MVAR/ (-) 300 MVAR SVC

Asset-III: 400/220 kV New Wanpoh Sub-station: (+) 300 MVAR/ (-) 200 MVAR SVC

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

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

2) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 8 and 9 above for respective block.

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

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

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

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 10.10 above.

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

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

*9) It is prayed to Hon'ble Commission to condone the minor delay in commissioning of **Asset-I:** 400/220 kV Ludhiana Sub-station: (+) 600 MVAR / (-) 400 MVAR" in line with CERC Regulations' 2014 12(2)(i) as it is due to the development of a new technology to be utilized for the first time India, which has taken longer time and is beyond the control of the petitioner* [added vide affidavit date 30.3.2021].

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 (IA) and expenditure sanction for the transmission project was accorded by the Board of Directors of the Petitioner company vide Memorandum dated 16.5.2014 with an estimated cost of ₹82998 lakh including an IDC of ₹4527 lakh, based on price level of February 2014.

b) As per the IA dated 16.5.2014, the timeline for completion of the transmission project was 27 months from the date of IA. The entire scope of work under the transmission project has been completed and is covered under the instant petition.

c) COD of the transmission assets covered in the instant petition is as follows:

Assets	SCOD	COD	Time over-run
Asset-I	15.8.2016	30.11.2016	107 days
Asset-II	15.8.2016	25.12.2016	132 days
Asset-III	15.8.2016	30.12.2017	502 days

d) The tariff in respect of Asset-I, Asset-II and Asset-III was allowed by the Commission vide order dated 28.12.2016 in Petition No.149/TT/2016, order dated 21.6.2018 in Petition No. 241/TT/2016 and order dated 22.6.2018 in Petition No. 6/TT/2018, respectively. The Commission in order dated 28.12.2016 in Petition No. 149/TT/2016 observed that the time over-run in case of Asset-I will be considered after its actual commissioning or at the time of truing up. The Commission vide order dated 21.6.2018 in Petition No. 241/TT/2016 and vide order dated 22.6.2018 in Petition No. 6/TT/2018 condoned the delay of 136 days in case of Asset-II and 16 months 16 days in case of Asset-III respectively.

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

5. The Petitioner has served the petition on the Respondents. Public Notice regarding the filing of the instant petition has also been published in the newspapers

in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9, has filed its reply vide affidavit dated 25.1.2021 in which issues of apportionment of cost, capital cost, time over-run, cost over-run, RoE, adoption of Indian Accounting Standards, Additional Capital Expenditure (ACE) and Interest on Loan (IoL) have been raised. BSES Rajdhani Power Limited (BRPL), Respondent No. 12, has filed its reply vide affidavit dated 17.3.2021 and has raised issues of time over-run, Initial Spares, accrued IDC, adoption of Indian Accounting Standards, grossing up of RoE, annual truing up by a transmission licensee, ACE, deferred tax liability, over payment of Income Tax, security expenses and capital spares, GST and filing fees. The Petitioner vide affidavits dated 2.3.2021 and 25.3.2021 has filed rejoinders to the replies of UPPCL and BRPL respectively.

6. The hearing in this matter was held on 31.3.2021 through video conference and order was reserved.

7. Having heard the representatives of the Petitioner, UPPCL and BRPL and having perused the material on record, we proceed to dispose of the petition.

8. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 20.1.2020, the Petitioner’s affidavits dated 2.12.2020, 30.3.2021, replies of UPPCL (25.1.2021) and BRPL (17.3.2021) and the Petitioner’s rejoinder (2.3.2021 and 25.3.2021) thereto.

9. BRPL has submitted that the Commission may engage an agency to represent the interest of consumers in the proceedings before the Commission in terms of Section 94(3) of the Act and Regulation 18 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

10. We have considered the above submissions of BRPL. The Petitioner vide affidavit dated 8.5.2020 has submitted that it has carried out publication of the present tariff petition in the newspapers on 29.1.2020 in compliance of Regulations 3(6) and 3(8) of the Central Electricity Regulatory Commission (Procedure for Making of Application for Determination of Tariff, Publication of Application and Other Related Matters) Regulations, 2004. Further, the instant petition has also been uploaded on the Petitioner's website. No suggestions/ objections with regard to the present tariff petitions were received by the Commission before listing of the present petition for hearing. In view of the above, we are of the view that there is no need to engage any agency to represent the interest of consumers in the present case.

<u>Truing-up of Annual Fixed Charges for 2014-19 tariff period</u>

11. The details of the transmission charges claimed by the Petitioner for the transmission assets are as follows:

(₹ in lakh)

Asset-I			
Particulars	**2016-17 (Pro-rata for 122 days)**	**2017-18**	**2018-19**
Depreciation	265.50	909.22	1010.22
Interest on Loan	286.81	909.28	934.00
Return on Equity	295.89	1009.79	1125.88
Interest on working capital	19.61	65.13	70.52
O & M Expenses	21.52	66.51	68.71
Total	**889.33**	**2959.93**	**3209.33**

(₹ in lakh)

Asset-II			
Particulars	**2016-17 (Pro-rata for 97 days)**	**2017-18**	**2018-19**
Depreciation	166.98	743.47	858.32
Interest on Loan	183.74	748.09	792.61
Return on Equity	186.95	828.07	954.54
Interest on working capital	12.62	54.04	60.39
O & M Expenses	17.11	66.51	68.71
Total	**567.40**	**2440.18**	**2734.57**

(₹ in lakh)

Asset-III		
Particulars	**2017-18 (Pro-rata for 92 days)**	**2018-19**
Depreciation	157.66	727.13
Interest on Loan	165.02	733.70
Return on Equity	176.52	816.28
Interest on working capital	11.57	52.38
O & M Expenses	16.76	68.71
Total	**527.53**	**2398.20**

12. The details of the Interest on Working Capital claimed (IWC) claimed by the Petitioner in respect of the transmission assets are as follows:

(₹ in lakh)

Asset-I			
Particulars	**2016-17**	**2017-18**	**2018-19**
Maintenance Spares	5.36	5.54	5.73
O&M Expenses	9.66	9.98	10.31
Receivables	443.45	493.32	534.89
Total	458.47	508.84	550.93
Rate of Interest (%)	12.80	12.80	12.80
Interest on Working Capital	19.61	65.13	70.52

(₹ in lakh)

Asset-II			
Particulars	**2016-17**	**2017-18**	**2018-19**
Maintenance Spares	5.36	5.54	5.73
O&M Expenses	9.66	9.98	10.31
Receivables	355.84	406.70	455.76
Total	370.86	422.22	471.80
Rate of Interest (%)	12.80	12.80	12.80
Interest on Working Capital	**12.62**	**54.04**	**60.39**

(₹ in lakh)

Asset-III		
Particulars	**2017-18**	**2018-19**
Maintenance Spares	5.54	5.73
O&M Expenses	9.98	10.31
Receivables	348.82	399.70

Total	364.34	415.74
Rate of Interest (%)	12.60	12.60
Interest on Working Capital	**11.57**	**52.38**

Capital Cost

13. The capital cost and ACE approved by the Commission vide orders dated 28.12.2016 in Petition No.149/TT/2016, dated 21.6.2018 in Petition No. 241/TT/2016 and dated 22.6.2018 in Petition No. 6/TT/2018 as on 31.3.2019 for the transmission assets are as follows:

(₹ in lakh)

Asset	Actual Capital Cost as on COD	ACE	Total Capital Cost as on 31.3 2019
Asset-I	14579.76	6014.51	20594.27
Asset-II	10569.15	7523.91	18093.06
Asset-III	11095.07	6161.97	17257.10

14. UPPCL has submitted that the Petitioner has adopted the Indian Accounting Standard (IND AS), but did not submit the impact of adoption of Indian Accounting Standards on opening balance of the capital cost and depreciation thereon. UPPCL has prayed that the Petitioner may be directed to show the opening balance in old system in comparison to Indian Accounting Standards for 2014-19 period.

15. BRPL has submitted that on account of Petitioner's opting for deemed cost exemption as per paragraph D7 AA of IND AS 101 'First Time Adoption of Indian Accounting Standard', tariff has increased. BRPL has contended that submissions of the Petitioner on the issue of Indian Accounting Standards are against the spirit of 2014 Tariff Regulations or 2019 Tariff Regulations which have its own procedure for computation of tariff and prayed that the same may be rejected.

16. In response, the Petitioner has submitted that the Ministry of Corporate Affairs (MCA) in 2015 had notified the Companies (Indian Accounting Standards (IND AS) Rules, 2015 which stipulated mandatory adoption and applicability of IND AS

beginning from the accounting period 2016-17 for companies having net worth more than ₹500 crore. The Petitioner has further submitted that there is no impact in tariff on account of adoption of IND AS.

17. We have considered the submissions of the Petitioner, BRPL and UPPCL. The issue of Indian Accounting Standards has been raised in number of petitions by BRPL including in Petition No. 136/TT/2020. The Commission vide its order dated 24.1.2021 in Petition No. 136/TT/2020 has observed that adoption of the new accounting standards by the Petitioner would not have any impact on tariff, which is determined purely on the basis of the applicable tariff regulations. For these reasons, no fresh finding is required to be given on the issue of introduction of Indian Accounting Standards by the Petitioner. Accordingly, submissions of UPPCL and BRPL on this count are rejected.

18. UPPCL has further submitted that the project cost is highly over-estimated and that the Petitioner must seek determination of tariff on the basis of the bid price received by it. The final completion cost calculated based on bills paid to the successful bidder should be compared with quoted bid price and original estimated approved cost and the price escalations claimed by the successful bidder over and above the bid cost may be considered as cost over-run on account of delay in execution of the project.

19. In response, the Petitioner has submitted that decrease in total completion cost is due to the highly competitive bidding which may be lower or higher than the original cost estimate depending upon prevailing market conditions. The Petitioner has also submitted that it follows a robust procedure for preparation of cost estimates before

obtaining Investment Approval (IA). The Petitioner has further submitted that only under unavoidable situations, the cost undergoes changes. Further, the price escalation formula is based on price variation and actual site/ market conditions.

20. The Petitioner vide Auditor's Certificate dated 30.7.2019 has submitted capital cost up to the date of commercial operation along with ACE up to 31.3.2019 and estimated ACE for the period from 1.4.2019 to 31.3.2020. The details of the approved apportioned capital cost, capital cost as on COD and ACE incurred up to 31.3.2019 as claimed by the Petitioner for the transmission assets are as follows:

(₹ in lakh)

Assets	Apportioned Approved Cost	Capital cost as on COD	Actual Add-Cap expenditure			Total Cost as on 31.03.2019
			2016-17	2017-18	2018-19	
Asset-I	31224.15	13843.45	2668.85	1333.77	2433.17	20279.24
Asset-II	25266.30	11170.51	1869.33	2131.58	2242.86	17414.28
Asset-III	26507.55	11692.03	0.00	667.76	3111.86	15471.65
Total	**82998.00**	**36705.99**	**4538.18**	**4133.11**	**7787.89**	**53165.17**

Cost variation

21. The completion cost claimed by Petitioner including ACE in respect of the transmission assets is ₹53165.17 lakh which is within the approved apportioned capital cost of ₹ 82998.00 as mentioned above.

22. UPPCL has submitted that the Commission vide orders dated 28.12.2016 in Petition No. 149/TT/2016 and dated 21.6.2018 in Petition No. 241/TT/2016 observed that there was an over-estimation of costs with regard to Asset-I and Asset-II. It was further submitted on behalf of UPPCL that original estimated project cost was approved as ₹82998 lakh on 16.5.2014 whereas the actual completion cost as on 31.3.2019 is ₹53165.17 lakh and is substantially lower than the apportioned approved cost. Hence, the Petitioner must explain the reasons for such over-estimation of the

project cost. UPPCL has submitted that the Petitioner should explain the manner of preparation of cost-estimate, reason for such over-estimation, splitting of the scope of project into three different assets when bid was invited for the project as a whole, reasons for not seeking individual IA for each of the three assets and details of price escalation formula agreed with the executing agency.

23. In response, the Petitioner has submitted that IA was submitted in the original petitions where tariff was initially claimed i.e. Petition No. 149/TT/2016, Petition No. 241/TT/2016 and Petition No. 6/TT/2018. The Petitioner has also filed Auditor's certificates in respect of the transmission assets in the instant petition. The decrease in total completion cost is due to the highly competitive bidding. The Petitioner follows a highly robust procedure for preparation of cost estimates. Separate assets identified in IA were approved by the Board of Directors. The price escalation formula is based on price variation and actual site/ market conditions.

24. We have considered the submission of UPPCL and the clarifications given by the Petitioner. We note that there is no cost over-run in respect of the transmission assets compared with apportioned approved cost as per FR. However, there is need for more realistic cost estimation by the Petitioner.

Time over-run

25. The scheduled date of commercial operation (SCOD) of the transmission assets and the actual COD of the transmission assets are as follows:

Asset	**SCOD**	**COD**	**Time over-run**
Asset-I	15.8.2016	30.11.2016	107
Asset-II	15.8.2016	25.12.2016	132
Asset-III	15.8.2016	30.12.2017	502

26. The Commission vide order dated 21.6.2018 in Petition No. 241/TT/2016 and vide order dated 22.6.2018 in Petition No. 6/TT/2018 condoned the entire time over-run in case of Asset-II and Asset-III.

27. As per IA, the scheduled COD of Asset-I was 27 months from the date of IA. IA was accorded on 16.5.2014 and as such the scheduled COD of the transmission assets was 15.8.2016 against which Asset-I was put into commercial operation on 30.11.2016 resulting in time over-run of 107 days. As regards the time over-run in case of Asset-I, the Commission vide order dated 28.12.2016 in Petition No.149/TT/2016 observed that the same will be considered after its actual COD. The relevant portion of the order dated 28.12.2016 is as follows:

> *"11. We have considered the submissions of the petitioner. The instant asset is not yet commissioned and it is anticipated to be commissioned on 1.12.2016. It is observed that there is already 111 days of time over-run and the petitioner has not submitted detailed justification with regard to time over-run. Hence, the issue of time over-run will be considered after actual commissioning of the instant asset or at the time of truing up. Accordingly, IDC and IEDC for 111 days of time over-run is not allowed at this stage."*

28. The Petitioner has submitted the following reasons for the time over-run in case of Asset-I:

a) Asset-I i.e. SVC at Ludhiana was first of its kind in the world which was to be established in India under 'Make in India' initiative. MV bus rating of SVC is approximately 12000 Ampere and on MV side such higher rating was to be used for the first time in India. This required time for evaluating and finalizing the type of bus bar arrangement. Ultimately a combination of 'C' channel and 8" Indian Pipe standard tube was used. The 'C' channel is also used in pair and made up of Aluminium.

b) This 'C' channel was first time made in India and was first time manufactured by the supplier. This rating was to be used for the first time and, hence, required special skills. Further, the clamp and connector of these MV buses were also developed for the first time and considerable time was spent in developing the same.

c) The principal SVC manufacturer Company, Siemens, never came across with such requirement of current rating anywhere in the world. This high current capacity bus design was indigenously developed for SVC projects in India with first time use of C-channel bus arrangement.

d) For above SVC project, coupling transformers, control and protection panel, SVC thyristor, etc. were supplied from factory developed by Siemens in its set-up at Goa which will cater to the requirements of upcoming new SVC and FACT projects in India.

e) The Commission has condoned the delay of 136 days in commissioning of “400/220 kV Kankroli Sub-station: (+) 400 MVAR/(-) 300 MVAR SVC” vide order dated 21.6.2018 in Petition No. 241/TT/2016.

29. In view of above, the Petitioner has prayed that the time over-run in case of Asset-I due to development of a new technology may be condoned.

30. BRPL has submitted that the Petitioner is seeking condonation of delay in case of Asset-I as it is the first of its kind in the country and was established under ‘Make in India’ initiative. BRPL has submitted that the same cannot be a reason for condonation of delay as the same is not covered under Regulation 12(2) of the 2014 Tariff Regulations. Placing reliance on Commission’s order dated 4.2.2014 in Petition No. 96/TT/2012 and APTEL’s judgment dated 26.2.2015 in Appeal No. 107 of 2014, BRPL has submitted that the time over-run in the present case is without any basis and is liable to be rejected.

31. We have considered the submissions of the Petitioner and BRPL. We notice that main reason for delay in COD of Asset-I was due to development of a new

technology to be utilized for the first time in India. The Petitioner awarded Letter of Award (LOA) as per planned schedule. There is delay in subsequent activity of supplies for which the Petitioner has submitted that it is mainly on account of design, development and testing of special type of high current capacity C-channel bus arrangement and its associated clamp connectors. We have considered the difficulties faced by the Petitioner on account of developing this high rating C channel arrangement indigenously. The development of this new technology consumed more time than envisaged and as per the Petitioner, this ultimately led to time over-run of 107 days. We have also given our thoughtful consideration to the fact that the Petitioner should have factored in the time required for development of this new technology at the stage of IA. At the same time, we have also given our considerable attention to the challenges that are experienced in the course of development and adoption of a new technology. On perusal of entire material available on record, we understand that considerable time is required to deal with the complexities to develop new technology and its adoption which ultimately paves the way for its use in the similar upcoming projects. Keeping in mind the aspect of innovation of new technology developed indigenously which is first of its kind in the country under "Make in India" initiative, the time over-run of 107 days in execution of Asset-I is condoned. We have condoned the delay considering the facts and circumstances of the instant case. Accordingly, IDC and IEDC for time over-run of 107 days are allowed to be capitalized.

Interest During Construction

32. The Petitioner has claimed Interest During Construction (IDC) for the transmission assets and has submitted Auditor's Certificates in support of the same.

The Petitioner has submitted computation of IDC along with year-wise details of the IDC discharged.

33. The allowable IDC has been worked out considering the information submitted by the Petitioner for the individual assets separately on cash basis. The loan details submitted in Form-9C for 2014-19 tariff period and IDC computation sheets have been considered for the purpose of IDC calculation on cash and accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.

34. Accordingly, based on the information furnished by the Petitioner, the IDC considered is summarized as follows:

(₹ in lakh)

Assets	**IDC claimed by Petitioner (as per Auditor Certificate)**	**Entitled IDC up to SCOD**	**IDC disallowed as on SCOD due to computation difference**	**Un-discharged portion of entitled IDC as on SCOD**	**IDC allowed on cash basis as on SCOD**
	A	B	C=A-B	D	E=B-D
Asset-I	611.14	609.40	1.74	209.17	400.23
Asset-II	533.56	528.46	5.10	209.50	318.96
Asset-III	956.05	953.01	3.04	188.00	765.00

<u>Incidental Expenditure During Construction (IEDC)</u>

35. The Petitioner has claimed IEDC of ₹203.22 lakh, ₹258.58 lakh, ₹831.54 lakh for Asset-I, Asset-II and Asset-III respectively and has submitted Auditor's certificate in support of the same. The Petitioner has also submitted that entire IEDC has been discharged as on COD in respect of the transmission assets.

36. IEDC for Asset-I, Asset-II and Asset-III is within the estimated expenditure of IEDC as indicated in the Abstract Cost Estimate. Hence, IEDC claimed has been allowed.

Initial Spares

37. Regulation 13(d) of the 2014 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of the plant and machinery cost up to the cut-off date, subject to the following ceiling norms:

> *"13. **Initial Spares***
> *Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to the following ceiling norms:*
>
> *(d) Transmission System*
> *(i) Transmission line - 1.00%*
> *(ii) Transmission Sub-station (Green Field) - 4.00%*
> *(iii) Transmission Sub-station (Brown Field) - 6.00%*
> *(iv) Series Compensation devices and HVDC Station - 4.00%*
> *(v) Gas Insulated Sub-station (GIS) - 5.00%*
> *(vi) Communication system - 3.5%"*

38. The Petitioner has claimed the following Initial Spares for the transmission assets and prayed to allow the Initial Spares as per actuals:

Assets	Plant and Machinery cost claimed as on cut-off date after deducting IDC, IEDC and civil works (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling Limit (%) (C)	Allowable Initial Spares worked out D = [(A-B)*C /(100-C)]	Excess Initial Spares to be deducted from Plant and Machinery Cost
Asset-I	19514.19	1298.92	6	1162.68	136.24
Asset-II	17198.14	1078.80	4	671.64	407.16
Asset-II	16348.11	1062.39	4	638.41	423.99

39. BRPL has submitted that Initial Spares for Asset-II and Asset-III was allowed @4% of the plant and machinery cost and, therefore, Asset-I should also be allowed @4% of the plant and machinery cost and the Petitioner's claim for Initial Spares @6% may not be allowed.

40. In response, the Petitioner has submitted that the Initial Spares claimed for Asset-I are as per order dated 28.12.2016 in Petition No. 149/TT/2016.

41. We have considered the submissions of the Petitioner and BRPL. The instant three transmission assets are Static VAR Compensators (SVCs) and Regulation 13(d)(iv) of the 2014 Tariff Regulations provides for Initial Spares for Series Compensation devices @4% of the plant & machinery cost. Accordingly, Asset-II and Asset-III, which are SVCs, were allowed Initial Spares @4% vide orders dated 21.6.2018 in Petition No. 241/TT/2016 and 22.6.2018 in Petition No. 6/TT/2018 respectively. However, in case of Asset-I, which is also an SVC, Initial Spares was inadvertently allowed @6% in order dated 28.12.2016. In accordance with Regulation 13(d)(iv) of the 2014 Tariff Regulations, Initial Spares are allowed for the transmission assets @4% of the plant & machinery cost in the instant order.

42. It is observed that the Petitioner had filed Petition No. 32/RP/2018 seeking review of order dated 21.6.2018 in Petition No. 241/TT/2016. The Petitioner had also filed Petition No. 33/RP/2018 seeking review of order dated 22.6.2018 in Petition No. 6/TT/2018 contending that Asset-II and Asset-III are eligible for Initial Spares @6% of the plant & machinery cost. The review petitions were dismissed by the Commission vide order dated 23.1.2019. The Petitioner has filed Appeals (DFR Nos. 2172/2019 and 2173/2019) against the Commission’s orders dated 21.6.2018 and 22.6.2018 and same are under consideration by APTEL. The Initial Spares allowed for Asset-I, Asset-II and Asset-III is subject to outcome of the Appeals filed by the Petitioner before APTEL.

43. The details of commercial operation of the transmission assets covered under the instant petition and their cut-off dates are as follows:

Assets	COD	Cut-off Date
Asset-I	30.11.2016	31.3.2019
Asset-II	25.12.2016	31.3.2019
Asset-III	30.12.2017	31.3.2020

44. The plant & machinery cost up to the cut-off date has been considered for computation of Initial Spares as provided under Regulation 13 of the 2014 Tariff Regulations:

Assets	Plant & machinery cost up to cut-off date (excluding IDC and IEDC as per Auditor certificate) (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling Limit (%) (C)	Allowable Initial Spares worked out D = [(A-B)*C /(100-C)]	Excess Initial Spares (₹ in lakh)	Initial Spares allowed (₹ in lakh)
Asset-I	19464.88	1298.92	4	756.92	542.01	756.92
Asset- II	16622.14	1078.8	4	647.64	431.16	647.64
Asset- III	16348.11	1062.39	4	636.91	425.49	636.91

45. Excess Initial Spares of ₹25.50 lakh, ₹241.97 lakh and ₹ 274.54 in respect of Asset-I are disallowed as ACE during 2016-17, 2017-18 and 2018-19. In case of Asset-II, excess Initial Spares of ₹402.03 lakh and ₹29.13 lakh are disallowed as ACE during 2018-19 and 2019-20. Excess Initial Spares of ₹118.53 lakh and ₹306.96 lakh in case of Asset-III are disallowed as ACE during 2018-19 and 2019-20.

Capital cost as on COD

46. Accordingly, the capital cost allowed as on COD is summarized as follows:

(₹ in lakh)

Asset	Capital cost as on 1.4.2014 or COD whichever is later as per Auditor's Certificate	Less: IDC as on COD due to		Less: IEDC disallowed as on COD	Excess Initial Spares	Capital cost considered as on 1.4.2014 or COD whichever is later
		Computation difference	Un-discharged			
Asset-I	13843.45	1.74	209.17	0.00	0.00	13632.54

Asset-II	11170.51	5.10	209.50	0.00	0.00	10955.91
Asset-III	11692.03	3.04	188.00	0.00	0.00	11500.97

Additional Capital Expenditure (ACE)

47. BRPL has submitted that the Petitioner's claim of ACE includes accrued IDC which is not permissible under the 2014 Tariff Regulations and hence liable to be rejected.

48. In response, the Petitioner has submitted that accrued IDC as on the date of commercial operation was not considered while calculating the tariff as the same was not discharged. Accrued IDC has been taken out from expenditure as on COD and added as ACE when it has been discharged and prayed to allow the same.

49. The Commission had allowed the following ACE in respect of the transmission assets vide orders dated 28.12.2016, 21.6.2018 and 22.6.2018 in Petition No. 149/TT/2016, Petition No. 241/TT/2016 and Petition No. 6/TT/2018 respectively:

(₹ in lakh)

Assets	**Additional Capital Expenditure**		
	2016-17	**2017-18**	**2018-19**
Asset-I	4009.67	1002.42	1002.42
Asset-II	5542.74	1981.17	0.00
Asset-III	0.00	5154.56	1007.46

50. The Petitioner has claimed the following ACE in respect of the transmission assets and submitted Auditor's Certificate in support of its claim:

(₹ in lakh)

Assets	**Additional Capital Expenditure**		
	2016-17	**2017-18**	**2018-19**
Asset-I	2668.85	1333.77	2433.17
Asset-II	1869.33	2131.58	2242.86
Asset-III	0.00	667.76	3111.86

51. ACE claimed includes accrued IDC discharged during 2014-19 tariff period. It is observed that total estimated completion cost including ACE for 2014-19 tariff

period is within the approved cost as per FR. ACE claimed by the Petitioner is allowed under Regulations 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations as it is towards balance and retention payments and works deferred for execution. The un-discharged IDC as on COD has been allowed as ACE. The details of ACE allowed are as follows:

(₹ in lakh)

Asset-I	**ACE**		
	2016-17	**2017-18**	**2018-19**
ACE to the extent of balance & retention payments and work deferred for execution/ACE to the extent of unexecuted work	2668.86	1333.77	2433.17
Add: IDC Discharged	16.21	192.96	0.00
Less: Excess Initial Spares	25.50	241.97	274.54
Total ACE allowed	2659.57	1284.76	2158.63

(₹ in lakh)

Asset-II	**ACE**		
	2016-17	**2017-18**	**2018-19**
ACE to the extent of balance & retention payments and work deferred for execution/ ACE to the extent of unexecuted work	1869.33	2131.58	2242.86
Add: IDC Discharged	19.08	190.43	0.00
Less: Excess Initial Spares	0.00	0.00	402.03
Total ACE allowed	1888.41	2322.01	1840.83

(₹ in lakh)

Asset-III	**ACE**	
	2017-18	**2018-19**
ACE to the extent of balance & retention payments and work deferred for execution/ ACE to the extent of unexecuted work	667.76	3111.86
Add: IDC Discharged	16.81	171.19
Less: Excess Initial Spares	0.00	118.53
Total ACE allowed	684.57	3164.52

<u>Capital Cost for the 2014-19 tariff period</u>

52. Accordingly, the capital cost of the transmission assets considered for the 2014-19 tariff period is as follows:

(₹ in lakh)

Assets	Apportioned approved cost	Capital cost as on COD on cash basis	Additional Capital Expenditure (ACE)			Total capital cost as on 31.3.2019
			2016-17	2017-18	2018-19	
Asset-I	31224.15	13632.54	2685.07	1284.76	2158.63	19735.504
Asset-II	25266.30	10955.91	1888.41	2322.01	1840.83	17007.16
Asset-III	26507.55	11500.97	0.00	684.57	3164.52	15350.06
	82998.00	**36089.42**	**4573.48**	**4291.34**	**7163.98**	**52092.724**

53. The completion cost including ACE in respect of the transmission assets is ₹52092.50 lakh and it is within the approved apportioned capital cost of ₹82998.00 lakh.

Debt-Equity Ratio

54. The Petitioner has considered the debt-equity ratio of 70:30 as on COD and for ACE post-COD. The debt-equity ratio of 70:30 has been considered for capital cost as on COD and ACE during 2014-19 period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of debt-equity ratio in respect of the transmission assets as on the date of commercial operation and as on 31.3.2019 are as follows:

Asset-I	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	9542.78	70.00	13814.86	70.00
Equity	4089.76	30.00	5920.64	30.00
Total	13632.54	100.00	19735.50	100.00
Asset-II	**As on COD**		**As on 31.3.2019**	
	Amount (₹ in lakh)	**(%)**	**Amount (₹ in lakh)**	**(%)**
Debt	7669.14	70.00	11905.03	70.00
Equity	3286.77	30.00	5102.13	30.00
Total	10955.91	100.00	17007.16	100.00
Asset-III	**As on COD**		**As on 31.3.2019**	
	Amount (₹ in lakh)	**(%)**	**Amount (₹ in lakh)**	**(%)**
Debt	8050.69	70.00	10745.06	70.00
Equity	3450.29	30.00	4605.01	30.00
Total	11500.97	100.00	15350.06	100.00

Depreciation

55. The depreciation has been allowed out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-19 tariff period. The Gross Block during 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD) and working of WAROD is given in Annexure-1. Depreciation for 2014-19 period is trued-up for the transmission assets as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations and the same is as follows:

(₹ in lakh)

Asset-I			
Particulars	**2016-17 (Pro-rata for 122 days)**	**2017-18**	**2018-19**
Opening Gross Block	13632.54	16292.11	17576.87
Additional Capitalisation	2659.57	1284.76	2158.63
Closing Gross Block	16292.11	17576.87	19735.50
Average Gross Block	14962.32	16934.49	18656.18
Weighted Average Rate of Depreciation (WAROD) (%)	5.28	5.28	5.28
Balance useful life at the beginning of the year	25.00	25.00	24.00
Aggregated Depreciable Value	13466.09	15241.04	16790.57
Remaining Aggregated Depreciable Value	13202.03	14082.84	14647.32
Combined Depreciation during the year	**264.06**	**894.14**	**985.05**

(₹ in lakh)

Asset-II			
Particulars	**2016-17 (Pro-rata for 97 days)**	**2017-18**	**2018-19**
Opening Gross Block	10955.91	12844.32	15166.33
Additional Capitalisation	1888.41	2322.01	1840.83
Closing Gross Block	12844.32	15166.33	17007.16
Average Gross Block	11900.12	14005.32	16086.74
Weighted Average Rate of Depreciation (WAROD) (%)	5.28	5.28	5.28
Balance useful life at the beginning of the year	25.00	25.00	24.00
Aggregated Depreciable Value	10710.10	12604.79	14478.07
Remaining Aggregated Depreciable Value	10543.12	11698.33	12722.23

Combined Depreciation during the year	**166.98**	**739.48**	**849.38**

(₹ in lakh)

Asset-III		
Particulars	**2017-18 (Pro-rata for 92 days)**	**2018-19**
Opening Gross Block	11500.97	12185.54
Additional Capitalisation	684.57	3164.52
Closing Gross Block	12185.54	15350.06
Average Gross Block	11843.26	13767.80
Weighted Average Rate of Depreciation (WAROD) (%)	5.28	5.28
Balance useful life at the beginning of the year	25.00	25.00
Aggregated Depreciable Value	10658.93	12391.02
Remaining Aggregated Depreciable Value	10501.32	11506.47
Combined Depreciation during the year	**157.62**	**726.94**

56. The details of depreciation allowed for the transmission assets vide orders dated 28.12.2016, 21.6.2018 and 22.6.2018 in Petition No. 149/TT/2016, Petition No. 241/TT/2016 and Petition No. 6/TT/2018 respectively, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

Assets	**Particulars**	**2016-17**	**2017-18**	**2018-19**
Asset-I	Allowed vide order dated 28.12.2016 in Petition No. 149/TT/2016	290.29	1007.99	1060.91
	Claimed by the Petitioner in the instant petition	265.50	909.22	1010.22
	Allowed after truing up in the instant petition	**264.06**	**894.14**	**985.05**
Asset-II	Allowed vide order dated 21.6.2018 in Petition No. 241/TT/2016	187.19	903.01	955.31
	Claimed by the Petitioner in the instant petition	166.98	743.47	858.32
	Allowed after truing up in the instant petition	**166.98**	**739.48**	**849.38**
Asset-III	Allowed vide order dated 22.6.2018 in Petition No. 6/TT/2018	0.00	181.96	884.58
	Claimed by the Petitioner in the instant petition	0.00	157.66	727.13
	Allowed after truing up in the instant petition	**0.00**	**157.62**	**726.94**

Interest on Loan (IoL)

57. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. The change in interest rate is due to floating rate of interest applicable for the project to be claimed/ adjusted over a period of 5 years directly from the beneficiaries.

58. We have considered the submissions of the Petitioner. IoL is allowed based on actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL allowed for the transmission assets for the 2014-19 tariff period is calculated based on the following:

a. Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.

b. The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period.

59. The details of IoL calculated are as follows:

(₹ in lakh)

Asset-I			
Particulars	**2016-17 (Pro-rata for 122 days)**	**2017-18**	**2018-19**
Gross Normative Loan	9542.78	11404.48	12303.81
Cumulative Repayments up to Previous Year	0.00	264.06	1158.20
Net Loan-Opening	9542.78	11140.42	11145.62
Addition due to Additional Capitalization	1861.70	899.34	1511.04
Repayment during the year	264.06	894.14	985.05
Net Loan-Closing	11140.42	11145.62	11671.61
Average Loan	10341.60	11143.02	11408.61
Weighted Average Rate of Interest on Loan (%)	8.291	8.092	8.040
Interest on Loan	**286.58**	**901.67**	**917.30**

(₹ in lakh)

Asset-II			
Particulars	**2016-17 (Pro-rata for 97 days)**	**2017-18**	**2018-19**
Gross Normative Loan	7669.14	8991.03	10616.44

Cumulative Repayments up to Previous Year	0.00	166.98	906.46
Net Loan-Opening	7669.14	8824.05	9709.98
Addition due to Additional Capitalization	1321.89	1625.41	1288.58
Repayment during the year	166.98	739.48	849.38
Net Loan-Closing	8824.05	9709.98	10149.18
Average Loan	8246.60	9267.02	9929.58
Weighted Average Rate of Interest on Loan (%)	8.384	8.073	7.979
Interest on Loan	**183.74**	**748.11**	**792.33**

(₹ in lakh)

Asset-III		
Particulars	**2017-18 (Pro-rata for 92 days)**	**2018-19**
Gross Normative Loan	8050.69	8529.89
Cumulative Repayments up to Previous Year	0.00	157.62
Net Loan-Opening	8050.69	8372.28
Addition due to Additional Capitalization	479.20	2215.16
Repayment during the year	157.62	726.94
Net Loan-Closing	8372.28	9860.50
Average Loan	8211.48	9116.39
Weighted Average Rate of Interest on Loan (%)	7.971	8.046
Interest on Loan	**164.97**	**733.51**

60. The details of the IoL allowed for the transmission assets vide orders dated 28.12.2016, 21.6.2018 and 22.6.2018 in Petition No. 149/TT/2016, Petition No. 241/TT/2016 and Petition No. 6/TT/2018 respectively, IoL claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

Assets	**Particulars**	**2016-17**	**2017-18**	**2018-19**
Asset-I	Allowed earlier vide order dated 28.12.2016 in Petition No. 149/TT/2016	311.01	1028.60	1001.37
	Claimed by the Petitioner in the instant petition	286.81	909.28	934.00
	Allowed after truing up in the instant petition	**286.58**	**901.67**	**917.30**
Asset-II	Allowed earlier vide order dated 21.6.2018 in Petition No. 241/TT/2016	206.83	948.72	928.62
	Claimed by the Petitioner in the instant petition	183.74	748.09	792.61
	Allowed after truing up in the instant petition	**183.74**	**748.11**	**792.33**
Asset-III	Allowed earlier vide order dated 22.6.2018 in Petition No. 6/TT/2018	0.00	197.01	915.07
	Claimed by the Petitioner in the instant petition	0.00	165.02	733.70
	Allowed after truing up in the instant petition	**0.00**	**164.97**	**733.51**

Return on Equity (RoE)

61. UPPCL in its reply has submitted that RoE is grossed up by effective tax rate for years 2014-18. The Petitioner has not submitted return for year 2018-19 and it is considering grossing up of RoE by MAT @18.5%, surcharge @12% and cess @4% which is not in accordance with the provisions of Regulation 25(3) of the 2014 Tariff Regulations. As such, the Petitioner may not be allowed to gross up RoE for 2018-19 unless taxes are paid.

62. In response, the Petitioner has submitted that Income Tax assessment of the Petitioner has been completed and Assessment Orders have been issued by the Income Tax Department for 2014-15, 2015-16 and 2016-17 and Income Tax returns have been filed with the Income Tax Department for the years 2017-18 and 2018-19. The Petitioner has further submitted that so far it has been granted trued-up tariff for 2014-19 period in Petition No. 247/TT/2019, Petition No. 274/TT/2019, Petition No. 245/TT/2019 and Petition No. 307/TT/2019 for transmission assets under the respective petitions.

63. BRPL has submitted that the Petitioner has calculated the effective tax rate after grossing up the rate of return on equity at the end of every financial year which is not based on actual tax paid. BRPL has further submitted that the Petitioner has not enclosed the details of the actual tax paid. Further, relying on Regulation 25(1) of the 2014 Tariff Regulations, BRPL has submitted that base rate of return on equity is required to be grossed up with the effective tax rate and not with MAT. BRPL has submitted that the transmission licensee shall carry out truing up of grossed up rate of RoE as per Regulation 8(8) in accordance with Regulation 25(3) of the 2014 Tariff Regulations and it is a statutory responsibility of the Petitioner to carry out annual

truing up of the grossed up rate of Return on Equity. BRPL has submitted that the Petitioner has submitted that the effective rate of tax on transmission business is ‘Nil’. BRPL has submitted that the Petitioner is claiming tax benefits of higher depreciation during initial period under the Income Tax Act and also the benefits of the Tax Holiday as per Section 80 IA of the Income Tax Act, 1961. These benefits under the Income Tax Act are permissible only in respect of its core services related to the transmission business and not on other incomes of the Petitioner like consultancy, planning, design, training etc. Accordingly, the denial of necessary documents showing actual tax payment on the transmission business and information given in Form 3, does not entitle the Petitioner for grossing up of RoE for the true up period. BRPL has submitted that all the relevant documents with regard to the same are required to be filed before the Commission but the Petitioner has not filed the same. BRPL has submitted that the Petitioner may be directed to file the complete details of the tax benefits claimed in a particular assessment year and failure to submit such documents, the grossed-up rate of return on equity during tariff period 2014-19 may be disallowed. BRPL has submitted that the amount already collected from the beneficiaries on account of grossed-up rate of return on equity may be returned forthwith by the Petitioner with interest. BRPL has further submitted that 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 materializes. BRPL has also submitted that the claims of deferred tax are required to be adjusted for 2004-09 tariff period.

64. In response, the Petitioner has submitted that that it does not file income tax return on transmission business in respect of a particular region as the company has a single PAN and there is no provision in the Income Tax Act, 1961 to file separate

returns on the basis of nature of business being undertaken by any entity. All the documents in support of income tax (either returns or assessment orders) are for the Petitioner's Company as a whole. The Auditor's Certificate clearly shows income from transmission business and income from other segments along with copy of assessment order/income return which are relevant to derive the effective tax rate has already been submitted in Petition No. 24/TT/2020. The Petitioner has further submitted that region-wise balance sheet and Profit and Loss Accounts for Northern Region 1 for 2014-19, Northern Region 2 for 2014-19 and Northern Region 3 for 2016-19 and Cost Audit Report for 2017-18, 2018-19 are enclosed as Enclosure-2A, Enclosure-2B, Enclosure-2C and Enclosure-2D in vide affidavit dated 10.08.2020 in Petition No. 24/TT/2020. The Petitioner has submitted that it has computed effective tax rate based on actual tax paid pursuant to assessment orders for the years 2014-15, 2015-16 and 2016-17. The income tax due for 2017-18 and 2018-19 has been deposited and tax returns have already been filed. However, the Petitioner is yet to receive the assessment orders. In case, the tax computed under normal provision is less than the tax calculated on book profit at the percentage prescribed under section 115JB (Minimum Alternate Tax) then the Company has to pay tax computed as per the provisions of section 115JB of the Income Tax Act, 1961 which works out between 20.96% to 21.5488%. The Petitioner has submitted that the actual effective tax rate used for grossing up of RoE is provided in Form 8.

65. The Petitioner has also submitted that it is eligible to claim deferred tax liabilities for the period up to 31.3.2009 on being materialized in subsequent period, i.e., financial year 2009-10 onwards. Therefore, the Petitioner is only claiming the reimbursement of income tax liability discharged as per the provisions of Income tax

Act, 1961. The Petitioner has submitted that the deferred tax liability materialized up to 31.3.2014 has been claimed till date and claim for deferred tax materialized for the 2014-19 period is yet to be claimed.

66. We have considered the above submissions of the Petitioner, UPPCL and BRPL. Similar issues have been raised by UPPCL and BRPL in other petitions as well and the Commission has given a finding on them. We do not find any merits in the submissions of BRPL and UPPCL as the Petitioner has submitted necessary documents in support of its claim.

67. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given in the table below. The same MAT rates are considered for the purpose of grossing up of the rate of RoE for truing up of the tariff of 2014-19 period in terms of the provisions of the 2014 Tariff Regulations.

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	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

68. The Petitioner has also requested to allow it to claim the differential tariff on account of the trued-up RoE based on effective rate calculated on completion of Income tax assessment/ reassessment for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of the respective assessment orders, directly from the beneficiaries, on year to year basis as provided under the 2014 Tariff Regulations.

69. The trued-up RoE allowed for the transmission assets for the 2014-19 tariff period is as follows:

(₹ in lakh)

Asset-I			
Particulars	**2016-17 (Pro-rata for 122 days)**	**2017-18**	**2018-19**
Opening Equity	4089.76	4887.63	5273.05
Addition due to Additional Capitalization	797.87	385.42	647.59
Closing Equity	4887.63	5273.05	5920.64
Average Equity	4488.70	5080.34	5596.85
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
Tax Rate applicable (%)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.705	19.758
Return on Equity (Pre-tax)	**295.64**	**1001.08**	**1105.83**

(₹ in lakh)

Asset-II			
Particulars	**2016-17 (Pro-rata for 97 days)**	**2017-18**	**2018-19**
Opening Equity	3286.77	3853.29	4549.88
Addition due to Additional Capitalization	566.52	696.59	552.25
Closing Equity	3853.29	4549.88	5102.13
Average Equity	3570.03	4201.59	4826.01
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
Tax Rate applicable (%)	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.705	19.758
Return on Equity (Pre-tax)	**186.95**	**827.92**	**953.52**

(₹ in lakh)

Asset-III		
Particulars	**2017-18 (Pro-rata for 92 days)**	**2018-19**
Opening Equity	3450.29	3655.65
Addition due to Additional Capitalization	205.37	949.36
Closing Equity	3655.65	4605.01
Average Equity	3552.97	4130.33
Return on Equity (Base Rate) (%)	15.500	15.500
Tax Rate applicable (%)	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.758
Return on Equity (Pre-tax)	**176.47**	**816.07**

70. The details of the RoE allowed for the transmission asset vide orders dated 28.12.2016, 21.6.2018 and 22.6.2018 in Petition No. 149/TT/2016, Petition No. 241/TT/2016 and Petition No. 6/TT/2018 respectively, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

Assets	Particulars	2016-17	2017-18	2018-19
Asset-I	Allowed earlier vide order dated 28.12.2016 in Petition No. 149/TT/2016	323.45	1123.13	1182.10
	Claimed by the Petitioner in the instant petition	295.89	1009.79	1125.88
	Allowed after truing up in the instant petition	**295.64**	**1001.08**	**1105.83**
Asset-II	Allowed earlier vide order dated 21.6.2018 in Petition No. 241/TT/2016	208.57	1006.14	1064.41
	Claimed by the Petitioner in the instant petition	186.95	828.07	954.54
	Allowed after truing up in the instant petition	186.95	827.92	953.52
Asset-III	Allowed earlier vide order dated 22.6.2018 in Petition No. 6/TT/2018	0.00	202.74	985.60
	Claimed by the Petitioner in the instant petition	0.00	176.52	816.28
	Allowed after truing up in the instant petition	0.00	176.47	816.07

Operation & Maintenance Expenses (O&M Expenses)

71. The details of the O&M Expenses allowed for the transmission assets allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of tariff computation are as follows:

(₹ in lakh)

Asset-I			
Particulars	**2016-17 (Pro-rata for 122 days)**	**2017-18**	**2018-19**
Sub-station bays			
400 kV Ludhiana Sub-station: (+) 600 MVAR (-) 400 MVAR SVC	1	1	1
Norm (₹ lakh/bay)			
400 kV (AIS)	64.37	66.51	68.71
Total Sub-station O&M Expenses	64.37	66.51	68.71
Total O&M Expenses	**21.52**	**66.51**	**68.71**

(₹ in lakh)

Asset-II			
Particulars	**2016-17 (Pro-rata for 97 days)**	**2017-18**	**2018-19**
Sub-station bays			
Kankroli: (+) 400 MVAR/ (-) 300 MVAR SVC at Kankroli Sub-station	1	1	1
Norm (₹ lakh/bay)			
400 kV (AIS)	64.37	66.51	68.71

Total Sub-station O&M Expenses	64.37	66.51	68.71
Total O&M Expenses	**17.11**	**66.51**	**68.71**

(₹ in lakh)

Asset-III		
Particulars	**2017-18 (Pro-rata for 93 days)**	**2018-19**
New Wanpoh: (+) 300 MVAR (-) 200 MVAR SVC at 400/220 kV New Wanpoh Sub-station	1	1
400 kV (AIS)	66.51	68.71
Total Sub-station O&M Expenses	66.51	68.71
Total O&M Expenses	**16.76**	**68.71**

72. The details of the O&M Expenses allowed for transmission assets vide orders dated 28.12.2016, 21.6.2018 and 22.6.2018 in Petition No. 149/TT/2016, Petition No. 241/TT/2016 and Petition No. 6/TT/2018 respectively, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Assets	**Particulars**	**2016-17**	**2017-18**	**2018-19**
Asset-I	Allowed earlier vide order dated 28.12.2016 in Petition No. 149/TT/2016	21.34	66.51	68.71
	Claimed by the Petitioner in the instant petition	21.52	66.51	68.71
	Allowed after truing up in the instant petition	21.52	66.51	68.71
Asset-II	Allowed earlier vide order dated 21.6.2018 in Petition No. 241/TT/2016	17.11	66.51	68.71
	Claimed by the Petitioner in the instant petition	17.11	66.51	68.71
	Allowed after truing up in the instant petition	17.11	66.51	68.71
Asset-III	Allowed earlier vide order dated 22.6.2018 in Petition No. 6/TT/2018	0.00	16.76	68.71
	Claimed by the Petitioner in the instant petition	0.00	16.54	68.71
	Allowed after truing up in the instant petition	0.00	16.76	68.71

Interest on Working Capital (IWC)

73. The Petitioner is entitled to claim Interest on Working Capital as per Regulation 28(1)(c) of the 2014 Tariff Regulations as follows:-

i. Maintenance spares:

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses specified in Regulation 28.

ii. O & M Expenses:

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

iii. Receivables:

The receivables have been worked out on the basis of 2 months of annual transmission charges as worked out above.

iv. Rate of interest on working capital:

Rate of Interest on Working Capital is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

74. The Interest on Working capital allowed for the transmission assets is as follows:

(₹ in lakh)

Asset- I			
Particulars	**2016-17 (Pro-rata for 122 days)**	**2017-18**	**2018-19**
WC for O & M Expenses	5.36	5.54	5.73
WC for Maintenance Spares	9.66	9.98	10.31
WC for Receivables	442.47	487.98	524.34
Total Working Capital	457.49	503.49	540.37
Rate of Interest on working capital (%)	12.80	12.80	12.80
Interest of Working Capital	19.57	64.45	69.17

(₹ in lakh)

Asset-II			
Particulars	**2016-17 (Pro-rata for 97 days)**	**2017-18**	**2018-19**
WC for O & M Expenses	5.36	5.54	5.73
WC for Maintenance Spares	9.66	9.98	10.31
WC for Receivables	355.84	406.00	454.02
Total Working Capital	370.86	421.51	470.05
Rate of Interest on working capital (%)	12.80	12.80	12.80
Interest of Working Capital	**12.62**	**53.95**	**60.17**

(₹ in lakh)

Asset-III		
Particulars	**2017-18 (Pro-rata for 92 days)**	**2018-19**
WC for O & M Expenses	5.54	5.73
WC for Maintenance Spares	9.98	10.31
WC for Receivables	348.72	399.60
Total Working Capital	364.24	415.63
Rate of Interest on working capital (%)	12.60	12.60
Interest of Working Capital	**11.57**	**52.37**

75. The details of the IoL allowed for the transmission assets vide orders dated 28.12.2016, 21.6.2018 and 22.6.2018 in Petition No. 149/TT/2016, Petition No. 241/TT/2016 and Petition No. 6/TT/2018 respectively, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)

Assets	Particulars	2016-17	2017-18	2018-19
Asset-I	Allowed earlier vide order dated 28.12.2016 in Petition No. 149/TT/2016	21.27	72.36	74.32
	Claimed by the Petitioner in the instant petition	19.61	65.13	70.52
	Allowed after truing up in the instant petition	19.57	64.45	69.17
Asset-II	Allowed earlier vide order dated 21.6.2018 in Petition No. 241/TT/2016	14.03	65.78	67.86
	Claimed by the Petitioner in the instant petition	12.62	54.04	60.39
	Allowed after truing up in the instant petition	12.62	53.95	60.17
Asset-III	Allowed earlier vide order dated 22.6.2018 in Petition No. 6/TT/2018	0.00	13.55	64.31
	Claimed by the Petitioner in the instant petition	0.00	11.57	52.38
	Allowed after truing up in the instant petition	0.00	11.57	52.37

Approved Annual Fixed Charges for the 2014-19 Tariff Period

76. Accordingly, the annual fixed charges approved in respect of Asset-I, Asset-II and Asset-III after truing-up for 2014-19 tariff period are as follows:-

(₹ in lakh)

Asset-I			
Particulars	**2016-17 (Pro-rata for 122 days)**	**2017-18**	**2018-19**
Depreciation	264.06	894.14	985.05
Interest on Loan	286.58	901.67	917.30
Return on Equity	295.64	1001.08	1105.83
Interest on Working Capital	19.57	64.45	69.17
O & M Expenses	21.52	66.51	68.71
Total	**887.37**	**2927.85**	**3146.05**

(₹ in lakh)

Asset-II			
Particulars	**2016-17 (Pro-rata for 97 days)**	**2017-18**	**2018-19**
Depreciation	166.98	739.48	849.38

Interest on Loan	183.74	748.11	792.33
Return on Equity	186.95	827.92	953.52
Interest on Working Capital	12.62	53.95	60.17
O & M Expenses	17.11	66.51	68.71
Total	**567.39**	**2435.97**	**2724.11**

(₹ in lakh)

Asset-III		
Particulars	**2017-18 (Pro-rata for 92 days)**	**2018-19**
Depreciation	157.62	726.94
Interest on Loan	164.97	733.51
Return on Equity	176.47	816.07
Interest on Working Capital	11.57	52.37
O & M Expenses	16.76	68.71
Total	**527.39**	**2397.61**

77. The details of the annual fixed charges allowed for the transmission assets vide orders dated 28.12.2016, 21.6.2018 and 22.6.2018 in Petition No. 149/TT/2016, Petition No. 241/TT/2016 and Petition No.6/TT/2018 respectively, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Assets	**Particulars**	**2016-17**	**2017-18**	**2018-19**
Asset-I	Allowed earlier vide order dated 28.12.2016 in Petition No. 149/TT/2016	967.36	3298.58	3387.41
	Claimed by the Petitioner in the instant petition	889.33	2959.93	3209.33
	Allowed after truing up in the instant petition	887.37	2927.85	3146.05
Asset-II	Allowed earlier vide order dated 21.6.2018 in Petition No. 241/TT/2016	633.73	2990.16	3084.92
	Claimed by the Petitioner in the instant petition	567.40	2440.18	2734.57
	Allowed after truing up in the instant petition	567.39	2435.97	2724.11
Asset-III	Allowed earlier vide order dated 22.6.2018 in Petition No. 6/TT/2018	0.00	611.79	2918.26
	Claimed by the Petitioner in the instant petition	0.00	527.53	2398.20
	Allowed after truing up in the instant petition	0.00	527.39	2397.61

Determination of Annual Fixed Charges For 2019-24 Tariff Period

78. The Petitioner has submitted tariff forms combining Asset-I, Asset-II and Asset-III, which achieved COD prior to 1.4.2019, into single asset. Accordingly, as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, single tariff for the Combined Asset has been worked out for the 2019-24 tariff period.

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

(₹ in lakh)

Particulars	**2019-20**	**2020-21**	**201-22**	**2022-23**	**2023-24**
Depreciation	2872.90	2956.34	2956.34	2956.34	2956.34
Interest on Loan	2556.31	2402.65	2165.81	1928.61	1686.02
Return on Equity	3044.29	3128.51	3128.51	3128.51	3128.51
Interest on Working Capital	164.35	166.25	164.02	161.84	159.25
Operation and Maintenance	847.36	877.13	907.86	939.78	972.71
Total	**9485.21**	**9530.88**	**9322.54**	**9115.08**	**8902.83**

80. The Petitioner has claimed the following Interest on Working Capital for Combined Asset for 2019-24 tariff period:

(₹ in lakh)

Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
O&M Expenses	70.61	73.09	75.66	78.32	81.06
Maintenance Spares	127.10	131.57	136.18	140.97	145.91
Receivables	1166.21	1175.04	1149.36	1123.78	1094.61
Total	1363.92	1379.70	1361.20	1343.07	1321.58
Rate of Interest on working capital (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	70.61	73.09	75.66	78.32	81.06

Effective Date of Commercial Operation (E-COD)

81. The Petitioner has claimed E-COD of the Combined Asset as 3.4.2017. Based on the trued-up admitted capital cost and actual COD of all the transmission assets, same E-COD has been worked out as follows:

Computation of Effective COD						
Assets	**Actual COD**	**Admitted Capital Cost as on 31.3.2019**	**Weight of the cost (%)**	**Number of days from last COD**	**Weighted Days**	**Effective COD (latest COD – Total weighted Days)**
Asset-I	30.11.2016	19735.50	37.89	395.00	149.65	3.4.2017
Asset-II	25.12.2016	17007.16	32.65	370.00	120.80	
Asset-III	30.12.2017	15350.06	29.47	0.00	0.00	
Total		52092.72	100.00		270.44	

82. E-COD is used to determine the lapsed life of the project as a whole which works out as (1) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL)

83. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of Weighted Average Life.

84. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different span of life. Therefore, the concept of Weighted Average Life (WAL) has been used as the useful life of the project as a whole.

85. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 25 years as follows:

Admitted Capital Cost as on 31.3.2019			
Particulars	**Combined Cost (₹ in lakh) (a)**	**Life as per 2019 Regulation (Years) (b)**	**Weight (a) x (b)**
Sub-Station Equipment	51932.30	25	1298307.53
IT Equipment and Software	160.42	7	1069.46
Total	52092.72		1299376.99
WAL = Total Weight/ Capital cost of the project		25 Years	

86. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed above, the Effective COD of the transmission assets is 3.4.2017 and lapsed life of the project as a whole is worked out as one (1) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 24 years.

Capital Cost

87. Regulations 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 asset before the date of commercial operation;
(i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal 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 asset forming part of the project, but not in use, as declared in the tariff petition;
(b) De-capitalised Asset after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

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

88. UPPCL in its reply has submitted that Commission has determined tariff for 2014-19 based on apportioned cost of the assets and now actual cost of the project is available in the form of quoted bid price (i.e., original completion cost) and total completion cost based on bills paid to the successful bidder including escalations, if any. Therefore, the capital cost of the project as on COD of the project on 30.12.2017, at the end of control period on 31.3.2019 and cut-off date 31.9.2019 may be re-determined based on quoted bid price and bills plus escalations paid to the executing Agency till 31.3.2019 and thereafter till 31.3.2024.

89. In response, the Petitioner has submitted Auditor's certificates for completion cost of all the transmission assets covered in the instant petition and claimed transmission tariff as per the 2014 Tariff Regulations.

90. The capital cost has been considered as per Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line,

sub-station and PLCC) as admitted by the Commission as on 31.3.2019 for the transmission assets is clubbed together and has been considered as capital cost for Combined Asset as on 1.4.2019 which is as follows:

(₹ in lakh)

Element	Asset-I	Asset-II	Asset-III	Capital cost for Combined Assets as on 31.3.2019
Sub-Station Equipment	19661.09	16921.14	15350.06	**51932.30**
IT Equipment and Software	74.40	86.02	0.00	**160.42**
Total	**19735.50**	**17007.16**	**15350.06**	**52092.72**

91. The trued-up capital cost for the Combined Asset is considered as admitted capital cost as on 1.4.2019 for working out tariff for 2019-24 tariff period.

Additional Capital Expenditure (ACE)

92. UPPCL has submitted that since the approval of completion cost was for incurring expenditure only up to the cut-off date, any amount which is within the unutilized amount of ₹29832.83 lakh is not available to the Petitioner for the purpose of incurring ACE for capital additions during 2019-20, after the cut-off date. Therefore, the Petitioner is required to submit details of ACE incurred up to the cut-off date i.e. 31.9.2019 and the Petitioner must obtain fresh Board approval in respect of the expenditure incurred between 1.10.2019 to 31.3.2020 for projected capital additions during the remaining period of 2019-20.

93. In response, the Petitioner has submitted that ACE details have already been submitted vide affidavit dated 2.12.2020.

94. Regulation 24 of the 2019 Tariff Regulations provides as follows:

> *"24. Additional Capitalization within the original scope and upto the cut-off date*
> *(1) The Additional Capital Expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

(a) Undischarged liabilities recognized to be payable at a future date;
(b) Works deferred for execution;
(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
(d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
(e) Change in law or compliance of any existing law; and
(f) Force Majeure events:

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

(2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution."

95. Regulation 25 of the 2019 Tariff Regulations provides as follows:

"25. Additional Capitalisation within the original scope and after the cut-off date:

(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:

(a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
(b) Change in law or compliance of any existing law;
(c) Deferred works relating to ash pond or ash handling system in the original scope of work;
(d) Liability for works executed prior to the cut-off date;
(e) Force Majeure events;
(f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
(g) Raising of ash dyke as a part of ash disposal system.

2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
(d) The replacement of such asset or equipment has otherwise been allowed by the Commission."

96. Excess Initial Spares of ₹ 29.13 lakh in respect of Asset-II and ₹306.96 lakh in respect of Asset-III has been disallowed from ACE during 2019-24.

97. ACE allowed for the 2019-24 for the Combined Asset, which is subject to true-up is as follows:

(₹ in lakh)

Particulars	Regulation	ACE 2019-24	Excess Initial Spares	ACE allowed for the year 2019-24
ACE to extent of balance and retention payments and work deferred for execution before the cut-off date/ after the cut-off date	Regulation 24(1) (a) and Regulation 24(1)(b) of the 2019 Tariff Regulations/ Regulation 25(1)(d) of the 2019 Tariff Regulations	3325.37	-336.09	2989.28

Capital Cost for 2019-24 tariff period

98. Accordingly, the capital cost of the Combined Asset considered for 2019-24 tariff period, subject to truing-up, is as follows:

(₹ in lakh)

Capital Cost allowed as on 1.4.2019	ACE allowed for the year 2019-24	Total Estimated Completion Cost up to 31.3.2024
52092.72	2989.28	55082.00

99. Against the overall apportioned approved capital cost of ₹82998.00 lakh, the estimated project cost of the Combined Asset including ACE is ₹55082.00 lakh which is within the approved cost. Therefore, there is no cost over-run.

Debt-Equity Ratio

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

"18. Debt-Equity Ratio:

*"**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."

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

(₹ in lakh)

Combined Asset	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	36464.94	70.00	38557.44	70.00
Equity	15627.78	30.00	16524.56	30.00
Total	**52092.72**	100.00	**55082.00**	100.00

Depreciation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

103. The IT equipment has been considered as a part of the Gross Block and depreciated using Weighted Average Rate of Depreciation (WAROD). The WAROD has been worked out and is given at Annexure-2 after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 percent depreciable. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation upto 31.3.2019. The depreciation allowed for the Combined Asset is as follows:

(₹ in lakh)

Combined Asset					
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening Gross Block	52092.72	55082.00	55082.00	55082.00	55082.00
Addition during 2019-24 due to Projected Additional Capitalisation	2989.28	0.00	0.00	0.00	0.00
Closing Gross Block	55082.00	55082.00	55082.00	55082.00	55082.00
Average Gross Block	53587.36	55082.00	55082.00	55082.00	55082.00
Weighted Average Rate of Depreciation (WAROD) (%)	5.32	5.32	5.32	5.32	5.32

Balance Useful life at the beginning of the year	24.00	23.00	22.00	21.00	20.00
Aggregated Depreciable Value	48249.31	49599.13	49599.13	49599.13	49599.13
Combined Depreciation during the year	**2849.52**	**2932.95**	**2932.95**	**2932.95**	**2932.95**
Remaining Aggregated Depreciable Value Total	40616.15	39033.02	36100.07	33167.12	30234.17

Interest on Loan (IoL)

104. 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".

105. UPPCL has submitted IoL is calculated based on actual rate of interest and the Petitioner is proposing to claim or adjust the change in interest rate due to floating interest rates directly from beneficiaries. UPPCL has further submitted that in line with the Commission's order dated 30.12.2015 in Petition No. 435/TT/2014, the Petitioner should be directed that Weighted Average Rate of Interest based on loan prevailing as on 1.4.2014 may be considered for calculation of interest. The impact of floating rate of interest may be considered at the time of truing up of tariff of 2019-24 period.

106. In response, the Petitioner has submitted that IoL has been calculated on the basis of interest rates prevailing as on 1.4.2019 for respective loans. The change in interest rate due to floating rate of interest applicable, if any, for the project needs to be claimed/ adjusted over the tariff period of 5 years directly from/with the beneficiaries.

107. We have considered the above submissions of UPPCL and the Petitioner. 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 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 truing-up. In view of the above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the Combined Asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

Combined Asset					
Particulars	**2019-20**	**2020-21**	**201-22**	**2022-23**	**2023-24**
Gross Normative Loan	36464.94	38557.44	38557.44	38557.44	38557.44
Cumulative Repayments up to Previous Year	4783.64	7633.16	10566.11	13499.06	16432.01

Net Loan-Opening	31681.29	30924.28	27991.33	25058.38	22125.43
Addition due to Additional Capitalization	2092.50	0.00	0.00	0.00	0.00
Repayment during the year	2849.52	2932.95	2932.95	2932.95	2932.95
Net Loan-Closing	30924.28	27991.33	25058.38	22125.43	19192.48
Average Loan	31302.78	29457.80	26524.85	23591.90	20658.95
Weighted Average Rate of Interest on Loan (%)	8.104	8.096	8.105	8.116	8.103
Interest on Loan	**2536.69**	**2384.94**	**2149.96**	**1914.64**	**1673.98**

Return on Equity (RoE)

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

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

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

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

Provided further that:

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

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

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

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

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

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

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

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

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

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

Illustration-

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

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

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

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

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

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

109. BRPL has submitted that as per Regulation 31(3) of the 2019 Tariff Regulations, the Petitioner has a statutory duty to undertake true-up of grossed-up rate of RoE at the end of every financial year based on actual tax paid. The above statutory function is delegated to transmission licensee along with responsibility wherein all the documents related to tax payment have to be provided including the actual tax payment by the Petitioner only on the transmission business in the particular region.

110. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE for 2019-24 tariff period which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the Combined Asset under Regulation 30 of the 2019 Tariff Regulations is as follows:

(₹ in lakh)

Combined Asset					
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening Equity	15627.78	16524.56	16524.56	16524.56	16524.56
Addition due to Additional Capitalization	896.78	0.00	0.00	0.00	0.00
Closing Equity	16524.56	16524.56	16524.56	16524.56	16524.56
Average Equity	16076.17	16524.56	16524.56	16524.56	16524.56
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	3019.43	3103.64	3103.64	3103.64	3103.64

<u>Operation & Maintenance Expenses (O&M Expenses)</u>

111. Regulations 35(3) and (4) of the 2019 Tariff Regulations provide as follows:

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

Particulars	*2019-20*	*2020-21*	*2021-22*	*2022-23*	*2023-24*
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	*45.01*	*46.60*	*48.23*	*49.93*	*51.68*
400 kV	*32.15*	*33.28*	*34.45*	*35.66*	*36.91*
220 kV	*22.51*	*23.30*	*24.12*	*24.96*	*25.84*
132 kV and below	*16.08*	*16.64*	*17.23*	*17.83*	*18.46*
Norms for Transformers (₹ Lakh per MVA)					
765 kV	*0.491*	*0.508*	*0.526*	*0.545*	*0.564*
400 kV	*0.358*	*0.371*	*0.384*	*0.398*	*0.411*
220 kV	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
132 kV and below	*0.245*	*0.254*	*0.263*	*0.272*	*0.282*
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Single Circuit (Bundled conductor with four sub-conductors)	*0.755*	*0.781*	*0.809*	*0.837*	*0.867*
Single Circuit (Twin & Triple Conductor)	*0.503*	*0.521*	*0.539*	*0.558*	*0.578*
Single Circuit (Single Conductor)	*0.252*	*0.260*	*0.270*	*0.279*	*0.289*
Double Circuit (Bundled conductor with four or more sub-conductors)	*1.322*	*1.368*	*1.416*	*1.466*	*1.517*
Double Circuit (Twin & Triple Conductor)	*0.881*	*0.912*	*0.944*	*0.977*	*1.011*
Double Circuit (Single Conductor)	*0.377*	*0.391*	*0.404*	*0.419*	*0.433*
Multi Circuit (Bundled Conductor with four or more sub-conductor)	*2.319*	*2.401*	*2.485*	*2.572*	*2.662*
Multi Circuit (Twin & Triple Conductor)	*1.544*	*1.598*	*1.654*	*1.713*	*1.773*
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	*834*	*864*	*894*	*925*	*958*
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	*1,666*	*1,725*	*1,785*	*1,848*	*1,913*
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	*2,252*	*2,331*	*2,413*	*2,498*	*2,586*
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	*2,468*	*2,555*	*2,645*	*2,738*	*2,834*
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	*1,696*	*1,756*	*1,817*	*1,881*	*1,947*
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 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 ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*

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

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

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

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

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

112. The Petitioner has claimed the following O&M Expenses for Combined Asset for the 2019-24 tariff period:

(₹ in lakh)

Combined Asset					
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
SVC					
Original project cost as on 31.3.2019 (₹ in lakh)	56490.54	56490.54	56490.54	56490.54	56490.54

Norm Rate (%) of O&M					
SVC	1.5000	1.5527	1.6071	1.6636	1.7219
Total O&M Expenses	**847.36**	**877.13**	**907.86**	**939.78**	**972.71**

113. We have considered the submissions of the Petitioner. The Petitioner has considered the capital cost as on 31.3.2019 for claiming the O&M Expenses for the instant assets which are SVCs. However, as per Regulation 35(3)(v) of the 2019 Tariff Regulations, the O&M Expenses for the SVCs shall be worked out @1.5% of original project cost as on the date of commercial operation which shall be escalated at the rate of 3.51% to work out the O&M Expenses during the tariff period. In accordance with Regulation 35(3)(v) of the 2019 Tariff Regulations, 1.5% of the capital cost as on the COD has been considered for working out the O&M Expenses of instant SVCs, which is escalated at the rate of 3.51% for the 2019-24 tariff period.

114. Accordingly, the O&M Expenses allowed in accordance with Regulation 35(3)(v) of the 2019 Tariff Regulations considering combined capital cost as on 31.3.2019 for Combined Asset are as follows:

(₹ in lakh)

Combined Asset					
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
SVC					
Original project cost as on COD (₹ in lakh)	36089.42	36089.42	36089.42	36089.42	36089.42
Norm Rate (%) of O&M					
SVC	1.5000	1.5527	1.6071	1.6636	1.7219
Total O&M Expenses	**541.34**	**560.36**	**579.99**	**600.38**	**621.42**

<u>Interest on Working Capital (IWC)</u>

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

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

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

(i) Receivables equivalent to 45 days of annual fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

(iii) Operation and maintenance expenses, including security expenses for one month.

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 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. Definition - In these regulations, unless the context otherwise requires:-

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

116. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the bank rate as on 1.4.2019.

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

(₹ in lakh)

Combined Asset					
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
WC for O & M Expenses	45.11	46.70	48.33	50.03	51.79
WC for Maintenance Spares	81.20	84.05	87.00	90.06	93.21

WC for Receivables	1118.48	1124.77	1097.91	1071.11	1040.83
Total Working Capital	1244.79	1255.52	1233.24	1211.20	1185.83
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest of working capital	150.00	141.25	138.74	136.26	133.41

Annual Fixed Charges For 2019-24 Tariff Period

118. The various components of the annual fixed charges in respect of Combined Asset for 2019-24 tariff period are summarized as follows:

(₹ in lakh)

Combined Asset					
Particulars	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Depreciation	2849.52	2932.95	2932.95	2932.95	2932.95
Interest on Loan	2536.69	2384.94	2149.96	1914.64	1673.98
Return on Equity	3019.43	3103.64	3103.64	3103.64	3103.64
Interest on Working Capital	150.00	141.25	138.74	136.26	133.41
Operation and Maintenance Expenses	541.34	560.36	579.99	600.38	621.42
Total	**9096.97**	**9123.14**	**8905.29**	**8687.87**	**8465.40**

Filing Fee and Publication Expenses

119. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses.

120. BRPL has objected to the claim of filing fee submitting that the same is at the discretion of the Commission. BRPL has submitted that the Commission in its order dated 11.9.2008 in Petition No. 129 of 2005 declined the reimbursement of filing fee observing that the Central Power Sector Undertakings in furtherance of their business interests, are statutorily required to approach the Commission for determination and approval of tariff.

121. In response, the Petitioner submitted that it has requested for reimbursement of expenditure by the beneficiaries towards petition filing fee and publication expenses in terms of Regulation 70(1) of the 2019 Tariff Regulations. The Petitioner has placed reliance on the Commission's order dated 28.3.2016 in Petition No.

137/TT/2015 where it allowed the recovery of petition filing fee and expenditure for publication of notices from beneficiaries on pro-rata basis.

122. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

123. The Petitioner has requested to allow it to bill and recover license fee and RLDC fees and charges, separately from the Respondents.

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

Goods and Services Tax

125. 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 Respondents 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.

126. BRPL has objected to the prayer of the Petitioner for grant of GST.

127. We have considered the submissions of the Petitioner and BRPL and are of the opinion that GST is not levied on transmission service at present. Therefore, we are of the view that Petitioner's prayer is pre-mature and the Petitioner is at liberty to approach the Commission if GST is levied upon transmission service in future.

Security Expenses

128. 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 Interest on Working Capital.

129. BRPL has submitted that the Petitioner should clarify the provision under which such a claim has been made.

130. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

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

Sharing of Transmission Charges

132. With effect from 1.11.2020, the 2010 Sharing Regulations has been repealed and sharing is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

133. To summarise:

a) The trued-up Annual Fixed Charges allowed for the transmission assets for 2014-19 tariff period are:

(₹ in lakh)

Asset I			
Particulars	**2016-17 (Pro-rata for 122 days)**	**2017-18**	**2018-19**
AFC	**887.37**	**2927.85**	**3146.05**

(₹ in lakh)

Asset II			
Particulars	**2016-17 (Pro-rata for 97 days)**	**2017-18**	**2018-19**
AFC	567.39	2435.97	2724.11

(₹ in lakh)

Asset-III		
Particulars	**2017-18 (Pro-rata for 92 days)**	**2018-19**
AFC	527.39	2397.61

b) The Annual Fixed Charges allowed in respect of the Combined Asset for 2019-24 tariff period in the instant order are as follows:

(₹ in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
9096.97	9123.14	8905.29	8687.87	8465.40

134. The Annexure-1 and Annexure-2 given hereinafter form part of the order.

135. This order disposes of Petition No. 468/TT/2020 in terms of the above discussions and findings.

sd/-	sd/-	sd/-	sd/-
(P. K. Singh)	**(Arun Goyal)**	**(I. S. Jha)**	**(P. K. Pujari)**
Member	**Member**	**Member**	**Chairperson**

Petition No.	**468/TT/2020**	**Annexure-1**
Period	**True-Up**	**Asset-I**

2014-19		**ACE (₹ in lakh)**					**Additional Depreciation (₹ in lakh)**		
Capital Expenditure as on COD	**Admitted Cost on COD (₹ in lakh)**	**2016-17**	**2017-18**	**2018-19**	**Admitted Cost on 31.3.2019 (₹ in lakh)**	**Rate of Depreciation (%)**	**2016-17**	**2017-18**	**2018-19**
Sub Station	13632.54	2585.17	1284.76	2158.63	**19661.09**	5.28	788.05	890.21	981.12
IT Equipment and software	0.00	74.40	0.00	0.00	74.40	5.28	1.97	3.93	3.93
Total	**13632.54**	**2659.57**	**1284.76**	**2158.63**	**19735.50**		**790.02**	**894.14**	**985.05**
Average Gross Block (₹ in lakh)							14962.32	16934.49	18656.18
Weighted Average Rate of Depreciation %							5.28	5.28	5.28

Petition No: **468TT2020** **Annexure-1**
Period **True-Up** **Asset-II**

2014-19	**Admitted Cost on COD (₹ in lakh)**	**ACE (₹ in lakh)**			**Admitted Cost on 31.3.2019 (₹ in lakh)**	**Rate of Depreciation (%)**	**Additional Depreciation (₹ in lakh)**		
Capital Expenditure as on COD		**2016-17**	**2017-18**	**2018-19**			**2016-17**	**2017-18**	**2018-19**
Sub Station	10955.91	1888.41	2243.01	1833.81	16921.14	5.28	628.33	737.40	845.02
IT Equipment and software	0.00	0.00	79.00	7.02	86.02	5.28	0.00	2.09	4.36
Total	**10955.91**	**1888.41**	**2322.01**	**1840.83**	**17007.16**		**628.33**	**739.48**	**849.38**
Average Gross Block (₹ in lakh)							11900.12	14005.32	16086.74
Weighted Average Rate of Depreciation %							5.28	5.28	5.28

Petition No:- **468TT2020** **Annexure-1**

Period **True-Up** **Asset-III**

2014-19	**Admitted Cost on COD (₹ in lakh)**	**ACE (₹ in lakh)**		**Admitted Cost on 31.3.2019 (₹ in lakh)**	**Rate of Depreciation (%)**	**Additional Depreciation (₹ in lakh)**	
Capital Expenditure as on COD		**2017-18**	**2018-19**			**2017-18**	**2018-19**
Sub Station	11500.97	684.57	3164.52	15350.06	5.28	625.32	726.94
Total	**11500.97**	**684.57**	**3164.52**	**15350.06**		**625.32**	**726.94**
Average Gross Block (₹ in lakh)						11843.26	13767.80
Weighted Average Rate of Depreciation %						5.28	5.28

Petition No:- **468TT2020** **Annexure-2**

Period **True-Up** **Combined Asset**

2019-24	**Admitted Cost on 31.3.2019 (₹ in lakh)**	**ACE (₹ in lakh)**	**Admitted Cost on 31.3.2024 (₹ in lakh)**	**Rate of Depreciation (%)**	**Additional Depreciation (₹ in lakh)**				
Capital Expenditure as on COD		**2019-20**			**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Sub Station	51932.30	2896.41	54828.71	5.28	2818.49	2894.96	2894.96	2894.96	2894.96
PLCC	160.42	92.87	253.29	6.33	31.03	37.99	37.99	37.99	37.99
Total	**52092.72**	**2989.28**	**55082.00**		2849.52	2932.95	2932.95	2932.95	2932.95
Average Gross Block (₹ in lakh)					53587.36	55082.00	55082.00	55082.00	55082.00
Weighted Average Rate of Depreciation %					5.32	5.32	5.32	5.32	5.32