

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 13/TT/2020

Coram:

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

Date of Order : 26.02.2021

In the Matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations- 1999 and truing up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Salal-I Transmission System associated with the Northern Region.

And in the Matter of:

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

.....Petitioner

Vs

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



4. Jodhpur Vidyut Vitran Nigam Ltd.,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan).
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004 (Himachal Pradesh).
6. Punjab State Electricity Board,
The Mall,
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 Ltd.,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001 (Uttar Pradesh).
10. Delhi Transco Ltd.,
Shakti Sadan, Kotla Road,
New Delhi-110002.
11. BSES Yamuna Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
13. Tata Power Delhi Distribution Ltd. (TPDDL),
33 KV Sub-station, Hudson Lane,
Kingsway Camp,
North Delhi-110009.
14. Chandigarh Administration,
Sector-9, Chandigarh.
15. Uttarakhand Power Corporation Ltd.,
Urja Bhawan,
Kanwali Road, Dehradun (Uttarakhand).
16. North Central Railway,



Allahabad (Uttar Pradesh).

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

...Respondent(s)

For Petitioner: Shri S. S. Raju, PGCIL
Shri A. K. Verma, PGCIL
Shri Vipin Joseph, PGCIL
Shri V.P. Rastogi, PGCIL

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

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the Petitioner”), a deemed transmission licensee, for truing up of the tariff for the period from 1.4.2014 to 31.3.2019 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff for the period from 1.4.2019 to 31.3.2024 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of Salal-I Transmission System associated with the Northern Region (hereinafter referred to as ‘the transmission project’ or ‘the transmission asset’)

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 7 and 8 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 7 and 8 above for respective block.



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

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 recover FERV on the foreign loans deployed as provided under clause 68 of the Tariff Regulations, 2019.

7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 8.5 & 8.6 above.

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

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

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

Background

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

- a. The Department of Power in Central Government had sanctioned the setting up of transmission project vide letter dated 23.8.1983. Subsequently, approval for the Revised Cost Estimate (RCE) was accorded by Ministry of Power vide letter dated 9.6.1997. The total cost of the transmission project as per the Central Government approval is ₹3027.00 lakh (including IDC of ₹315.00 lakh). The scope of work covered in the transmission project is as follows:



Transmission line

- i. 220 kV Salal- Jammu-I S/C transmission line
- ii. 220 kV Jammu-Hiranagar S/C transmission line
- iii. 220 kV Hiranagar-Sarna S/C transmission line
- iv. 220 kV Sarna-Dasua ckt-I (on D/C tower) transmission line
- v. 220 kV Salal-Kishanpur-I D/C transmission line
- vi. 220 kV Kishanpur-Udhampur D/C transmission line

Sub-stations:

- i. Jammu: Bay of Salal-I & Hiranagar Sarna:Bay of Hiranagar
- ii. Sarna:Bay of Dasuya-I
- iii. Dasuya (PSEB):Sarna-I
- iv. Kishanpur:Salal-I & II
- v. Kishanpur:Udhampur-I & II
- vi. Udhampur (PDD):Kishanpur-I & II

b. The transmission project was put into commercial operation w.e.f. 1.4.1986.

c. The initial tariff for the transmission project was notified by the Ministry of Power vide its notification dated 16.11.1998 at an admitted capital cost of ₹3057.00 lakh. The tariff notified by Ministry of Power was valid up to 31.3.2002. However, as the terms and conditions for determination of tariff notified by the Commission came into effect on 1.4.2001, the transmission charges approved by Ministry of Power were rendered valid up to 31.3.2001.

d. The transmission tariff for the 2001-04 tariff period for the transmission asset was allowed vide order dated 31.7.2003 in Petition No. 20/2002; the tariff for the 2004-09 tariff period was allowed vide order dated 25.11.2005 in Petition No. 110/2004; the tariff for the 2009-14 tariff period was determined vide order dated 7.10.2010 in Petition No. 143/2010; and tariff for the 2009-14 tariff period was trued up and the 2014-19 tariff period was allowed vide order dated 23.2.2016 in Petition No. 25/TT/2015.



e. The Petitioner has not claimed the revised transmission tariff for the 2001-04 and 2004-09 tariff periods on account of change in Interest on Loan (IOL) and Interest on Working Capital (IOWC) to the extent of revision in IOL and in Maintenance Spares in terms of APTEL judgments dated 22.1.2007 and 13.6.2007 in Appeal No. 8112005 and 139/2006 as there is no additional capital expenditure (ACE) during 2001-04 and 2004-09 tariff periods.

f. The Petitioner has claimed trued up tariff for the transmission asset for the 2014-19 tariff period as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges (AFC) approved vide order dated 23.2.2016 in Petition No. 25/TT/2015	940.89	968.82	987.66	1006.88	1026.96
AFC claimed by the Petitioner based on truing up in the instant petition	935.56	963.42	993.87	1013.53	1034.48

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. General Notice dated 14.1.2020 directing the beneficiaries/Respondents to file reply in the matter was also posted on the Commission's website. Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9, has filed its reply vide affidavit dated 6.8.2020 and has raised issues of depreciation, RoE, O&M Expenses and licence fees. BSES Rajdhani Power Limited (BRPL), Respondent No.12, has filed soft copy of its reply dated 5.6.2020 and hard copy of the reply was filed vide affidavit dated 24.9.2020 after lifting of the lockdown due to Covid-19 pandemic and has raised



issues of ACE, deferred tax liability, RoE, filing fees, security expenses and GST. The Petitioner, vide affidavit dated 5.6.2020 and affidavit dated 10.7.2020, has filed rejoinder to the reply of UPPCL and BRPL, respectively. The issues raised by UPPCL and BRPL and the clarifications given by the Petitioner are considered in the relevant portions of this order.

6. This order is issued considering the submissions made in petition dated 7.11.2019, Respondent's reply vide affidavit dated 6.8.2020 and 24.9.2020 and the Petitioner's affidavits dated 5.6.2020, 10.7.2020, 21.9.2020.

7. The hearing in this matter was held on 9.6.2020 through video conference and the order was reserved.

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

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

10. We have considered the above submissions of the BRPL in terms of Regulation 3(6) and (8) of the Central Electricity Regulatory Commission (Procedure for Making of Application for Determination of Tariff, Publication of Application and



Other Related Matters) Regulations, 2004. Accordingly, the Petitioner has published notice in the newspapers and vide affidavit dated 19.12.2019 has submitted that it has carried out the publication of the present tariff application in the newspapers dated 18.11.2019 in the states of New Delhi, Chandigarh, Uttar Pradesh, Rajasthan, Jammu and Kashmir, Uttarakhand and Himachal Pradesh in various languages. Further, the instant petition has been uploaded on the Petitioner's website. The Notice published in newspapers contained a statement that the application made for determination of tariff is posted on the website of the applicant and the address of the website has also been given. The said notice contained a statement that "suggestions or objections, if any, on the tariff proposals for determination of tariff may be filed by any person including the beneficiary in the Office of the Secretary, Central Electricity Regulatory Commission with a copy to the applicant at its Corporate Office within 30 days of publication of the notice". No suggestions/ objections with regard to the present tariff petitions were received by the Commission before listing of the present petition for hearing.

11. In the facts and circumstances of the present case, no pressing need is felt for engagement of any agency to represent the interest of consumers as pursuant to the publications and posting the tariff application on website, no suggestions/ objections have been received. Accordingly the submissions of BRPL for engaging any agency for consumer's interest in the present petition are rejected.

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

12. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission asset are as under:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	67.26	73.02	82.91	83.61	83.59
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	312.92	316.63	318.11	317.84	318.70
Interest on Working Capital	37.37	38.54	39.78	40.80	41.87
O&M Expenses	518.01	535.23	553.07	571.28	590.32
Total	935.56	963.42	993.87	1013.53	1034.48

13. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission asset are as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	43.17	44.60	46.09	47.61	49.19
Maintenance Spares	77.70	80.28	82.96	85.69	88.55
Receivables	155.93	160.57	165.65	168.92	172.41
Total Working Capital	276.80	285.45	294.70	302.22	310.15
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	37.37	38.54	39.78	40.80	41.87

Capital Cost

14. The capital cost of the project in the instant petition has been calculated in accordance with Regulation 9(3) and Regulation 9(6) of the 2014 Tariff Regulations. The Commission vide order dated 23.2.2016 in Petition No. 25/TT/2015 had approved the transmission tariff for the transmission asset for the 2014-19 tariff period based on admitted capital cost of ₹3270.83 lakh as on 31.3.2014. The Petitioner had projected ACE of ₹87.75 lakh and de-capitalisation of ₹17.00 lakh at the time of tariff determination for the 2014-19 tariff period and the same was allowed. Accordingly, ACE considered in order dated 23.2.2016 in Petition No. 25/TT/2015 for tariff computation is shown under:

(₹ in lakh)

Admitted Cost as on 1.4.2014	ACE	Admitted Capital Cost as on 31.3.2019
	2014-19	
3270.83	70.75	3341.58



Additional Capital Expenditure (ACE)

15. The Petitioner vide Auditor Certificate dated 30.7.2019 has claimed total ACE of ₹105.45 lakh and de-capitalisation of ₹22.56 lakh i.e. a net ACE of ₹82.89 lakh based on actual expenditure for the transmission asset, the details are as under:

(₹ in lakh)

Capital Cost as on 31.3.2014	ACE (as per Auditor Certificate)					De-capitalisation	Capital Cost as on 31.3.2019
	2014-15	2015-16	2016-17	2017-18	2018-19	2016-17	
3270.83	12.42	64.34	28.69	0.00	0.00	(22.56)	3353.72

16. BRPL has submitted that the Petitioner has claimed ACE during 2014-19 tariff period on actual basis as against that allowed by the Commission in its order dated 23.2.2016 in Petition No. 25/TT/2015. Against the approved ACE of ₹87.75 lakh, the actual ACE claimed is ₹105.45 lakh upto 2016-17, which is an increase of 12%. In response, the Petitioner, vide affidavit dated 10.7.2020, has submitted that the difference between approved ACE of ₹87.75 lakh during the 2014-19 tariff period and actual claim of ₹105.45 lakh in instant petition is on account of entry tax of ₹10.23 lakh which was inadvertently missed while proposing the estimated ACE and minor variation during final reconciliation and is based on actual expenditure incurred.

17. The Petitioner's claim towards de-capitalisation varies from the de-capitalisation approved vide order dated 23.2.2016 in Petition No. 25/TT/2015. In its reply to the specific query in this regard, the Petitioner, vide affidavit dated 5.6.2020, has submitted that in the previous petition, de-capitalisation claimed was estimated as ₹17.00 lakh. The Petitioner has further submitted that on finalization/ completion of works, the actual de-capitalisation value as per books is calculated as ₹22.56 lakh and the same has also been certified in the Auditor Certificate. With regard to ACE



claimed, the Petitioner has further submitted that ACE is related to the replacement of sub-station equipment such as isolators, current transformers (CT), circuit breakers (CB), PLCC etc.

18. We have considered the submissions of the Petitioner and BRPL. The claimed ACE is on account of replacement of sub-station equipment such as isolators, CTs, CBs, PLCC etc. and the variation is on account of entry tax of ₹10.23 lakh and reconciliation. Therefore, ACE has been approved as claimed. The total capital cost as on 31.3.2019 is as under:

(₹ in lakh)

Capital Cost as on 31.3.2014	Approved ACE						Capital Cost as on 31.3.2019
	2014-15	2015-16	2016-17	2016-17 (De-cap)	2017-18	2018-19	
3270.83	12.42	64.34	28.69	(22.56)	0.00	0.00	3353.72

Debt-Equity ratio

19. The Petitioner has claimed debt-equity ratio as on 31.3.2014 approved by the Commission in order dated 23.2.2016 in Petition No. 25/TT/2015 and the same has been considered as opening debt-equity ratio as on 1.4.2014 as provided in Regulation 19(3) of the 2014 Tariff Regulations. The details of the same are as under:

Particulars	Amount (₹ in lakh)	(%)
Debt	1678.18	51.31
Equity	1592.65	48.69
Total	3270.83	100.00

20. The debt-equity ratio of 70:30 has been considered for ACE allowed during 2014-19 tariff period in accordance with Regulation 19(5) of the 2014 Tariff Regulations. The de-capitalisation of asset in the instant case is carried out in the



debt-equity ratio as on the date of capitalisation as per the details submitted by the Petitioner in Form 10B.

21. The details of debt and equity as on 1.4.2014 and 31.3.2019 for the transmission asset considered for the purpose of tariff for the 2014-19 tariff period are as under:

Debt-Equity for Capital Cost as on 1.4.2014

Particulars	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)
Debt	1678.18	51.31
Equity	1592.65	48.69
Total	3270.83	100.00

Debt-Equity for ACE and De-capitalisation during 2014-19

(₹ in lakh)

Particulars	ACE		ACE		ACE		De-capitalisation		ACE	ACE
	2014-15	(%)	2015-16	(%)	2016-17	(%)	2016-17	(%)*	2017-18	2018-19
Debt	8.69	70.00	45.04	70.00	20.08	70.00	11.28	50.00	0.00	0.00
Equity	3.73	30.00	19.30	30.00	8.61	30.00	11.28	50.00	0.00	0.00
Total	12.42	100.00	64.34	100.00	28.69	100.00	22.56	100.00	0.00	0.00

*as per the Form 10B submitted by the petitioner

Debt-Equity for Capital Cost as on 31.3.2019

Particulars	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	1740.72*	51.90
Equity	1613.01**	48.10
Total	3353.72	100.00

*Debt as on 1.4.2014 plus debt considered for ACE minus adjustment made in debt on de-capitalisation.

** Equity as on 1.4.2014 plus equity considered for ACE minus adjustment made in equity on de-capitalisation.

Interest on Loan (IoL)

22. The Petitioner has not claimed any interest on loan. Therefore, no interest on loan has been considered in this order.



Return on Equity (RoE)

23. The Petitioner has claimed RoE for the transmission asset in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax rate (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	21.018	19.625
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

24. UPPCL has submitted that the Petitioner should resubmit the calculation of equity and rate of RoE for 2016-2019. In response, the Petitioner vide affidavit dated 5.6.2020 has submitted that it has considered the equity as approved vide order dated 23.2.2016 in Petition No. 25/TT/2015. The Petitioner has further submitted that the effective rate of tax considered for 2014-15 and 2015-16 are based on Assessment Orders issued by Income-Tax authorities, for the purpose of grossing up of RoE rate and that the effective rate of tax considered for 2016-17 and 2017-18 are based on the Income Tax returns filed, for the purpose of grossing up of RoE rate of respective years. Further, for 2018-19, pending filing of ITR during filing of instant petition, effective tax rate is calculated based the applicable MAT rate (i.e. MAT 18.50% + Surcharge 12.00% + Cess 4%) for the purpose of grossing up of rate of RoE.

25. BRPL has submitted that the information regarding Income Tax Assessment submitted by the Petitioner is in respect of the Petitioner as a whole and not in respect of the tax on the transmission business in respect of the Northern Region. Accordingly, the said information is not the relevant information for the purpose of



effective tax rate. BRPL has submitted that on the basis of the publicly available financial statements of the Petitioner, BRPL has worked out the effective tax rate of the Petitioner which stands at 8.70% for 2014-15 and 'NIL' in 2015-16, 2016-17, 2017-18 and 2018-19. BRPL has submitted that the actual tax rate applicable to the transmission licensee was to be trued up along with truing up of tariff to be determined in accordance with Regulation 6 of the 2009 Tariff Regulations and based on the truing up of tariff if the recovered tariff exceeded the tariff approved, the Petitioner should have refunded to beneficiaries along with simple interest. BRPL has further submitted that Regulation 49 of the 2014 Tariff Regulations clearly restricts the claim of tax amount only to deferred tax liabilities up to 31st March 2009 whenever it will materialize. It is also submitted that the claims of deferred tax is required to be adjusted for the tariff period 2004-09.

26. In response, the Petitioner vide affidavit dated 10.7.2020 has submitted that the Petitioner has submitted that it is eligible for claiming the deferred tax liabilities for the period up to 31.3.2009 on materialization in subsequent period i.e. financial year 2009-10 onwards. The Petitioner has submitted that it is only claiming the reimbursement of Income tax liability, discharged as per the provisions of Income Tax Act, 1961. The Petitioner has submitted that it has used Profit Before Tax (PBT) as reported in the Statement of Profit and Loss (of consolidated financial statements). The Petitioner has submitted that the Petitioner Company has been paying tax under the provisions of Section 115JB of the Income tax Act, 1961 (MAT provisions). The Petitioner has further submitted that it has submitted effective tax rates for all the financial years started from 2014-15 to 2018-19 as part of the instant petition. All the income from all streams of business is taxable at MAT Rate only. Income tax return is



filed for the company on the basis of standalone financial statements. Tax returns of the subsidiaries and joint ventures are filed separately as individual entities.

27. We have considered the submissions of the Petitioner and BRPL and UPPCL. The Commission vide order dated 24.1.2021 in Petition No. 136/TT/2020 has already dealt with the issues raised by the Respondents. The relevant paragraphs of the order are extracted as under:

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

53. As regards UPPCL’s contention that the grossed up rate of RoE for the period 2016-17 to 2018-19 is not based on the MAT rates approved by the Income Tax Authorities, it is observed that the effective rate of tax considered by the Petitioner for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by Income Tax authorities and the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed for the purpose of grossing up the RoE rate of respective years. In view of the clarification given by the Petitioner, we are of the view that there is no merit in the contention of UPPCL.”

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



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

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

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

29. The MAT rates considered in order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations, as under:

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

30. The Petitioner has claimed RoE for the 2014-19 period after grossing up the RoE of 15.50% with Effective Tax rates (based on MAT rates) for each year as per



2014 Tariff Regulations. RoE is trued up on the basis of the MAT rate applicable in the respective years and RoE approved in order dated 23.2.2016 in Petition No. 25/TT/2015, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity					
Opening Equity	1592.65	1596.38	1615.68	1613.01	1613.01
Additions	3.73	19.30	-2.67	0.00	0.00
Closing Equity	1596.38	1615.68	1613.01	1613.01	1613.01
Average Equity	1594.51	1606.03	1614.34	1613.01	1613.01
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	312.69	316.48	318.11	317.85	318.69

(₹ in lakh)					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 23.2.2016 in Petition No. 25/TT/2015	314.40	316.48	316.48	316.48	316.48
Claimed by the Petitioner in the instant petition	312.92	316.63	318.11	317.84	318.70
Allowed after true-up in this order	312.69	316.48	318.11	317.85	318.69

Depreciation

31. UPPCL has submitted that the Petitioner should justify the rate of depreciation considered in the instant petition for the 2014-19 tariff period. In response, the Petitioner vide affidavit dated 5.6.2020 has submitted that it has considered the cumulative depreciation as approved in order dated 23.2.2016 in Petition No. 25/TT/2015. The Petitioner has further submitted that the asset has completed 12 years of life as on 31.3.1998 and thus depreciation has been computed based on the remaining depreciable value to be recovered in the balance useful life as per the 2014 Tariff Regulations.

32. We have considered the submissions of the Petitioner and UPPCL. The transmission project has already completed 12 years before 1.4.2014. Accordingly,



depreciation has been calculated based on the remaining depreciable value to be recovered over the balance useful life. Thus, the depreciation allowed during the 2014-19 period and the depreciation approved in order dated 23.2.2016 in Petition No. 25/TT/2015, claimed by the Petitioner in the instant petition and approved after trueing up in the instant order is as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	3270.83	3283.25	3347.59	3353.72	3353.72
Additional Capitalisation	12.42	64.34	28.69	0.00	0.00
Decapitalisation	0.00	0.00	22.56	0.00	0.00
Closing Gross Block	3283.25	3347.59	3353.72	3353.72	3353.72
Average Gross Block	3277.04	3315.42	3350.66	3353.72	3353.72
Weighted average rate of Depreciation (WAROD) (%)	spreading				
Balance useful life of the asset	7.00	6.00	5.00	4.00	3.00
Elapsed life	28.00	29.00	30.00	31.00	32.00
Depreciable Value	2949.34	2983.88	3015.59	3018.35	3018.35
Depreciation during the year	67.25	73.01	82.91	83.60	83.60
Cumulative Depreciation	2545.83	2618.84	2683.93	2767.54	2851.14
Remaining Depreciable Value	403.51	365.04	331.66	250.81	167.21

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 23.2.2016 in Petition No. 25/TT/2015	71.00	78.46	78.46	78.46	78.46
Claimed by the Petitioner in the instant petition	67.26	73.02	82.91	83.61	83.59
Allowed after true-up in this order	67.25	73.01	82.91	83.60	83.60

Operation & Maintenance Expenses (O&M Expenses)

33. The O&M Expenses claimed by the Petitioner for the transmission asset are as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses					
Bays 2 Nos. of 200 kV Bays at Salal-I & Hiranagar, 1 No. of 200 kV Bay at Hiranagar, 1 No. of 200 kV Bay at Dasuya-I, 1 No. of 200 kV Bay at Sarna-I, 2 Nos. of 200 kV Bays at Salal-I & II, 2 Nos. of 200 kV Bays at Udhampur-I & II, 2 Nos. of 200 kV Bays at Kishenpur-I & II					
No. of bays	11	11	11	11	11



Transmission line (220 kV at Salal Jammu-I, Jammu-Harinagar, Harinagar-Sarna, Salal-Kishenpur-I&II, Kishenpur-Udhampur-I&II)					
S/C (Single Conductor)	147.55	147.55	147.55	147.55	147.55
D/C Single Conductor	78.84	78.84	78.84	78.84	78.84
Total O&M expense (₹ in lakh)	518.00	535.22	553.07	571.29	590.32

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses					
220 kV bay					
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10
Transmission line					
S/C (Single Conductor)					
Norms (₹ lakh/km)	0.202	0.209	0.216	0.223	0.230
D/C Single Conductor					
Norms (₹ lakh/km)	0.303	0.313	0.324	0.334	0.346

35. UPPCL has submitted that the O&M Expenses claimed by the Petitioner are not consistent with the calculations prepared by the Respondent. In response, the Petitioner vide affidavit dated 5.6.2020 has submitted that it has computed the O&M Expenses as per the 2014 Tariff Regulations.

36. We have considered the submission of the Petitioner and UPPCL. The O&M Expenses are allowed for the transmission asset as per the norms specified in the 2014 Tariff Regulations. O&M Expenses approved in order dated 23.2.2016 in Petition No. 25/TT/2015, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is shown under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses					
Bays 2 Nos. of 200 kV Bays at Salal-I & Hiranagar, 1 No. of 200 kV Bay at Hiranagar, 1 No. of 200 kV Bay at Dasuya-I, 1 No. of 200 kV Bay at Sarna-I, 2 Nos. of 200 kV Bays at Salal-I & II, 2 Nos. of 200 kV Bays at Udhampur-I & II, 2 Nos. of 200 kV Bays at Kishenpur-I & II					



No. of bays	11	11	11	11	11
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.1
Transmission line (220 kV at Salal Jammu-I, Jammu-Harinagar, Harinagar-Sarna, Salal-Kishenpur-I&II, Kishenpur-Udhampur-I&II)					
S/C (Single Conductor)	147.55	147.55	147.55	147.55	147.55
Norms (₹ lakh/km)	0.202	0.209	0.216	0.223	0.23
D/C Single Conductor	78.84	78.84	78.84	78.84	78.84
Norms (₹ lakh/km)	0.303	0.313	0.324	0.334	0.346
Total O&M expense (₹ in lakh)	518.00	535.22	553.07	571.29	590.32

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 23.2.2016 in Petition No. 25/TT/2015	518.00	535.22	553.08	571.29	590.32
Claimed by the Petitioner in the instant petition	518.01	535.23	553.07	571.28	590.32
Allowed after true-up in this order	518.00	535.22	553.07	571.29	590.32

Interest on Working Capital (IWC)

37. IWC has been worked out as per the methodology provided in the Regulation 28 of the 2014 Tariff Regulations. The details of the trued-up IWC approved for the transmission asset for the 2014-19 period and IWC approved in order dated 23.2.2016 in Petition No. 25/TT/2015, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
O&M Expenses	43.17	44.60	46.09	47.61	49.19
Maintenance Spares	77.70	80.28	82.96	85.69	88.55
Receivables	155.88	160.54	165.65	168.92	172.41
Total Working Capital	276.75	285.43	294.70	302.22	310.15
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	37.36	38.53	39.78	40.80	41.87

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 23.2.2016 in Petition No. 25/TT/2015	37.49	38.66	39.64	40.65	41.70
Claimed by the Petitioner in the instant petition	37.37	38.54	39.78	40.80	41.87
Allowed after true-up in this order	37.36	38.53	39.78	40.80	41.87



Annual Transmission Charges allowed for 2014-19 Tariff Period

38. The trued-up annual fixed charges approved for the transmission asset for the 2014-19 tariff period are summarised below:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	67.25	73.01	82.91	83.60	83.60
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	312.69	316.48	318.11	317.85	318.69
Interest on Working Capital	37.36	38.53	39.78	40.80	41.87
O&M Expenses	518.00	535.22	553.07	571.29	590.32
Total	935.31	963.24	993.89	1013.54	1034.48

39. The details of the Annual Transmission Charges approved in order dated 23.2.2016 in Petition No. 25/TT/2015, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is shown as under:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 23.2.2016 in Petition No. 25/TT/2015	940.89	968.82	987.66	1006.88	1026.96
Claimed by the Petitioner in the instant petition	935.56	963.42	993.87	1013.53	1034.48
Allowed after true-up in this order	935.31	963.24	993.89	1013.54	1034.48

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

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

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	83.61	83.59	18.07	40.73	51.79
Interest on Loan	0.00	0.00	3.19	7.16	6.66
Return on Equity	302.96	302.96	303.58	304.27	304.88
Interest on Working Capital	19.55	20.06	19.63	20.55	21.23
O&M Expenses	315.20	326.19	337.70	349.45	361.70
Total	721.32	732.80	682.17	722.16	746.26

41. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission asset are as under:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	26.27	27.18	28.14	29.12	30.14
Maintenance Spares	47.28	48.93	50.66	52.42	54.26
Receivables	88.69	90.35	84.10	89.03	91.75
Total Working Capital	162.24	166.46	162.90	170.57	176.15
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	19.55	20.06	19.63	20.55	21.23

Capital Cost

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

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

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) *Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) *Expenditure on account of change in law and force majeure events; and*



- (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (3) *The Capital cost of an existing project shall include the following:*
- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
 - (b) *Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
 - (c) *Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*
 - (d) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (e) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
 - (f) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) *cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
 - (b) *cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*
- (5) *The following shall be excluded from the capital cost of the existing and new projects:*
- (a) *The assets forming part of the project, but not in use, as declared in the tariff petition;*
 - (b) *De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*
- Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be de-capitalised only after its redeployment;*
- Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.*
- (c) *In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*
 - (d) *Proportionate cost of land of the existing project which is being used for*



- generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”

43. The Petitioner has claimed capital cost of ₹3353.72 lakh as on 31.3.2019 for the transmission asset vide Auditor Certificate dated 30.7.2019 and the same has been computed and considered as opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

44. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as under:

“24. Additional Capitalisation 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.”

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

(1) The ACE 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.”*

45. The Petitioner has projected net ACE of ₹126.42 lakh after adjusting for de-capitalisation during the 2019-24 tariff period as shown under:-

(₹ in lakh)				
Capital Cost as on 1.4.2019	Net ACE projected			Capital Cost as on 31.3.2024
	2021-22	2022-23	2023-24	
3353.72	66.94	35.13	24.35	3480.14

46. The Petitioner has submitted that ACE proposed is for replacement of deteriorating component/ equipment in the system which may affect the stability and reliability of the grid in case of sudden failures. The Petitioner has further submitted that the same is covered under Regulation 25(2) of the 2019 Tariff Regulations. The Petitioner has claimed extension of life of the transmission asset by 5 years starting from 2021-22.

47. The Petitioner, vide affidavit dated 5.6.2020, has submitted the equipment-wise details of the proposed ACE which include isolators (10 nos.), CTs (3 nos.), Capacitive Voltage Transformers (CVTs) (3 nos.), control and relay panels (3 sets), CB (1 No.) and power and control cables.



48. We have considered the submission of the Petitioner. The proposed ACE is towards replacement isolators, CTs, Capacitive Voltage Transformers (CVTs), control and relay panels, CB and power and control cables, due to obsolescence of technology. These items are of critical nature and their failure may affect the stability and reliability of the grid. As such, the replacement of these obsolete equipment and the consequent ACE is approved, subject to true-up on actual basis. However, it is observed that the Petitioner has not submitted the OEM certificate in respect of the sub-station equipment that is sought to be replaced in the 2019-24 tariff period. The sub-station associated with the instant transmission assets has already completed its useful life. Therefore, to assess and understand the anticipated life extension of the sub-station for the purpose of depreciation, the Petitioner is directed to submit the OEM Certificate regarding the proposed life of the sub-station equipment which is sought to be replaced alongwith the justification at the time of truing-up.

49. ACE and de-capitalisation allowed for the 2019-24 tariff period is as under:

(₹ in lakh)					
Sl. No.	Particulars	2021-22	2022-23	2023-24	Total
(1)	ACE	133.86	84.78	31.48	250.12
(2)	De-capitalisation	66.92	49.65	7.13	123.70
(3)	Net ACE (1)-(2)	66.94	35.13	24.35	126.42

50. Accordingly, capital cost of the transmission asset as on 31.3.2024 is approved as under:

(₹ in lakh)						
Capital Cost as on 1.4.2019	Approved Net ACE					Capital Cost as on 31.3.2024
	2019-20	2020-21	2021-22	2022-23	2023-24	
3353.72	0.00	0.00	66.94	35.13	24.35	3480.14



Adjustments to equity

51. The transmission asset was put into commercial operation on. 1.4.1986. The debt-equity ratio as on COD was 50:50. The Weighted Average Life for the transmission asset was determined as 35 years. Thus, the transmission system shall complete its useful life on 31.3.2021. Proviso to Regulation 18(3) of the 2019 Tariff Regulations provides that if a transmission system completes its useful life on or after 1.4.2019 and if the actual equity deployed is more than 30% of the capital cost, then the equity shall be restricted to 30% of the total equity deployed. Regulation 18(3) of the 2019 Tariff Regulations provides as follows:

“18. Debt-Equity Ratio:

(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;.....”

52. The debt-equity Ratio as on 31.3.2019 is 51.90:48.10 i.e. the equity deployed is more than 30%. Therefore, as per proviso to Regulation 18(3) of the 2019 Tariff Regulations, equity from 2021-22 onwards has been restricted to 30%. Depreciation has been fully recovered upto 90% of the capital cost by the year 2020-21 and the loan has already been re-paid prior to the 2014-19 period. Accordingly, the capital cost for the 2019-24 tariff period is allowed as under:

Particulars	Value
Closing equity as on 31.3.2019** (₹ in lakh)	1613.01
Closing equity as on 31.3.2020** (₹ in lakh)	1613.01
Closing equity as on 31.3.2021** (₹ in lakh)	1613.01



Equity deployed as on 31.3.2021	48.10%
Opening equity as on 1.4.2021*** (₹ in lakh)	1006.12
Net reduction in equity (₹ in lakh)	606.89

**Represents 48.10% of Gross Block of ₹ 3353.72 lakh

***Represents 30% of Gross Block of ₹ 3353.72 lakh

Debt-Equity ratio

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

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

Provided that:

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

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

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

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

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

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



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

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

54. The transmission system completes its useful life in 2020-21 and decapitalisation of assets is proposed after the completion of useful life. In accordance with Regulation 18 of the 2019 Tariff Regulations, ACE for the 2019-24 period is allowed in the ratio of 70:30. As decided above, the equity from 2021-22 onwards is restricted to 30% and accordingly, debt-equity ratio of 70:30 has been considered for the purpose of decapitalisation also. The details of the debt and equity considered for the purpose of computation of tariff for 2019-24 tariff period is as under: -

Debt-Equity for Capital Cost as on 1.4.2019

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)
Debt	1740.72**	51.90
Equity	1613.01	48.10
Total	3353.72	100.00

**Repaid prior to 1.4.2014

Debt-Equity for ACE and De-capitalisation during 2019-24

Particulars	ACE		ACE		De-capitalisation		ACE		De-capitalisation		ACE		De-capitalisation	
	2019-20	2020-21	2021-22	(%)	2021-22	(%)	2022-23	(%)	2022-23	(%)	2023-24	(%)	2023-24	(%)
Debt	0.00	0.00	93.70	70.00	46.84	70.00	59.35	70.00	34.76	70.00	22.04	70.00	4.99	70.00
Equity	0.00	0.00	40.16	30.00	20.08	30.00	25.43	30.00	14.90	30.00	9.44	30.00	2.14	30.00
Total	0.00	0.00	133.86	100.00	66.92	100.00	84.78	100.00	49.65	100.00	31.48	100.00	7.13	100.00



Debt-Equity for Capital Cost as on 31.3.2024

(₹ in lakh)	
Particulars	Capital cost as on 31.3.2024
Debt	1829.21***
Equity	1044.04
	606.89****
Total	3480.14

***Debt to the extent of Rs. 1740.72 has already been repaid prior to 1.4.2014 and balance on account of new additions to be serviced.

****Equity in excess of 30% reduced with effect from 1.4.2021

Return on Equity (RoE)

55. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provides as under:-

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

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

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

Provided further that:

- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;
- iii. in case of a thermal generating station, with effect from 1.4.2020:
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
 - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:



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

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

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

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

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

Illustration-

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

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

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

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;

(d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

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.”



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

57. UPPCL has submitted that the Petitioner should consider the figures of equity and the rate of RoE on the basis of MAT rates approved by Income Tax Authorities. In response, the Petitioner vide affidavit dated 5.6.2020 has submitted that in the absence of IT assessment order pertaining to 2019-24 period, RoE has been calculated @18.782% after grossing up the RoE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the rate specified by the Commission as per illustration under Regulation 31(2)(ii) of the 2019 Tariff Regulations during the 2019-24 period. As per Regulation 31(3), the grossed up rate of RoE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2019-24 tariff period on actual gross income of any financial year.

58. BRPL has submitted that the Petitioner should clarify whether it is grossing up deferred tax amount while billing to beneficiaries and, if so, the same is required to be refunded to beneficiaries. In response, the Petitioner vide affidavit dated 10.7.2020 has submitted that it has claimed deferred tax liability during the period 2009-14 only for the deferred tax liability upto 31.3.2009 and those that have materialized. Further, the Petitioner has submitted that deferred tax liability amount billed/ materialized is not considered while grossing up the RoE.

59. We have considered the submissions made by the Petitioner, UPPCL and BRPL. As regards UPPCL's observation regarding Petitioner's claim of RoE for the 2019-24 tariff period, it is observed that the Petitioner has claimed RoE @18.782% after



grossing up the RoE with MAT rate of 17.472% based on the rate specified in the illustration under Regulation 31(2)(ii) of the 2019 Tariff Regulations. Further, the grossed up rate of RoE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2019-24 tariff period on actual gross income of any financial year as provided in Regulation 31(3) of the 2019 Tariff Regulations. As regards BRPL's contention regarding the deferred tax liability, it observed that the Petitioner has considered the deferred tax liability only upto 31.3.2009 and has not considered deferred tax liability amount billed/ materialized while grossing up RoE. The Petitioner has satisfactorily clarified the issues raised by UPPCL and BRPL.

60. As observed above, equity from 2021-22 onwards has been restricted to 30% as per proviso to Regulation 18(3) of the 2019 Tariff Regulations. The MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the transmission asset is as under: -

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	1613.01	1613.01	1006.12**	1026.20	1036.74
Additions	0.00	0.00	40.16	25.43	9.44
Decrease due to decapitalisation during the period	0.00	0.00	20.08	14.90	2.14
Closing Equity	1613.01	1613.01	1026.20	1036.74	1044.04
Average Equity	1613.01	1613.01	1016.16	1031.47	1040.39
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	302.95	302.95	190.85	193.73	195.40



Interest on Loan (IoL)

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

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

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

(3) *The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalisation 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*

62. Gross normative loan to the extent of Rs. 1740.712 has already been repaid prior to 1.4.2014 and therefore, IoL has been considered on ACE (new additions). The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period may be adjusted.



Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the instant asset is as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	1740.72	1740.72	1740.72	1787.57	1812.16
Cumulative Repayments upto Previous Year	1740.72	1740.72	1740.72	1744.25	1753.55
Net Loan-Opening	0.00	0.00	0.00	90.17	140.21
Additions	0.00	0.00	93.70	59.35	22.04
Adjustment of gross loan pertaining to de-capitalised asset	0.00	0.00	46.84	34.76	4.99
Repayment during the year	83.60	83.60	3.53	9.31	12.38
Adjustment of cumulative repayment pertaining to de-capitalised asset	0.00	0.00	46.84	34.76	4.99
Net Loan-Closing	0.00	0.00	90.17	140.21	149.87
Average Loan	0.00	0.00	45.08	115.19	145.04
Weighted Average Rate of Interest on Loan (WAROI) (%)	8.4818	8.4551	8.4459	8.4327	8.3907
Interest on Loan	0.00	0.00	3.81**	9.71**	12.17**

**Computed by multiplying WAROI into Average Loan raised for additions

Depreciation

63. Regulation 33 of the 2019 Tariff Regulations provide that: -

“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.

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.



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.

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.

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

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

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.

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.

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

64. The transmission project has already completed more than 12 years before 1.4.2019. Accordingly, depreciation has been calculated based on the remaining depreciable value (upto 90% of existing gross block of assets) to be recovered over



the balance useful life upto 31.3.2021 and thereafter no depreciation is allowed on existing assets. As discussed in paragraph 06, the Petitioner has proposed an extension in life for the transmission system by 5 years, but has not provided the OEM certificate and adequate justification towards the claim. Hence, depreciation for ACE (new additions) claimed for 2021-22 onwards is allowed at normative rate of depreciation as specified in the 2019 Tariff Regulations, subject to submission of requisite documents/ information for claim of extension in life at the time of truing-up.

Depreciation allowed for the transmission asset for the 2019-24 period is as under:

(₹ in lakh)					
Existing Assets	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block Other Assets	3353.72	3353.72	3353.72	3286.80	3237.15
Decapitalisation	0.00	0.00	66.92	49.65	7.13
Closing Gross Block Other Assets	3353.72	3353.72	3286.80	3237.15	3230.02
Average Gross Block Other Assets	3353.72	3353.72	3320.26	3261.98	3233.59
Weighted average rate of Depreciation (WAROD) (%)	Spreading				
Depreciable Value	3018.35	3018.35	2958.12	2913.44	2907.02
Cumulative Depreciation at the beginning	2851.14	2934.74	3018.35	2958.12	2913.44
Dep adjustment on a/c of decapitalisation			60.23	44.69	6.42
Net Cumulative Depreciation after adjustment for de-capitalisation	2851.14	2934.74	2958.12	2913.44	2907.02
Remaining Depreciation Value	167.21	83.60	0.00	0.00	0.00
Balance useful life of the asset	2.00	1.00			
Elapsed life	33.00	34.00			
Depreciation	83.60	83.60	0.00	0.00	0.00

(₹ in lakh)					
New Additions	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	0.00	0.00	0.00	133.86	218.64
Additional Capitalisation	0.00	0.00	133.86	84.78	31.48
Closing Gross Block	0.00	0.00	133.86	218.64	250.12
Average Gross Block	0.00	0.00	66.93	176.25	234.38
Weighted average rate of Depreciation (WAROD) (%)			5.28%	5.28%	5.28%
Depreciable Value	0.00	0.00	60.24	158.63	210.94
Cumulative Depreciation at the beginning of the year	0.00	0.00	0.00	3.53	9.31
Depreciation	0.00	0.00	3.53	9.31	12.38
Cumulative Depreciation at the end of the year	0.00	0.00	3.53	12.84	25.22
Remaining Depreciation recoverable at the end of the year	0.00	0.00	56.70	145.79	185.73



Operation & Maintenance Expenses (O&M Expenses)

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

“35. Operation and Maintenance Expenses:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
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
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
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
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
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)	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
<i>Norms for HVDC stations</i>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except	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)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500	1,696	1,756	1,817	1,881	1,947



± 800 kV, Bishwanath-Agra HVDC bipole scheme (Rs	2,563	2,653	2,746	2,842	2,942
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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.”

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses					
Bays					
2 Nos. of 200 kV Bays at Salal-I & Hiranagar, 1 No. of 200 kV Bay at Hiranagar, 1 No. of 200 kV Bay at Dasuya-I, 1 No. of 200 kV Bay at Sarna-I, 2 Nos. of 200 kV Bays at Salal-I & II, 2 Nos. of 200 kV Bays at Udhampur-I & II, 2 Nos. of 200 kV Bays at Kishenpur-I & II					
No. of bays	11	11	11	11	11
Transmission line (220 kV at Salal Jammu-I, Jammu-Harinagar, Harinagar-Sarna, Salal-Kishenpur-I&II, Kishenpur-Udhampur-I&II)					
S/C (Single Conductor)	147.55	147.55	147.55	147.55	147.55
D/C Single Conductor	78.84	78.84	78.84	78.84	78.84
PLCC					
Original Capital Cost	34.54	34.54	34.54	34.54	34.54
Total O&M Expenses (₹ in lakh)	315.21	326.19	337.70	349.45	361.70

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



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

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

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

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

68. The O&M Expenses allowed for the transmission asset is as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses					
Bays 2 Nos. of 200 kV Bays at Salal-I & Hiranagar, 1 No. of 200 kV Bay at Hiranagar, 1 No. of 200 kV Bay at Dasuya-I, 1 No. of 200 kV Bay at Sarna-I, 2 Nos. of 200 kV Bays at Salal-I & II, 2 Nos. of 200 kV Bays at Udhampur-I & II, 2 Nos. of 200 kV Bays at Kishenpur-I & II					
No. of bays	11	11	11	11	11
Norms (₹ lakh/Bay)	22.51	23.3	24.12	24.96	25.84
Transmission line (220 kV at Salal Jammu-I, Jammu-Harinagar, Harinagar-Sarna, Salal-Kishenpur-I&II, Kishenpur-Udhampur-I&II)					
S/C (Single Conductor)	147.55	147.55	147.55	147.55	147.55
Norms (₹ lakh/km)	0.252	0.260	0.270	0.279	0.289



D/C Single Conductor	78.84	78.84	78.84	78.84	78.84
Norms (₹ lakh/km)	0.377	0.391	0.404	0.419	0.433
Total O&M Expenses (₹ in lakh)	314.52	325.49	337.01	348.76	361.02

Interest on Working Capital (IWC)

69. Regulation 34 and Regulation 3(7) of the 2019 Tariff Regulations specifies as under:

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

(a) For Coal-based/lignite-fired thermal generating stations:

- (i) *Cost of coal or lignite and limestone towards stock, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;*
- (ii) *Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;*
- (iii) *Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;*
- (iv) *Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;*
- (v) *Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and*
- (vi) *Operation and maintenance expenses, including water charges and security expenses, for one month.*

(b) For Open-cycle Gas Turbine/Combined Cycle thermal generating stations:

- (i) *Fuel cost for 30 days corresponding to the normative annual plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel;*
- (ii) *Liquid fuel stock for 15 days corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel, cost of main liquid fuel duly taking into account mode of operation of the generating stations of gas fuel and liquid fuel;*
- (iii) *Maintenance spares @ 30% of operation and maintenance expenses including water charges and security expenses;*
- (iv) *Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel; and*
- (v) *Operation and maintenance expenses, including water charges and security expenses, for one month.*

(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.*

(2) *The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:*

Provided that in case of new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.

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

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

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

“3. Definitions. - *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;”*

70. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. The ROI considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, ROI for 2020-21 onwards has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and interest thereon allowed are as under: -



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	26.21	27.12	28.08	29.06	30.08
Maintenance Spares	47.18	48.82	50.55	52.31	54.15
Receivables	88.60	90.09	68.02	71.34	73.61
Total Working Capital	161.98	166.04	146.65	152.72	157.85
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	19.52	18.68	16.50	17.18	17.76

Annual Fixed Charges for the 2019-24 Tariff Period

71. The transmission charges allowed for the transmission asset for the 2019-24 period are summarised below: -

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	83.60	83.60	3.53	9.31	12.38
Interest on Loan	0.00	0.00	3.81	9.71	12.17
Return on Equity	302.95	302.95	190.85	193.73	195.40
Interest on Working Capital	19.52	18.68	16.50	17.18	17.76
O&M Expenses	314.52	325.49	337.01	348.76	361.02
Total	720.58	730.72	551.70	578.69	598.72

Filing Fee and the Publication Expenses

72. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that though the Commission can allow filing fee and publication expenses at its discretion under Regulation 70(1) of the 2019 Tariff Regulations, but the exercise of such discretion is a judicial discretion in the adjudication of tariff for which no justification has been filed by the Petitioner. BRPL also referred to the Commission's order dated 11.9.2008 in Petition No. 129 of 2005 where it declined the claim of Central Power Sector undertakings for allowing the reimbursement of the application filing fee. The Petitioner, in response has submitted that it has requested for reimbursement of expenditure by the beneficiaries towards petition filing fee and publication expense, in terms of Regulation 70(1) of the 2019 Tariff Regulations. Further, the Petitioner also referred to 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.

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

Licence Fee & RLDC Fees and Charges

74. UPPCL has submitted that payment of licence fee is onus of the Petitioner. IN response, the Petitioner vide affidavit dated has submitted that the license fee may be allowed to be recovered separately from the Respondents in terms of Regulation 70 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019. The fees and charges to be paid by the Petitioner as ISTS licensee (deemed ISTS licensee) under Central Electricity Regulatory Commission (Fees and Charges of RLDC and other matters) Regulations as amended from time to time shall also be recoverable from the DICs as provided under clause 70(3) of the 2019 Tariff Regulations.

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

Security Expenses

76. The Petitioner has submitted that security expenses for the transmission asset are not claimed in the instant petition and it would file a separate petition for claiming



the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 will be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

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

78. We have considered the submissions of the Petitioner and BRPL. We are of the view that Petitioner should claim security expenses for all the transmission assets in one petition. It is observed that the Petitioner has already filed the Petition No. 260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with Petition No. 260/MP/2020 in accordance with the appropriate provisions of the 2019 Tariff Regulations.



Goods and Services Tax

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

80. BRPL has submitted that the demand of the Petitioner is premature and need not be considered at this juncture. In response, the Petitioner submitted that currently transmission of electricity by an electric transmission utility is exempt from GST. Hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately.

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

Capital Spares

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

Sharing of Transmission Charges

83. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission



(Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

84. To summarise, the trued-up Annual Fixed Charges allowed for the transmission asset for the 2014-19 tariff period are as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	935.31	963.24	993.89	1013.54	1034.48

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	720.58	730.72	551.70	578.69	598.72

85. This order disposes of Petition No. 13/TT/2020.

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson

