

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 127/TT/2020

Coram:

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

Date of Order: 08.02.2021

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of the transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of Combined Asset-A consisting of **Asset 1:** 400 kV D/C (Quad) Gurgaon-Manesar Transmission Line along with associated bays, **Asset 2:** 400/220 kV 500 MVA ICT-I at Manesar Sub-Station along with associated bays, **Asset 3:** 400/220 kV 500 MVA ICT-II at Manesar Sub-Station along with associated bays and, **Asset 4:** 125 MVAR Bus Reactor at Manesar, and Asset-B, consisting of **Asset 5:** 2 Nos. of 220 kV Line Bays at Fatehabad Sub-Station under "Transmission system associated with NRSS-XIII" in Northern Region.

And in the matter of:

Power Grid Corporation of India Ltd.,
"Saudamini", Plot No. 2,
Sector 29, Gurgaon-122001
Haryana

....Petitioner

Vs.

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,
Vidyut Bhawan, Vidyut Marg,
Jaipur - 302005 (Rajasthan).
2. Haryana Power Purchase Centre, IInd Floor,
Shakti Bhawan, Sector-6,
Panchkula - 134109.



3. Himachal Pradesh State Electricity Board,
Vidyut Bhawan,
Shimla - 171004 (Himachal Pradesh).
4. Punjab State Power Corporation Ltd.,
Thermal Shed Tia, Near 22 Phatak,
Patiala – 147001.
5. Power Development Department,
Janipura Grid Station,
Jammu (Tawi) - 180007.
6. Power Purchase Agreement Directorate,
Uttar Pradesh Power Corporation Ltd.,
10th Floor, Shakti Bhawan Extn.,
14, Ashok Marg, Lucknow - 226001.
7. Delhi Transco Ltd.,
Shakti Sadan,
Kotla Road (near ITO), New Delhi.
8. Chandigarh Electricity Department,
UT-Chandigarh, Div-11, Opposite, Transport Nagar,
Industrial Area Phase– I,
Sector -9, Chandigarh.
9. Uttarakhand Power Corporation Ltd.,
Urja Bhawan, Kanwali Road,
Dehradun.
10. 132 kV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar,
Jaipur - 302017 (Rajasthan).
11. Ajmer Vidyut Vitran Nigam Ltd.,
132 kV, GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar,
Jaipur - 302017 (Rajasthan).
12. Jodhpur Vidyut Vitran Nigam Ltd.,
132 kV, GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan).
13. Jaipur Vidyut Vitran Nigam Ltd.,
132 kV, GSS RVPNL Sub-Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan)



14. Northern Central Railway,
Allahabad.
15. BSES Yamuna Power Ltd., (Delhi Discom)
B Block, Shakti Kiran, Bldg., (Near Karkadooma Court)
Karkadooma, 2nd Floor,
New Delhi – 110092.
16. BSES Rajdhani Power Ltd., (Delhi Discom)
Bus Terminal, Nehru Place,
BSES Bhawan, Behind Nehru Place,
New Delhi – 110019.
17. Tata Power Delhi Distribution Ltd.,
33 kV Sub-station Building,
Hudson Lane, Kingsway Camp,
North Delhi – 110009.
18. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.

...**Respondents**

For Petitioner : Shri A.K Verma, PGCIL
Shri B.Dash, PGCIL
Shri V.P Rastogi, PGCIL

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

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd. (hereinafter referred to as “the Petitioner”), a deemed transmission licensee, for truing-up of the transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and determination of tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) of the following assets (hereinafter referred to as “transmission assets/Combined Asset”) under “Transmission System



associated with NRSS-XIII” in Northern Region (hereinafter referred to as “transmission project”)

Asset 1: 400 kV D/C (Quad) Gurgaon-Manesar Transmission Line along with associated bays;

Asset 2: 400/220 kV 500 MVA ICT-I at Manesar Sub-Station along with associated bays;

Asset 3: 400/220 kV 500 MVA ICT-II at Manesar Sub-Station along with associated bays;

Asset 4: 125 MVAR Bus Reactor at Manesar; and

Asset 5: 2 Nos. of 220 kV Line Bays at Fatehabad Sub-Station.

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

“1) Approve the Additional Capitalisation expenditure incurred/proposed during 2014-19 and during 2019-24 tariff block as per para 6.3 and 8.3.

2) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 7.1 and 8.4.

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

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

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

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

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 8.11 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 beneficiaries, if GST on transmission is withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

Background

3. The Investment Approval (IA) for the transmission project was accorded by the Board of Directors of the Petitioner vide Memorandum No. C/CP/NRSS-XII dated 16.2.2009 with an estimated cost of ₹31769 lakh including the IDC of ₹2432 lakh, based on 4th quarter, 2008 price level.

4. The scope of the transmission project includes the following elements:

I. Transmission Lines:

(1) Gurgaon (Powergrid)-Manesar 400 kV (quad) line-18 km

(2) Delinking Agra-Samaypur and Samaypur-Gurgaon (Powergrid) 400 kV lines from Samaypur and making a direct 400 kV S/C line from Agra to Gurgaon (PG).

II. Sub-stations:

(1) Manesar 400/220 kV (POWERGRID) - GIS Sub-station (New)-2x500 MVA 400/220 kV Transformer

(2) Gurgaon 400/220 kV (POWERGRID) GIS (Extension)

(3) Fatehabad 400/220 kV (POWERGRID) Sub-station(Extension)



III. Reactive Compensation:

- (1) Delinking of Agra-Samaypur and Samaypur-Gurgaon 400 kV lines from Samaypur and making a direct 400 kV S/C circuit line from Agra to Gurgaon
- (2) 125 MVAR Bus Reactor at Manesar
- (3) 50 MVAR switchable line reactor (at Agra)
- (4) 50 MVAR Switchable line reactor at Ballabgarh end of Agra-Ballabgarh line to be made switchable bus reactor on the vacated bay

5. The transmission project was scheduled to be put into commercial operation by 1.12.2011 as per the IA dated 16.2.2009. The details of commercial operation of the transmission assets covered under the instant petition and petitions in which tariff was allowed earlier are as under:

Asset	COD	Asset in the instant petition	Remark
Asset-1	1.9.2012	Combined Asset-A	Covered in Petition Nos. 108/TT/2018, 79/TT/2012 and Review Petition 01/RP/2015
Asset-2	1.6.2012		
Asset-3	1.8.2012		
Asset-4	1.10.2012		Covered in Petition Nos. 108/TT/2018 and 54/TT/2013
Asset-5	1.7.2011	Asset-B	Covered in Petition Nos. 57/TT/2015 and 15/2011

6. The transmission tariff in respect of the Assets-1, 2 and 3 from COD to 31.3.2014 was determined vide order dated 31.1.2014 in Petition No. 79/TT/2012 under the 2009 Tariff Regulations read with order dated 30.4.2015 in Review Petition No. 01/RP/2015. The transmission tariff in respect of the Asset-4 from COD to 31.3.2014 was determined vide order dated 10.8.2015 in Petition No. 54/TT/2013 under the 2009 Tariff Regulations. The tariff allowed vide orders dated 31.1.2014 and 10.8.2015 in Petition No. 79/TT/2012 and 54/TT/2013 respectively



was trued-up and tariff for 2014-19 period for Assets-1, 2, 3 and 4 (Combined Asset-A in the instant Petition) was determined vide order dated 11.12.2018 in Petition No. 108/TT/2018. The tariff in respect of Asset-5 from COD to 31.3.2014 was determined vide order dated 12.10.2011 in Petition No. 15/2011 under the 2009 Tariff Regulations. The tariff allowed vide order dated 12.10.2011 in Petition No. 15/2011 for the 2009-14 period was trued-up and tariff for the 2014-19 period for Asset-5 (Asset-B in the instant petition) was determined vide order dated 18.2.2016 in Petition No. 57/TT/2015.

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

8. The Petitioner has served the petition on the Respondents and notice has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. General Notice dated 12.3.2020 directing the beneficiaries/Respondents to file reply in the matter was also posted on the Commission's website BSES Rajdhani Power Ltd. (BRPL), Respondent No. 16 has filed its reply vide affidavit dated 12.3.2020 and has raised the issues of Initial Spares, effective rate considered for the calculation of RoE and effect of GST. The Petitioner vide affidavit dated 20.3.2020 has filed its rejoinder to the reply filed by BRPL. The issues raised by BRPL and the clarifications given by the Petitioner have been dealt in the respective paragraphs of this order.



9. This order is issued considering the submissions made in the Petition dated 8.1.2020, Petitioner's affidavits dated 12.3.2020 and 25.6.2020, BRPL's reply dated 12.3.2020 and Petitioner's rejoinder vide affidavit dated 20.3.2020 to the reply of BRPL.

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

11. Having heard the representatives of the Petitioner, learned counsel for BRPL and perused the material on record, we proceed to dispose of the petition.

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

12. The Petitioner has claimed the annual transmission charges for two assets viz. Combined Asset A consisting of Asset-1 to 4 and Asset B consisting of Asset-5 as shown in the Table in paragraph 5 above. The details of the trued-up transmission charges claimed by the Petitioner for the transmission assets are as under:

(₹ in lakh)

Combined Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1131.30	1194.27	1221.67	1235.73	1235.83
Interest on Loan	1299.52	1300.29	1219.02	1113.35	999.09
Return on Equity	1374.01	1481.71	1512.79	1528.60	1532.86
Interest on working capital	131.82	137.23	138.23	138.05	137.14
O & M Expenses	800.83	827.39	854.89	883.17	912.56
Total	4737.48	4940.89	4946.60	4898.90	4817.48

(₹ in lakh)

Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	19.99	19.99	19.99	19.99	19.99
Interest on Loan	18.01	16.24	14.45	12.66	10.88
Return on Equity	22.07	22.18	22.16	22.16	22.22
Interest on working capital	6.05	6.16	6.28	6.41	6.54



Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	84.42	87.22	90.12	93.10	96.20
Total	150.54	151.79	153.00	154.32	155.83

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

(₹ in lakh)

Combined Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	66.74	68.95	71.24	73.60	76.05
Maintenance Spares	120.12	124.11	128.23	132.48	136.88
Receivables	789.58	823.48	824.43	816.48	802.91
Total Working Capital	976.44	1016.54	1023.90	1022.56	1015.84
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	131.82	137.23	138.23	138.05	137.14

(₹ in lakh)

Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	7.04	7.27	7.51	7.76	8.02
Maintenance Spares	12.66	13.08	13.52	13.97	14.43
Receivables	25.09	25.30	25.50	25.72	25.97
Total Working Capital	44.79	45.65	46.53	47.45	48.42
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	6.05	6.16	6.28	6.41	6.54

Capital Cost

14. The details of apportioned approved capital cost, capital cost as on 31.3.2014, and Additional Capital Expenditure (ACE) incurred upto 31.3.2019 as claimed by the Petitioner for the Combined Asset-A and Asset-B are as under:

(₹ in lakh)

Asset	Approved Capital Cost as per FR	Capital cost as on 31.3.2014	Additional Capital Expenditure					Total completion cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-A	28261.19	21897.15	2881.32	547.45	529.63	5.31	0.00	25860.86
Asset-B	485.89	374.97	NIL					374.97



15. The Commission vide order dated 11.12.2018 in Petition No. 108/TT/2018 had allowed the capital cost of ₹21704.45 lakh for Combined Asset-A as opening capital cost as on 1.4.2014 and vide order dated 18.2.2016 in Petition No. 57/TT/2015 had allowed the capital cost of ₹374.97 lakh for Asset-B as opening capital cost as on 1.4.2014.

16. The Petitioner vide Auditor's Certificates dated 3.8.2019 and 30.11.2019 has claimed the capital cost incurred upto 31.3.2014 and ACE incurred upto 31.3.2019. The Petitioner has claimed capital cost of ₹21897.15 lakh for Combined Asset-A as on 31.3.2014 including Initial Spares amounting to ₹192.70 lakh in the already admitted capital cost of ₹21704.45 lakh as on 31.3.2014 approved by the Commission in order dated 11.12.2018 in Petition No. 108/TT/2018. The Petitioner has submitted that the Initial Spares of ₹192.70 lakh have now been claimed as a percentage of the total project cost as per the judgment of APTEL dated 14.9.2019 in Appeal No. 74 of 2017. The Petitioner has claimed the capital cost of ₹374.97 lakh for Asset-B as on 31.3.2014 which was approved by the Commission vide order dated 18.2.2016 in Petition No. 57/TT/2015.

Interest During Construction (IDC) and Incidental Expenses During Construction (IEDC)

17. Assets-1, 2, 3 and 4 were put into commercial operation with delay of 9, 6, 8 and 10 months respectively. The time over-run of 9 months in case of Asset-1 was condoned by the Commission vide order dated 31.1.2014 in Petition No. 79/TT/2012 and accordingly, the IDC and IEDC were considered in orders dated 31.1.2014 and 11.12.2018 in Petition Nos. 79/TT/2012 and 108/TT/2018 respectively. Further, out of time over-run of 6 months and 8 months in case of



Assets-2 and 3 respectively, time over-run of 6 months each was condoned by the Commission vide order dated 30.4.2015 in Petition No. 1/RP/2015 and accordingly, the IDC and IEDC has already been considered in the orders dated 30.4.2015 in Petition No. 108/TT/2018. Out of the time over-run of 10 months in case of Asset-4, the time over-run of 6 months was condoned by the Commission vide order dated 10.8.2015 in Petition No. 54/TT/2013 and the IDC and IEDC were considered in the orders dated 10.8.2015 and 11.12.2018 in Petition Nos. 54/TT/2013 and 108/TT/2018 respectively. There is no time over-run in case of Asset-5 and accordingly there was no disallowance of IDC and IEDC.

Initial spares

18. The Petitioner has claimed additional Initial Spares of ₹192.70 lakh for GIS Sub-station element as a percentage of the total project cost of Combined Asset-A (sub-station element of Assets-1, 2, 3 and 4). Earlier, the Initial Spares of ₹307.63 lakh were disallowed for sub-station element being beyond the specified ceiling limits of individual Assets-1, 2 and 3 in the order dated 11.12.2018 in Petition No. 108/TT/2018. There is no disallowance of Initial Spares with respect to sub-station element based on the ceiling limits of individual Asset-4.

19. In case of Asset-B, Initial Spares of ₹36.84 lakh were disallowed for sub-station element as it was beyond the ceiling, in the order dated 18.2.2016 in Petition No. 57/TT/2016. However, no revision of Initial Spares has been claimed by the Petitioner for Asset-B in the instant petition.



20. Further, no Initial Spares have been claimed by the Petitioner for the transmission line element under Asset-1 which includes 400 kV D/C (Quad) Gurgaon-Manesar Transmission Line along with associated bays.

21. The Petitioner has now prayed to revise the Initial Spares allowed earlier for the assets under Combined Asset-A in light of Appellate Tribunal for Electricity (hereinafter referred to as “ the Tribunal”) judgement dated 14.9.2019 in Appeal No.74 of 2017. The Petitioner has claimed the following revised Initial Spares based on the combined project cost of Assets-1, 2, 3 and 4 considering GIS sub-station:

(₹ in lakh)	
Description	Sub-station
Combined Asset A: Project capital cost considering no deduction against Initial Spare	21404.45
Ceiling limit	3.50%
Initial spares worked out	711.88
Initial spares claimed	828.49
Initial spares approved earlier	519.18
Additional Initial Spares claimed by the petitioner	192.70

22. BRPL in its reply dated 12.3.2020 has submitted that the Petitioner has claimed re-calculation of the ‘Initial Spares’ of the transmission assets for the 2009-14 tariff period in accordance with the judgment of the Tribunal dated 14.9.2019 in Appeal No. 74 of 2017. However, the instant petition is for true-up of the tariff of 2014-19 period and Regulation 8(1) of the 2014 Tariff Regulations does not allow re-calculation of ‘Initial Spares’ based on the capital cost of the 2009-14 tariff period. BRPL has further submitted that the judgment dated 14.9.2019 in Appeal No. 74 of 2017 in Petition No. 53/TT/2015 is for true-up of transmission tariff of the 2009-14 period for Transmission System associated with Kudankulam Atomic



Power Project in Southern Region. The said judgment is for true up of the tariff of the 2009-14 tariff period and is clearly distinguishable from the instant case as the Tribunal did not render any finding on the issue of true up for the 2014-19. BRPL has placed reliance upon the provisions of Code of Civil Procedure, 1908 in support of its submissions and submitted that if a decision on a question of law on which the judgment of the court is based is reversed or modified by subsequent decision of a superior court in any other case, then it shall not be a ground for review of such judgment and in light of the same the excess spares claimed by the Petitioner may be disallowed. In response, the Petitioner vide its rejoinder dated 20.3.2020 has submitted that the Tribunal vide its judgment dated 14.9.2019 in Appeal No. 74 of 2017 has allowed the Appeal and has held that Initial Spares have to be seen as a percentage of total Project cost and not on the individual cost of assets. The Petitioner has further submitted that since the tariff of 2009-14 period is not being opened again, the re-calculated Initial Spares disallowed during 2009-14 tariff period have been added to the opening capital cost of Combined Asset-A as on 1.4.2014.

23. We have considered the submissions of the Petitioner and BRPL. The basic contention of BRPL is that the Tribunal's judgement of 14.9.2019 is not applicable to the instant case. The APTEL's judgement of 14.9.2019 was passed by the Tribunal against the Commission's order dated 21.4.2016 in Petition No.53/TT/2015 wherein the Commission true up the tariff of the 2009-14 tariff period as per the 2009 Tariff Regulations and tariff for the 2014-19 tariff period was determined as per the 2014 Tariff Regulations for the assets, which were put into commercial operation during the 2004-09 and 2009-14 tariff periods, under the



Transmission System associated with Kudankulam Atomic Power Project in Southern Region. In the instant case, the assets were put into commercial operation during the 2009-14 period and the instant petition is for truing up the tariff of the 2009-14 period and determination of tariff for the 2019-24 period. Therefore, the principle involved in the instant case are similar to the principle settled in the case of Petition No.53/TT/2015 and, therefore, in our view, the judgement of Tribunal is applicable.

24. In Petition No.53/TT/2015, the Commission restricted the Initial Spares to the capital cost of the individual assets, which were put into commercial operation during the 2004-09 and 2009-14 tariff periods, at the time of truing up of tariff of the 2009 -14 tariff period. Against this order, the Petitioner filed Appeal No. 74 of 2017 wherein the Tribunal vide judgement dated 14.9.2019 has held as under:-

“8.12 In view of these facts, it is relevant to note that the transmission projects due to their inherent nature are segregated into different assets or elements which are executed and commissioned progressively in stages. Keeping this in view, developer / licensee while planning estimates finalises, the requirement of spares on the basis of complete project which requires flexibility in deciding quantum of spares for different type of elements of a project along with commissioning of the particular asset so as to have better performance with high degree of reliability. The requirement of spares as such, may not be exactly in proportion to the cost of individual assets. In other words, a licensee might require large number of spares with a particular asset or assets Commissioned first based on technical requirement and lesser number of spares or nil spares in subsequent assets/ elements of similar nature. Admittedly, the break-up of initial spares for various assets may be percentage wise different subject to the overall initial spares requirement of the project within the overall limits / percentage provided in the Regulations.

8.13.....We do not agree with this methodology of restricting initial spares asset/element wise as adopted by the Central Commission. 3The Central Commission to have a prudence check on the initial spares, being restricted based on the individual asset wise cost initially, but subsequently ought to have allowed as per the ceiling limits on the overall project cost basis during the true-up.”

25. The Tribunal after taking into account the fact that the assets in Transmission System associated with Kudankulam Atomic Power Project were put

into commercial operation in the 2004-09 as well as 2009-14 tariff periods allowed revision of Initial Spares for the assets put into commercial operation in the 2004-09 and 2009-14 at the time of truing up of the tariff of the 2009-14 tariff period. Moreover, we are of the view that the principle laid down by the Tribunal in judgement dated 14.9.2019 that the Commission for the purpose of prudence check may initially restrict the Initial Spares, but subsequently allow Initial Spares as per the ceiling limits on the overall project cost basis at the time of truing up is of generic nature and it cannot be restricted to any particular tariff period, particularly when the assets of the same transmission project are put into commercial operation in different tariff periods. Therefore, we are not able to agree with the BRPL's contention that the Initial Spares allowed for the transmission assets for the 2009-14 period cannot be revised at the stage of truing up of the tariff of the 2014-19 tariff period.

26. As per the Tribunal's judgement dated 14.9.2019 in Appeal No. 74 of 2017, the Initial Spares are to be allowed as per the ceiling on the overall project cost. The transmission assets were put into commercial operation during the 2009-14 tariff period. Therefore, the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as the "2009 Tariff Regulations") are applicable in the instant case. Regulation 3(29) of the 2009 Tariff Regulations defines "project cost" as under:

"(29) 'original project cost' means the capital expenditure incurred by the generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cut-off date as admitted by the Commission;"

27. As per Regulation 8(iv) of the 2009 Tariff Regulations ceiling norms applicable for the sub-station is 3.5%.



28. It is observed that the Petitioner has rightly claimed the Initial Spares for the transmission assets, which were put into commercial operation during the 2009-14 tariff period, as per the norms specified in the 2009 Tariff Regulations and has accordingly submitted the total cost details of Assets-1, 2, 3 and 4 in the sub-station under Combined Asset-A for computation of allowable Initial Spares. Based on the submissions of the Petitioner, the allowable initial spares are as follows:

Particulars	Total project cost upto cut-off date (₹ in lakh)	Initial spares claimed (₹ in lakh)	Initial spares ceiling limit (%)	Initial spares allowable (₹ in lakh)	Initial Spares allowed in previous order (₹ in lakh)	Excess initial spares disallowed (₹ in lakh)	Initial spares now allowed (₹ in lakh)
Sub-Station Combined (Asset-A)	19373.88	826.29	3.5	672.71	518.66	153.58	672.71

29. The Commission vide order dated 11.12.2018 in Petition No. 108/TT/2018, allowed ₹518.66 lakh as Initial Spares whereas the Initial Spares allowable for the transmission assets as per the norms specified in the 2009 Tariff Regulations and as per said judgement of the Tribunal dated 14.9.2019 in Appeal No. 74 of 2017 is ₹672.71 lakh. Accordingly, an amount of ₹154.05 lakh (₹672.71 lakh less ₹518.66 lakh) is added to the earlier admitted capital cost as on 31.3.2014.

Capital cost as on COD (1.4.2014)

30. Accordingly, the capital cost allowed for the Combined Asset-A and Asset-B as on COD is summarized hereunder:

(₹ in lakh)			
Asset	Admitted Capital cost as on	Additional Initial Spares allowed	Capital cost allowed as on



	31.3.2014 in previous orders	as per APTEL judgement dated 14.9.2019	1.4.2014
Combined Asset-A	21704.45	154.05	21858.5
Asset-B	374.97	0.00	374.97
Total	22079.42	154.05	22233.47

Additional Capital Expenditure (ACE)

31. The admissibility of ACE is to be dealt with in accordance with the provisions of Regulations 14(1) and 14(3) of the 2014 Tariff Regulations. No Additional Capital Expenditure has been claimed by the Petitioner for Asset-B (Asset-5) covered in the instant petition. The Petitioner has claimed the following ACE for Combined Asset-A and has submitted the Auditor's Certificate in support of the same:

Asset	Additional Capital Expenditure				
	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-A	2881.32	547.45	529.63	5.31	0.00

32. The Petitioner, vide affidavits dated 25.6.2020, has submitted that the ACE in case of Combined Asset-A is on account of un-discharged liability towards final payment/withheld payment due to contractual exigencies of works executed within the cut-off date including the works deferred for execution. The ACE for the year 2014-15 for combined Asset-A has been claimed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations. ACE for the period 2015-19 for Combined Asset-A has been claimed under Regulation 14(3)(v) of the 2014 Tariff Regulations.

33. The Petitioner has also submitted that ACE upto 31.3.2019 has been considered in the Auditor's Certificate as per actuals. The contract-wise details for balance and retention payments are as under:



(₹ in lakh)

Asset	Party	Package	Financial Year			
			2014-15	2015-16	2016-17	2017-18
Asset-1	Rishabh Construction	Building & Civil Work	0.00	0.00	0.00	0.00
	IVRCL	Transmission Line Work	0.00	0.00	0.00	0.24
	SIEMENS	Sub-station Work	0.00	0.00	0.00	0.00
Total			0.00	0.00	0.00	0.24
Asset-2	SIEMENS		44.53	53.60	0.00	0.00
	Rishabh Construction	Building & Civil Work	0.00	0.00	0.00	0.00
	Chattar Pal Sharma		0.00	0.00	0.00	0.00
	Krishna Const		0.00	0.00	0.00	0.00
	SIEMENS	Sub-station Work	20.79	220.13	234.13	0.00
	AmeyBuildtech		12.89	0.00	0.00	0.00
Total			78.21	273.73	234.13	0.00
Asset-3	SIEMENS		19.40	53.60	0.00	0.00
	Rishabh Construction	Building & Civil Work	0.00	0.00	0.00	0.00
	Chattar Pal Sharma		0.00	0.00	0.00	0.00
	Krishna Const		0.00	0.00	0.00	0.00
	SIEMENS	Sub-station Work	0.00	220.13	282.74	5.07
	AmeyBuildtech		0.00	0.00	0.00	0.00
Total			19.40	273.73	282.74	5.07
Asset-4	SIEMENS	Sub-station Work	0.00	0.00	12.76	0.00
Total			0.00	0.00	12.76	0.00

34. Further, the contract-wise details of works deferred for execution are as under:

(₹ in lakh)

Asset	Party	Package	Financial Year			
			2014-15	2015-16	2016-17	2017-18
Asset-1	Rishabh Construction	Building & Civil Work	204.88	0.00	0.00	0.00
	IVRCL	Transmission Line Work	53.12	0.00	0.00	0.00
	SIEMENS	Sub-station Work	26.94	0.00	0.00	0.00
Total			284.94	0.00	0.00	0.00
Asset-2	SIEMENS		650.20	53.60	0.00	0.00
	Rishabh Construction	Building & Civil Work	562.06	0.00	0.00	0.00
	Chattar Pal Sharma		6.12	0.00	0.00	0.00
	Krishna Const		1.60	0.00	0.00	0.00
	SIEMENS	Sub-station Work	0.00	0.00	0.00	0.00
	AmeyBuildtech		0.00	0.00	0.00	0.00
Total			1219.98	0.00	0.00	0.00
Asset-3	SIEMENS	Building & Civil Work	675.33	0.00	0.00	0.00
	Rishabh Construction		562.06	0.00	0.00	0.00



Asset	Party	Package	Financial Year			
			2014-15	2015-16	2016-17	2017-18
	Chattar Pal Sharma	Sub-station Work	6.12	0.00	0.00	0.00
	Krishna Const		1.60	0.00	0.00	0.00
	SIEMENS		20.79	0.00	0.00	0.00
	AmeyBuildtech		12.89	0.00	0.00	0.00
Total			1278.79	0.00	0.00	0.00
Asset-4	SIEMENS	Sub-station Work	0.00	0.00	0.00	0.00
Total			0.00	0.00	0.00	0.00

35. The cut-off dates for the Combined Asset-A and Asset-B are 31.3.2015 and 31.3.2014 respectively.

36. The Commission vide RoP of hearing dated 9.6.2020 sought justification from the Petitioner on the issue of adjustment of the Liquidated Damages (LD) recovered from the contractor as ACE for Assets-3 and 4 of the Combined Asset-A during 2014-19 period. In response, the Petitioner vide affidavit dated 25.6.2020 has submitted that the exact amount of LD recovered can only be ascertained on completion of the Project. As per the prevalent practice, the retention money of the defaulting contractors is not released till the final settlement. The Petitioner has further submitted that cost certificates prepared for the purpose of filing the petition captures only the actual outflow of fund against such asset which results in showing the capital cost in certificate by reducing the LD amount. The amount of LD is reduced from the retention money of the defaulting contractor at a later stage on completion of the Project and reconciliations with the contractor. The Petitioner has submitted that as per the accounting policy/ practice, the LD recovered as mentioned in the certificate is adjusted against the capital cost.

37. The Petitioner has submitted that ₹57.80 lakh for Asset-3 and ₹19.56 lakh for Asset-4 was disallowed by the Commission as on COD against IDC and IEDC



due to disallowance of time over-run. The same deduction was considered by the Commission in admitting the capital cost as on 31.3.2014 for Asset-3 and Asset-4 in the order dated 11.12.2018 in Petition No. 108/TT/2018. The Petitioner has further submitted that the capital cost admitted on 31.3.2014 is considered in Auditor Certificates. Thus, the capital cost claimed as on 31.3.2014 is the cost after considering all disallowances. The Petitioner has submitted that LD recovered from the contractor of ₹48.61 lakh in 2016-17 and ₹5.07 lakh in 2017-18 were towards disallowed IDC and IEDC of ₹57.80 lakh for Asset-3 and ₹12.76 lakh in 2016-17 against disallowed IDC and IEDC of ₹19.56 lakh for Asset-4. The same has already been reduced from ACE cost of respective FY for Asset-3 and Asset-4 on its recovery.

38. The Petitioner further submitted that LD is added back to the extent of IDC and IEDC disallowed or LD recovered whichever is lower, because the recovered LD has already been reduced from the capital expenditure of respective FY and disallowed IDC and IEDC has already been reduced from cost as on COD and admitted cost as on 31.3.2014. Accordingly, LD recovered amount of ₹53.68 lakh (combined for 2016-17 and 2017-18) for Asset-3 and ₹12.76 lakh in 2016-17 for Asset-4 is added back to the capital cost in respective FY as mentioned in footnote of the Auditor's Certificate submitted by the Petitioner. The Petitioner has prayed to allow the adjustment of recovered LD in capital expenditure in respective Financial Year.

39. We have considered the submissions made by the Petitioner. The Tribunal in judgement dated 27.4.2011 in Appeal No. 72 of 2010 has laid down the following principles for dealing with the issue of time over-run in execution of projects.



“7.4. The delay in execution of a generating project could occur due to following reasons:

- i) due to factors entirely attributable to the generating company, e.g., imprudence in selecting the contractors/suppliers and in executing contractual agreements including terms and conditions of the contracts, delay in award of contracts, delay in providing inputs like making land available to the contractors, delay in payments to contractors/suppliers as per the terms of contract, mismanagement of finances, slackness in project management like improper co-ordination between the various contractors, etc.*
- ii) due to factors beyond the control of the generating company e.g. delay caused due to force majeure like natural calamity or any other reasons which clearly establish, beyond any doubt, that there has been no imprudence on the part of the generating company in executing the project.*
- iii) situation not covered by (i) & (ii) above.*

In our opinion in the first case the entire cost due to time over run has to be borne by the generating company. However, the Liquidated Damages (LDs) and insurance proceeds on account of delay, if any, received by the generating company could be retained by the generating company. In the second case the generating company could be given benefit of the additional cost incurred due to time over-run. However, the consumers should get full benefit of the LDs recovered from the contractors/suppliers of the generating company and the insurance proceeds, if any, to reduce the capital cost. In the third case the additional cost due to time overrun including the LDs and insurance proceeds could be shared between the generating company and the consumer. It would also be prudent to consider the delay with respect to some benchmarks rather than depending on the provisions of the contract between the generating company and its contractors/suppliers. If the time schedule is taken as per the terms of the contract, this may result in imprudent time schedule not in accordance with good industry practices.”

40. As per the directions of the Tribunal in the judgement dated 27.4.2011, when the time over-run is attributable to the project developer, the cost of the time over-run, i.e. IDC and IEDC have to be borne by the project developer and LD, if any, recovered can be retained by the Petitioner. In the instant case, the time over-run in case of Asset-3 and Asset-4 was partly condoned. Accordingly, IDC and IEDC for the period of time over-run not condoned in case of Asset-3 and Asset-4 were not capitalised and the LD recovered by the Petitioner can be retained by the Petitioner. The capital cost of the said two assets is allowed in accordance with the observations of the Tribunal as per said judgement dated 27.4.2011 in Appeal No.



72 of 2011. IDC and IEDC disallowed in case of the said assets is deducted from the capital cost as on their respective dates of commercial operation and the additional capital expenditure incurred by the Petitioner after the COD is added to the capital cost. Therefore, the Petitioner is allowed to retain the LD to the extent of IDC and IEDC disallowed and allowed to adjust ACE on this account.

41. ACE claimed by the Petitioner for Combined Asset-A is on account of balance and retention payment and works deferred for execution. ACE claimed by the Petitioner for 2014-15 for Combined Asset-A is within the cut-off date and for the period 2015-16 to 2018-19 is beyond the cut-off date. The same has been considered for computation of total capital cost as on 31.3.2019. The ACE claimed for the period 2014-15 to 2018-19 is allowed under Regulation 14(1)(i), 14(1)(ii) and 14(3)(v) of the 2014 Tariff Regulations.

42. The details of ACE allowed for the Combined Asset-A is as under:

Asset	Additional Capital Expenditure				
	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-A	2881.32	547.45	529.63	5.31	0.00

43. It has been noticed that all the assets covered in the instant petition were put into commercial operation during 2009-14 period. However, the Petitioner in the instant petition has not combined these assets into a single asset.

44. Regulation 6(1) of 2014 Tariff Regulation provide as follows:

“Tariff Determination

(1) Tariff in respect of a generating station may be determined for the whole of the generating station or stage or generating unit or block thereof, and tariff in respect of a transmission system may be determined for the whole of the transmission system or transmission line or sub-station or communication system forming part of transmission system:



Provided that:

(i) where all the generating units of a stage of a generating station or all elements of a transmission system have been declared under commercial operation prior to 1.4.2014, the generating company or the transmission licensee, as the case may be, shall file consolidated petition in respect of the entire generating station or transmissions system for the purpose of determination of tariff for the period 2014-15 to 2018-19:

(ii) in case of commercial operation of the generating station or transmission system including communication system on or after 1.4.2014, the generating company or transmission licensee shall file a consolidated petition combining all the units of the generating station or file appropriate petition for transmission elements of the transmission system which are likely to be commissioned during next six months from the date of application:

(iii) the tariff of the existing communication system forming part of transmission system shall be as per the methodology followed by the Commission prior to 1.4.2014.”

45. Therefore, to avoid granting multiple tariffs for the 2014-19 tariff period for the transmission assets which are covered in one transmission project, Combined Asset-A (Asset-1, Asset-2, Asset-3 and Asset-4) and Asset-B (Asset-5) are combined into a single asset and accordingly single tariff has been determined for the 2014-19 period.

Effective Date of Commercial Operation (E-COD)

46. Based on the above, tried-up admitted capital cost as on 31.3.2014 and the actual COD of all the assets, the E-COD is worked out as follows:

Computation of Effective COD						
Asset	Actual COD	Admitted Capital Cost as on 31.3.2014 (₹ in lakh)	Weight of the cost (%)	No. of Days from last COD	Weighted Days	Effective COD (Latest COD – Total weighted Days)
Asset-1	1.9.2012	8608.35	38.72	30.00	11.62	26.7.2012
Asset-2	1.6.2012	5753.83	25.88	122.00	31.57	
Asset-3	1.8.2012	5708.44	25.67	61.00	15.66	
Asset-4	1.10.2012	1787.88	8.04	0.00	0.00	
Asset-5	1.7.2011	374.98	1.69	458.00	7.72	
Total	1.10.2012	22233.48	100.00		66.57	



47. E-COD is used to determine the lapsed life of the transmission project as a whole, which works out as 1 (one) year as on 1.4.2014 (i.e. the number of completed years as on 1.4.2014 from E-COD).

Weighted Average Life (WAL)

48. The life as defined under Regulation 27 of the 2014 Tariff Regulations has been considered for determination of WAL. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different span of life. Therefore, the concept of WAL has been used as the useful life of the Project as a whole.

49. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2014 including the additional allowance of initial spares based on the Tribunal's judgement dated 14.9.2019 in Appeal No. 74 of 2017 as discussed above and their respective life as stipulated in the 2014 Tariff Regulations. The element-wise life as defined in the 2009 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2014 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 27 years as shown below:

Admitted Capital Cost as on 31.03.2014				
Particulars (1)	Combined Asset (₹ in lakh) (2)	Life in Years (3)	Weighted Cost (₹ in lakh) (4) = (2)x(3)	Weighted Avg. Life of Asset (in years) (5) = (4)/ (2)
Building & Other Civil Works	1125.97	25	28149.25	
Transmission Line	4403.05	35	154106.75	
Sub-Station Equipment	15281.84	25	382046.01	



Admitted Capital Cost as on 31.03.2014				
Particulars (1)	Combined Asset (₹ in lakh) (2)	Life in Years (3)	Weighted Cost (₹ in lakh) (4) = (2)x(3)	Weighted Avg. Life of Asset (in years) (5) = (4)/ (2)
PLCC	359.27	15	5389.05	
Total	21170.13		569691.06	26.91 years, rounded off to 27 years

50. WAL as on 1.4.2014 as determined above is applicable prospectively for 2014-19 tariff period onwards and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed, the Effective COD of the assets is 26.7.2012 and the lapsed life of the project as a whole, works out as 1 (one) year as on 1.4.2014 i.e. the number of completed years as on 1.4.2014 from Effective COD. Accordingly, WAL is used to determine the remaining useful life as on 1.4.2014 which works out to be 26 years.

Capital Cost summary from 1.4.2014 to 31.3.2019

51. Accordingly, the following cost has been considered as on 31.3.2019:

Asset	Capital cost allowed as on 1.4.2014	Additional Capital Expenditure					Total capital cost including additional capitalization as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-A & Asset-B	22233.47	2881.32	547.45	529.63	5.31	0.00	26197.20

Combined Asset-A & Asset-B	Capital cost as on 31.3.2014	Additional Capital Expenditure					Total capital cost including additional capitalization as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19	
Approved earlier vide order dated 11.12.2018 in Petition No. 108/TT/2018 and order dated 18.2.2016	22079.42	2881.32	547.46	515.75	397.38	0.00	26421.33



in Petition No. 57/TT/2015							
Claimed in the instant petition	22272.12	2881.32	547.45	529.63	5.31	0.00	26235.83
Approved in this order	22233.48	2881.32	547.45	529.63	5.31	0.00	26197.20

Debt-Equity Ratio

52. The Petitioner has considered debt-equity ratio of 70:30 as on 31.3.2014 and for ACE during 2014-19 period for Combined Asset-A. Further, the Petitioner has considered the debt-equity ratio of 70:30 as on 31.3.2014 for Asset-B as determined by the Commission vide order dated 18.2.2016 in Petition No. 57/TT/2015. The debt-equity ratio of 70:30 has been considered for capital cost as on 31.3.2014 as provided under Regulation 19 of the 2014 Tariff Regulations. The same is summarised as under:

Combined Asset	As on 31.3.2014		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	15563.45	70.00	18338.14	70.00
Equity	6670.03	30.00	7859.06	30.00
Total	22233.48	100.00	26197.20	100.00

Interest on Loan (IoL)

53. IoL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The Petitioner has claimed IoL based on actual interest rates for each year during 2014-19 period. The Petitioner has considered the weighted average rate of IoL on the basis of prevailing rates as on 1.4.2014 for respective loans. The Petitioner has submitted that the weighted average rate of IoL has been considered on the basis of rates prevailing as on 1.4.2014 and has prayed to consider the floating rate of interest applicable during 2014-19 period, if any, during the truing-up of tariff.

54. We have considered the submissions of the Petitioner. It is observed that the SBI loan with respect to transmission assets in the instant petition has been deployed with floating interest rates. Accordingly, factoring in the impact of floating rate of interest, the IoL has been worked out based on the actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The interest on loan has been worked out as detailed below:

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

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

55. The details of IoL allowed for the Combined Asset are as follows:

(₹ in lakh)

Combined Asset					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	15563.45	17580.37	17963.60	18334.42	18338.14
Cumulative Repayments upto Previous Year	1626.86	2776.12	3988.34	5227.95	6481.64
Net Loan-Opening	13936.59	14804.26	13975.26	13106.46	11856.49
Additions due to Additional Capitalization	2016.92	383.22	370.82	3.72	0.00
Repayment during the year	1149.26	1212.22	1239.62	1253.69	1253.78
Net Loan-Closing	14804.26	13975.26	13106.46	11856.49	10602.71
Average Loan	14370.42	14389.76	13540.86	12481.48	11229.60
Weighted Average Rate of Interest on Loan (%)	9.15	9.13	9.09	9.01	8.98
Interest on Loan	1315.11	1313.94	1231.40	1124.21	1008.36

56. Accordingly, IoL approved in order dated 11.12.2018 in Petition No. 108/TT/2018 and order dated 18.2.2016 in Petition No. 57/TT/2015, claimed by the Petitioner in the instant petition and the trued-up IoL allowed in respect of the Combined Asset is shown in the table below:



(₹ in lakh)					
Combined Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 11.12.2018 in Petition No. 108/TT/2018 and order dated 18.2.2016 in Petition No. 57/TT/2015	1305.00	1308.84	1231.23	1144.66	1042.03
Claimed by the Petitioner in the instant petition	1317.53	1316.53	1233.47	1126.01	1009.97
Allowed after true-up in this order	1315.11	1313.94	1231.40	1124.21	1008.36

Return on Equity (RoE)

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

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

58. BRPL in its reply dated 12.3.2020 has raised the issue of effective rate considered for the calculation of RoE and submitted that the Petitioner in the petition has claimed effective tax rate only for 2014-15 and 2015-16. However, the actual tax paid on income from other business activities of the Petitioner like consulting, communication, planning and design of projects etc. needs to be excluded from the computation of effective rate which has not been done by the Petitioner. The above information is required to be furnished and only then the Petitioner can be allowed the differential tariff claimed on account of trued-up ROE based on the effective tax rate for 2014-15 and 2015-16 only. BRPL has further

submitted that the deferred tax liability (DTL) relevant to the aforesaid other business shall also not be considered in the computation of effective tax rate.

59. In response, the Petitioner vide affidavit dated 20.3.2020 submitted that it has claimed the deferred tax liability materialized during 2009-14 only for the deferred tax liability accrued upto 31.3.2009. The Petitioner has further submitted that all the required documents along with Auditor certificate have been submitted with deferred tax liability bills. The Petitioner has submitted that the deferred tax liability amount billed/materialized has not been considered while grossing up the RoE. The Petitioner has further submitted that the Respondent has used the profit before tax as reported in the Statement of Profit and Loss of consolidated financial statements for computing the effective tax rate. However, the profit before tax as reported in the financial statements cannot be used as a base to calculate the effective tax rate. The Petitioner has submitted that the effective tax rate computed by the Respondent is based on the consolidated financial statements of the Company whereas income tax return for the Company is filed on the basis of standalone financial statements. Tax returns of the subsidiaries and joint ventures are filed separately as individual entities. The Petitioner has submitted that the Company has been paying tax under the provisions of section 115JB of the Income Tax Act, 1961 (MAT provisions) wherein Company's taxable income is derived as per the MAT provisions from the "Profit Before Tax" as reported in the financial statements and that the income from all streams of business are taxable at MAT rate only.

60. BRPL has raised similar issues in Petition No.136/TT/2020 and the Commission taking into consideration the submissions of BRPL and the



clarifications given by the Petitioner, held in order dated 24.1.2021 in the said petition 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.”

61. Further, the Commission, vide order dated 27.4.2020 in Petition No. 274/TT/2019, has arrived at the effective tax rate for the Petitioner based on the notified MAT rates. The relevant portion of the order 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

62. 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 period in terms of the provisions of the 2014 Tariff Regulations.

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

63. RoE allowed for the Combined Asset is as follows:

(₹ in lakh)

Combined Asset					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	6670.03	7534.43	7698.66	7857.47	7859.06
Addition due to Additional Capitalization	864.40	164.24	158.81	1.59	0.00
Closing Equity	7534.43	7698.66	7857.47	7859.06	7859.06
Average Equity	7102.23	7616.55	7778.07	7858.27	7859.06
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)(%)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax)	1392.75	1500.84	1532.67	1548.47	1552.79

64. RoE approved in order dated 11.12.2018 in Petition No. 108/TT/2018 and order dated 18.2.2016 in Petition No. 57/TT/2015, claimed by the Petitioner in the instant petition and trued-up RoE allowed in this order is shown in the table below:

	(₹ in lakh)				
Combined Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 11.12.2018 in Petition No. 108/TT/2018 and order dated 18.2.2016 in Petition No. 57/TT/2015	1383.68	1484.54	1515.82	1542.68	1554.37
Claimed by the Petitioner in the instant petition	1396.08	1503.89	1534.95	1550.76	1555.08
Allowed after true-up in this order	1392.75	1500.84	1532.67	1548.47	1552.79

Depreciation

65. The Petitioner has claimed depreciation considering gross block of ₹21897.15 lakh as on 31.3.2014 and Additional Capital Expenditure of ₹3963.72 lakh for Combined Asset-A during the 2014-19 period. Further, the Petitioner has claimed depreciation considering gross block of ₹374.97 lakh as on 31.3.2014 and no Additional Capital Expenditure has been claimed for Asset-B (Asset-5) during 2014-19 period.

66. We have considered the submissions of the Petitioner. Depreciation has been computed considering capital expenditure as on 31.3.2014 and ACE approved for 2014-19 tariff period. The weighted average useful life of the Combined Asset-A and Asset-B as mentioned above has been considered as 27 years in accordance with Regulation 27 of the 2014 Tariff Regulations. The gross block during the 2014-19 tariff period in respect of Combined Asset-A and Asset-B has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is given in Annexure-1. WAROD has been worked out after



taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2014-19 is as under:

(₹ in lakh)					
Combined Asset					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	22233.48	25114.80	25662.26	26191.89	26197.20
Additional Capitalisation	2881.32	547.46	529.63	5.31	0.00
Closing Gross Block	25114.80	25662.26	26191.89	26197.20	26197.20
Average Gross Block	23674.14	25388.53	25927.08	26194.55	26197.20
Weighted average rate of Depreciation (WAROD) (%)	4.85	4.77	4.78	4.79	4.79
Balance useful life of the asset at the beginning of the year	26	25	24	23	22
Aggregated Depreciable Value	20349.71	21892.66	22377.35	22618.08	22620.47
Remaining Depreciable value at the end of the year	17573.59	17904.32	17149.40	16136.43	14885.04
Combined Depreciation during the year	1149.26	1212.22	1239.62	1253.69	1253.78

67. Depreciation approved in order dated 11.12.2018 in Petition No. 108/TT/2018 and order dated 18.2.2016 in Petition No. 57/TT/2015, claimed by the Petitioner in the instant petition and true-up depreciation allowed in this order is shown in the table below:

(₹ in lakh)					
Combined Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 11.12.2018 in Petition No. 108/TT/2018 and order dated 18.2.2016 in Petition No. 57/TT/2015	1141.08	1204.04	1231.07	1255.07	1265.46
Claimed by the Petitioner in the instant petition	1151.29	1214.26	1241.66	1255.72	1255.82
Allowed after true-up in this order	1149.26	1212.22	1239.62	1253.69	1253.78

Operation & Maintenance Expenses (O&M Expenses)

68. The Petitioner has claimed O&M Expenses as per Regulation 29(4)(a) of the 2014 Tariff Regulations for Combined Asset-A and Asset-B. The O&M Expenses claimed by the Petitioner for the Combined Asset-A are as follows:

Sub-Station Bays					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M for Sub-station bays (as per norms)					
400 kV	360.78	372.75	385.14	397.88	411.11
220 kV	422.10	436.10	450.60	465.50	481.00
Total O&M Expenses	782.88	808.85	835.74	863.38	892.11

HV and DC Lines					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M for HV and DC Lines (as per norms)					
D/C Bundled with 4 or more sub-conductor)	17.95	18.54	19.15	19.79	20.45
Total O&M Expenses	17.95	18.54	19.15	19.79	20.45

Combined Asset-A					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Total O&M Expenses Claimed	800.83	827.39	854.89	883.17	912.56

69. The O&M Expenses claimed by the Petitioner for the Asset-B are as follows:

Sub-Station Bays					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M for Sub-station bays (as per norms)					
220 kV	84.42	87.22	90.12	93.10	96.20
Total O&M Expenses	84.42	87.22	90.12	93.10	96.20

Asset-B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Total O&M Expenses	84.42	87.22	90.12	93.10	96.20

Combined Asset-A & B					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Total O&M Expenses claimed for Combined Asset-A & B	885.25	914.61	945.01	976.27	1008.76

70. O&M Expenses allowed as per the norms specified under Regulation 29(4)(a) of the 2014 Tariff Regulations with respect to Combined Asset-A and Asset-B are as under:

Sub-Station Bays					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19

Norm (₹ lakh/bay)					
220 kV Bay AIS	42.21	43.61	45.06	46.55	48.10
400 kV Bay GIS	51.54	53.25	55.02	56.84	58.73
220 kV Bay GIS	42.21	43.61	45.06	46.55	48.10
Number of bays					
220 kV Bay AIS	2	2	2	2	2
400 kV Bay GIS	7	7	7	7	7
220 kV Bay GIS	10	10	10	10	10
O&M Expenses for 220 kV Bay AIS					
O&M Expenses for 220 kV Bay AIS	84.42	87.22	90.12	93.10	96.20
O&M Expenses for 400 kV Bay GIS					
O&M Expenses for 400 kV Bay GIS	360.78	372.75	385.14	397.88	411.11
O&M Expenses for 220 kV Bay GIS					
O&M Expenses for 220 kV Bay GIS	422.10	436.10	450.60	465.50	481.00
Total O&M Expenses	867.30	896.07	925.86	956.48	988.31

AC and HVDC Lines

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Norm (₹ lakh/km)					
D/C Bundled with 4 or more sub-conductor)	1.062	1.097	1.133	1.171	1.210
Line Length in km.					
400 kV D/C Gurgoan—Manesar transmission line (Line Length 16.9 km)					
D/C Bundled with 4 or more sub-conductor)	17.95	18.54	19.15	19.79	20.45
Total O&M Expenses	17.95	18.54	19.15	19.79	20.45

(₹ in lakh)

Combined Asset					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Total O&M Expenses Allowed	885.25	914.61	945.01	976.27	1008.76

71. There is no variation in the O&M Expenses approved in the order dated 11.12.2018 in Petition No. 108/TT/2018 and order dated 18.2.2016 in Petition No. 57/TT/2015, claimed by the Petitioner in the instant petition and tried-up in the instant order.

Interest on Working Capital (IWC)

72. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations. The components of the working capital and the Petitioner's entitlement to interest thereon are discussed hereunder:



(i) Maintenance Spares:

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

(ii) O & M Expenses:

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

(iii) Receivables:

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

(iv) Rate of interest on working capital

Rate of interest on working capital is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

73. IWC allowed for the Combined Asset for the 2014-19 tariff period is as under:

(₹ in lakh)

Combined Asset					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	73.77	76.22	78.75	81.36	84.06
Maintenance Spares	132.79	137.19	141.75	146.44	151.31
Receivables	813.34	847.47	848.84	841.16	827.87
Total	1019.90	1060.88	1069.34	1068.95	1063.25
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	137.69	143.22	144.36	144.31	143.54

74. The details of IWC approved in order dated 11.12.2018 in Petition No. 108/TT/2018 and order dated 18.2.2016 in Petition No. 57/TT/2015, claimed by the Petitioner in the instant petition and trued-up IWC allowed in the instant order are shown in the table below:

(₹ in lakh)

Combined Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Approved earlier vide order dated 11.12.2018 in	137.06	142.54	143.77	144.68	144.62

Petition No. 108/TT/2018 and order dated 18.2.2016 in Petition No. 57/TT/2015					
Claimed by the Petitioner in the instant petition	137.87	143.39	144.51	144.46	143.68
Allowed after true-up in this order	137.69	143.22	144.36	144.31	143.54

Approved Annual Charges for the 2014-19 Tariff Period

75. Accordingly, the annual transmission charges after truing-up for the 2014-19 tariff period for the Combined Asset are as under:

(₹ in lakh)

Combined Asset					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1149.26	1212.22	1239.62	1253.69	1253.78
Interest on Loan	1315.11	1313.94	1231.40	1124.21	1008.36
Return on Equity	1392.75	1500.84	1532.67	1548.47	1552.79
Int. on Working Capital	137.69	143.22	144.36	144.31	143.54
Op. and Maintenance	885.25	914.61	945.01	976.27	1008.76
Total	4880.05	5084.83	5093.05	5046.95	4967.23

76. The details of the Annual Transmission Charges allowed in order dated 11.12.2018 in Petition No. 108/TT/2018 and in order dated 18.2.2016 in Petition No. 57/TT/2015, claimed by the Petitioner in the instant petition and approved after truing-up in the instant order for the Combined Asset are shown in the table below:

(₹ in lakh)

Combined Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 11.12.2018 in Petition No. 108/TT/2018 and order dated 18.2.2016 in Petition No. 57/TT/2015	4852.07	5054.57	5066.90	5063.36	5015.23
Claimed by the Petitioner in the instant petition	4888.02	5092.68	5099.60	5053.22	4973.31
Allowed after true-up in this order	4880.05	5084.83	5093.05	5046.95	4967.23

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

77. The transmission tariff claimed by the Petitioner for Combined Asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1256.61	1257.40	1257.40	1257.40	1257.40
Interest on Loan	899.62	787.85	674.90	562.34	449.44
Return on Equity	1479.13	1479.97	1479.97	1479.97	1479.97
Interest on Working Capital	87.25	86.93	86.40	85.94	85.28
Operation and Maintenance	747.68	774.09	801.02	829.33	857.25
Total	4470.29	4386.24	4299.69	4214.98	4129.34

78. The Petitioner has claimed the following IWC for the 2019-24 tariff period for the Combined Asset:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	62.31	64.51	66.75	69.11	71.44
Maintenance Spares	112.15	116.11	120.15	124.40	128.59
Receivables	549.63	540.77	530.10	519.66	507.71
Total	724.09	721.39	717.00	713.17	707.74
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	87.25	86.93	86.40	85.94	85.28

Capital Cost as on 1.4.2019

79. Regulation 19 of the 2019 Tariff Regulation 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.”*

80. The Petitioner has claimed the capital cost of ₹26235.84 lakh as on 31.3.2019 for the Combined Asset. However, the admitted trued-up capital cost of ₹26197.20 lakh as on 31.3.2019 has been considered as the opening capital cost as on 1.4.2019 for determination of tariff for 2019-24 tariff period in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

81. Regulation 24 and 25 of the 2019 Tariff Regulations provides as under:-

“24. Additional Capitalization within the original scope and upto the cut-off date

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

- (a) *Undischarged liabilities recognized to be payable at a future date;*
- (b) *Works deferred for execution;*



- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
- (e) Change in law or compliance of any existing law; and
- (f) Force Majeure events:

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

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

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

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

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

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

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

82. The Petitioner has claimed projected ACE for 2019-24 tariff period and submitted Auditor's Certificates in support of the same. The projected ACE for 2019-20 tariff period as per Auditor's Certificates is ₹30.00 lakh.

83. The Petitioner vide affidavit dated 25.6.2020 has submitted that ACE claimed for the period 1.4.2019 to 31.3.2020 is on estimated basis and may vary due to final claim/ reconciliation at the time of contract closing. The contract-wise details for balance and retention payments are as detailed below:

(₹ in lakh)		
Party	Package	Financial Year
		2019-20
IVRCL	Transmission Line Work	30.00
Total		30.00

84. We have considered the submissions of the Petitioner. It is observed that the projected ACE falls after the cut-off date. The projected ACE claimed by the Petitioner is on account of balance and retention payment for works executed within the cut-off date. The same has been considered for computation of total capital cost as on 31.3.2024. ACE claimed during the 2019-20 period is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations which would be subject to true-up. ACE allowed subject to true-up is summarized below:

(₹ in lakh)		
Particulars	Regulation	Combined Asset
		2019-20
ACE to the extent of Balance & Retention Payments for works executed before cut-off date	Regulation 25(1)(d) of the 2019 Tariff Regulations	30.00

Capital cost considered for the 2019-24 tariff period

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



(₹ in lakh)

Capital Cost allowed as on 1.4.2019	ACE allowed for the year 2019-20	Total Estimated Completion Cost up to 31.3.2024
26197.20	30.00	26227.20

86. Against the overall FR approved capital cost of ₹28747.08 lakh, the estimated project cost of the Combined Asset including Additional Capital Expenditure is ₹26227.20 lakh which is within the FR cost. Therefore, there is no cost over-run as per FR cost.

Debt-Equity Ratio

87. 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.”

88. The details of the debt-equity considered for the purpose of computation of tariff for 2019-24 tariff period for the Combined Asset is as under:

Combined Asset	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Total Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	18338.14	70.00	18359.14	70.00
Equity	7859.06	30.00	7868.06	30.00
Total	26197.20	100.00	26227.20	100.00

Return on Equity (RoE)

89. Regulations 30 and 31 of the 2019 Tariff Regulations provides as under:

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

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

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

Provided further that:



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

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

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

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

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

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

Illustration-

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

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



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

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

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

90. The MAT rate is applicable to the Petitioner's Company. Accordingly, the MAT rate applicable during the 2018-19 has been considered for the purpose of RoE which shall be trued-up with actual tax rate in accordance with Regulation 31 of the 2019 Tariff Regulations. RoE allowed for the Combined Asset is as under:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	7859.06	7868.06	7868.06	7868.06	7868.06
Addition due to Additional Capitalization	9.00	0.00	0.00	0.00	0.00
Closing Equity	7868.06	7868.06	7868.06	7868.06	7868.06
Average Equity	7863.56	7868.06	7868.06	7868.06	7868.06
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax) (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	1476.93	1477.78	1477.78	1477.78	1477.78

Interest on Loan (IoL)

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



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

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

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

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

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

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

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

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

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

92. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up or next revision of tariff. By considering above, the IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff

Regulations. The details of IoL allowed for the Combined Asset for the 2019-24 tariff period are as follows:

(₹ in lakh)

Combined Asset					
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	18338.14	18359.14	18359.14	18359.14	18359.14
Cumulative Repayments upto Previous Year	7735.42	8990.00	10245.36	11500.72	12756.09
Net Loan-Opening	10602.71	9369.14	8113.78	6858.41	5603.05
Additions due to Additional Capitalization	21.00	0.00	0.00	0.00	0.00
Repayment during the year	1254.57	1255.36	1255.36	1255.36	1255.36
Net Loan-Closing	9369.14	8113.78	6858.41	5603.05	4347.68
Average Loan	9985.93	8741.46	7486.09	6230.73	4975.37
Weighted Average Rate of Interest on Loan (%)	8.995	8.999	9.001	9.011	9.019
Interest on Loan	898.20	786.62	673.84	561.47	448.75

Depreciation

93. Regulation 33 of the 2019 Tariff Regulations provides as under:

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

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

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

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

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



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

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

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

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

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

Provided that the remaining depreciable value as on 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.

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

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

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

94. Depreciation for the Combined Asset has been worked out considering the admitted ACE as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The gross block during the tariff period 2019-24 has been depreciated at weighted average rate of depreciation (WAROD). WAROD has been worked out at Annexure-2 after taking into account the depreciation rates of assets as prescribed



in 2019 Tariff Regulations. The depreciation allowed for the Combined Assets for the 2019-24 tariff period is as under:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	26197.20	26227.20	26227.20	26227.20	26227.20
Addition during the year 2019-24 due to projected Additional Capitalisation	30.00	0.00	0.00	0.00	0.00
Closing Gross Block	26227.20	26227.20	26227.20	26227.20	26227.20
Average Gross Block	26212.20	26227.20	26227.20	26227.20	26227.20
Weighted average rate of Depreciation(WAROD) (%)	4.79	4.79	4.79	4.79	4.79
Balance useful life at the beginning	21	20	19	18	17
Aggregated Depreciable Value	22633.97	22647.47	22647.47	22647.47	22647.47
Remaining Aggregate Depreciable Value at the end of the year	13643.97	12402.11	11146.74	9891.38	8636.01
Combined Depreciation during the year	1254.57	1255.36	1255.36	1255.36	1255.36
Aggregate Cumulative Depreciation	8990.00	10245.36	11500.72	12756.09	14011.45

Operation & Maintenance Expenses (O&M Expenses)

95. Regulations 35(3) and (4) of the 2019 Tariff Regulations provides as under:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<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



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole



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

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

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

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

96. The Petitioner has claimed O&M Expenses for following transmission elements during 2019-24 period:

I. Transmission Line:

- (1) 400 kV D/C (Quad) Gurgaon-Manesar Line – 16.9 Km

II. Sub-stations (220 kV):

- (1) Fatehabad Chormar-I Bays – 1 Bay
(2) Fatehabad Chormar-II Bays – 1 Bay

III. Sub-stations (400 kV GIS):

- (1) Manesar ICT-II 400 kV Bay – 1 Bay
(2) Manesar I and II Line Bays – 2 Bays
(3) Gurgaon I and II Line Bays – 2 Bays
(4) Manesar ICT-I 400 kV Bay – 1 Bay



(5) Manesar Bus Reactor Bay – 1 Bay

IV. Sub-stations (220 kV GIS):

(1) Manesar ICT-II Bay – 1 Bay

(2) Manesar Line V VI VII VIII Bays – 4 Bays

(3) 400/220 kV 500 MVA ICT-I at Manesar sub-station – 1 Bay

(4) Manesar 220 kV Line Bays – 4 Bays

V. 400 kV Sub-station ICT:

(1) ICT-I at Manesar – 1 Bay of 400 kV, 500 MVA

(2) ICT-II at Manesar – 1 Bay of 400 kV, 500 MVA

VI. Communication System:

(1) PLCC

97. The O&M Expenses claimed by the Petitioner for the transmission assets are as follows:

Sub-Station Bays					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M for Sub-station bays (as per norms)					
220 kV	45.02	46.60	48.24	49.92	51.68
400 kV GIS	157.55	163.08	168.82	174.72	180.86
200 kV GIS	157.58	163.10	168.84	174.72	180.88
Total O&M Expenses	360.15	372.78	385.90	399.36	413.42

Transformer					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M for Transformer (as per norms)					
400 kV	358.00	371.00	384.00	398.00	411.00
Total O&M Expenses	358.00	371.00	384.00	398.00	411.00

HV and DC Lines					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M for HV and DC Lines (as per norms)					
D/C Bundled with 4 or more sub-conductor)	22.34	23.12	23.93	24.78	25.64
Total O&M Expenses	22.34	23.12	23.93	24.78	25.64



PLCC					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M for PLCC (as per norms)					
PLCC	7.19	7.19	7.19	7.19	7.19
Total O&M Expenses	7.19	7.19	7.19	7.19	7.19

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Total O&M Expenses Claimed	747.68	774.09	801.02	829.33	857.25

98. The Petitioner has claimed O&M Expenses separately for the 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 has been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The relevant portions of the order dated 24.1.2021 in Petition No.126/TT/2020 are extracted hereunder.

“103. Thus, although PLCC equipment is a communication system, it has been considered as a part of sub-station, as it is used both for protection and communication. Therefore, we are of the considered view that rightly, it was not considered for separate O&M Expenses while framing norms of O&M for 2019-24 tariff period. While specifying norms for bays and transformers, O&M Expenses for PLCC have been included within norms for O&M Expenses for sub-station. Norms of O&M Expenses @2% of the 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.

99. The norms specified under Regulations 35(3) and (4) of the 2019 Tariff Regulations with respect to the transmission assets and the O&M Expenses allowed are as under:

Sub-Station Bays		(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Norm (₹ lakh/bay)						
220 kV	22.510	23.300	24.120	24.960	25.840	
400 kV GIS	22.505	23.296	24.115	24.962	25.837	
220 kV GIS	15.757	16.310	16.884	17.472	18.088	
Number of bays						
220 kV	2	2	2	2	2	
400 kV GIS	7	7	7	7	7	
200 kV GIS	10	10	10	10	10	
O&M Expense for 220 kV	45.02	46.60	48.24	49.92	51.68	
O&M Expense for 400 kV GIS	157.54	163.07	168.81	174.73	180.86	
O&M Expense for 220 kV GIS	157.57	163.10	168.84	174.72	180.88	
Total O&M Expenses	360.13	372.77	385.89	399.37	413.42	

Transformer					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norm (₹ lakh/MVA)					
400 kV Transformer	0.358	0.371	0.384	0.398	0.411
MVA Rating	500	500	500	500	500
No. of Transformers	2	2	2	2	2
O&M Expense for 400 kV Transformer	358.00	371.00	384.00	398.00	411.00
Total O&M Expenses	358.00	371.00	384.00	398.00	411.00

AC and HVDC Lines					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norm (₹ lakh/km)					
D/C Bundled with 4 or more sub-conductor)	1.322	1.368	1.416	1.466	1.517
Line Length in km.					
D/C Bundled with 4 or more sub-conductor)	16.90	16.90	16.90	16.90	16.90
D/C Bundled with 4 or more sub-conductor)	22.34	23.12	23.93	24.78	25.64
Total O&M Expenses	22.34	23.12	23.93	24.78	25.64

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Total O&M Expenses Allowed	740.47	766.89	793.82	822.15	850.06

Interest on Working Capital (“IWC”)

100. Regulation 34 and Regulation 3(7) of the 2019 Tariff Regulations provide 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:-

‘**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;”

101. 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 interest on working capital as 12.05%.

102. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) on working capital 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 in respect of the Combined Asset is as under:

(₹ in lakh)					
Combined Asset					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
O & M Expenses	61.71	63.91	66.15	68.51	70.84
Maintenance Spares	111.07	115.03	119.07	123.32	127.51
Receivables	548.00	538.44	527.80	517.38	505.47
Total	720.77	717.38	713.02	709.22	703.81
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on	86.85	80.71	80.21	79.79	79.18



Combined Asset					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
working capital					

Annual Fixed Charges allowed for the 2019-24 Tariff Period

103. The various components of the annual fixed charges for the Combined Asset for the 2019-24 tariff period are summarised below:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1254.57	1255.36	1255.36	1255.36	1255.36
Interest on Loan	898.20	786.62	673.84	561.47	448.75
Return on Equity	1476.93	1477.78	1477.78	1477.78	1477.78
Interest on Working Capital	86.85	80.71	80.21	79.79	79.18
Operation and Maintenance	740.47	766.89	793.82	822.15	850.06
Total	4457.03	4367.36	4281.02	4196.56	4111.13

Filing Fee and Publication Expenses

104. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 70(1) of the 2019 Tariff Regulations. BRPL in its reply dated 12.3.2020 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 has 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.

105. In response, the Petitioner vide affidavit dated submitted that the reimbursement of the fee paid by it for filing the petition and publication expenses in terms of Regulation 70(1) of the 2019 Tariff Regulations is being claimed. The Petitioner has submitted that Commission vide order dated 28.3.2016 in Petition

No. 137/TT/2015 has rejected the contention of BRPL and allowed the recovery of petition filing fee and publication of notices from the beneficiaries on pro rata basis.

106. We have considered the submissions of 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 and RLDC Fees and Charges

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

Goods and Services Tax

108. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from negative list in future. BRPL in its reply dated 12.3.2020 has raised the issue of GST recovery stating that the demand of the Petitioner is premature and need not be considered at this juncture.

109. In response, the Petitioner has submitted that the transmission charges claimed are exclusive of GST and if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondents to the Petitioner and the same shall be charged and billed separately by the Petitioner. In addition, the Petitioner has also submitted that any additional taxes to be paid by the Petitioner on account of

demand from Government/ Statutory authorities may be allowed to be recovered directly from the beneficiaries.

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

Security Expenses

111. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true-up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 will be filed on 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.

112. BRPL has submitted that the approach of the Petitioner towards claim of security expenses does not require the need for interest on working capital as the same is claimed in advance. In response, the Petitioner has submitted that as per Regulation 35(3)(c) of the 2019 Tariff Regulations, the security expenses and capital spares for transmission system are allowable separately after prudence



check. The Petitioner has further submitted that a separate petition would be filed before the Commission for claiming the overall security expenses and consequential interest on working capital on the same.

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

Capital Spares

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

Sharing of Transmission Charges

115. The billing, collection and disbursement of the transmission charges approved in this order 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.



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

(₹ in lakh)

Combined Asset					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	4880.05	5084.83	5093.05	5046.95	4967.23

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	4457.03	4367.36	4281.02	4196.56	4111.13

118. This order disposes of Petition No. 127/TT/2020.

**Sd/
(Arun Goyal)
Member**

**Sd/
(I.S. Jha)
Member**

**Sd/
(P. K. Pujari)
Chairperson**



Petition No.:	127/TT/2020
Period	2014-19 True-up

Annexure - 1

Combined Asset-A&B

2014-19 Capital Expenditure as on 1.4.2014	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations					
		2014- 15	2015- 16	2016- 17	2017- 18	2018- 19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)	
Freehold Land	1063.35	0.00	0.00	0.00	0.00	0.00	1063.35	0.00%	0.00	0.00	0.00	0.00	0.00	
Building	1125.97	2733.90	107.20	0.00	5.07	0.00	3972.14	3.34%	83.26	130.71	132.50	132.58	132.67	
Transmission Line	4403.05	53.12	0.00	0.00	0.24	0.00	4456.41	5.28%	233.88	235.29	235.29	235.29	235.30	
Sub Station	15281.84	94.30	440.26	529.63	0.00	0.00	16346.03	5.28%	809.37	823.48	849.09	863.07	863.07	
PLCC	359.27	0.00	0.00	0.00	0.00	0.00	359.27	6.33%	22.74	22.74	22.74	22.74	22.74	
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00	
IT Equipment and Software	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00	
TOTAL	22233.48	2881.32	547.46	529.63	5.31	0.00	26197.20		1149.26	1212.22	1239.62	1253.69	1253.78	
									Average Gross Block (₹ in lakh)	23674.14	25388.53	25927.08	26194.55	26197.20
									Weighted Average Rate of Depreciation (₹ in lakh)	4.85%	4.77%	4.78%	4.79%	4.79%



Petition No.:	127/TT/2020
Period	2019-24 Tariff

Annexure - 2
Combined Asset-A&B

2019-24 Capital Expenditure as on 1.4.2019	Combined Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Additional Capital Expenditure (₹ in lakh) 2019-20	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations				
					2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Freehold Land	1063.35	0.00	1063.35	0.00%	0.00	0.00	0.00	0.00	0.00
Building	3972.14	0.00	3972.14	3.34%	132.67	132.67	132.67	132.67	132.67
Transmission Line	4456.41	30.00	4486.41	5.28%	236.09	236.88	236.88	236.88	236.88
Sub Station	16346.03	0.00	16346.03	5.28%	863.07	863.07	863.07	863.07	863.07
PLCC	359.27	0.00	359.27	6.33%	22.74	22.74	22.74	22.74	22.74
Leasehold Land	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00	0.00
IT Equipment and Software	0.00	0.00	0.00	15.00%	0.00	0.00	0.00	0.00	0.00
TOTAL	26197.20	30.00	26227.20		1254.57	1255.36	1255.36	1255.36	1255.36
Average Gross Block (₹ in lakh)					26212.20	26227.20	26227.20	26227.20	26227.20
Weighted Average Rate of Depreciation (₹ in lakh)					4.79%	4.79%	4.79%	4.79%	4.79%

