

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 132/TT/2020

Coram:

Shri P. K. Pujari, Chairperson

Shri I. S. Jha, Member

Shri Arun Goyal, Member

Shri Pravas Kumar Singh, Member

Date of Order: 02.06.2021

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for the Combined Asset consisting of Asset-I: 400/220 kV, 315 MVA, ICT-1 along with associated bays, 400 kV 80 MVAR Bus Reactor along with associated bays, LILO of one circuit of 400 kV D/C Parbati-Amritsar Transmission Line at Hamirpur along with associated bays and Line reactor at Hamirpur GIS Sub-station; and Asset-II: 1 number of 400/220 kV, 315 MVA ICT-II along with associated bays at Hamirpur Sub-station under "Northern Region System Strengthening Scheme-XX" (NRSSS-XX) in Northern Region

And in the matter of:

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

.....Petitioner

Versus

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



4. Jodhpur Vidyut Vitran Nigam Ltd.,
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan).
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004 (Himachal Pradesh).
6. Punjab State Electricity Board,
Thermal Shed Tia, Near 22 Phatak,
Patiala-147001 (Punjab).
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula-134109 (Haryana).
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Ltd.,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001 (Uttar Pradesh).
10. Delhi Transco Ltd.,
Shakti Sadan, Kotla Road,
New Delhi-110002.
11. BSES Yamuna Power Ltd.,
B-Block, Shakti Kiran Bldg. (Near Karkadooma Courts),
Karkadooma 2nd Floor,
New Delhi-110092.
12. BSES Rajdhani Power Ltd,
BSES Bhawan, Nehru Place,
New Delhi-110019.
13. Tata Power Delhi Distribution Ltd.,
NDPL House, Hudson Lines Kingsway Camp,
Delhi-110009.
14. Chandigarh Administration,
Sector-9, Chandigarh.
15. Uttarakhand Power Corporation Ltd.,
Urja Bhawan, Kanwali Road,
Dehradun (Uttarakhand).



16. North Central Railway,
Allahabad (Uttar Pradesh).

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

.....Respondent(s)

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

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

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd., a deemed transmission licensee, for truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) for the Combined Asset comprising of **Asset-I**: 400/220 kV, 315 MVA, ICT-1 along with associated bays, 400 kV 80 MVAR Bus Reactor along with associated bays, LILO of one circuit of 400 kV D/C Parbati-Amritsar Transmission Line at Hamirpur along with associated bays and Line reactor at Hamirpur GIS sub-station; and **Asset-II**: 1 number of 400/220 kV, 315 MVA ICT-II along with associated bays at Hamirpur Sub-station (hereinafter referred to as “the transmission assets”) under NRSSS-XX in Northern Region (hereinafter referred to as “the transmission project”).

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



“(1) Approve the actual Additional Capitalisation expenditure incurred during 2014-19 tariff block & Projected add cap during tariff period 2019-24 and allowable initial spares claimed project wise as per para 9.3.3.

(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 10.1 and 11.5 respectively.

(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 Regulations 2014 and Tariff regulations, 2019.

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

(5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the 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.

(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”

3. Brief facts of the petition

a) The Investment Approval (I.A.) for the transmission project was accorded by the Board of Directors (BOD) of the Petitioner Company vide Memorandum No. C/CP/NRSS-XX dated 22.10.2010 at an estimated cost of ₹18268 lakh, including an IDC of ₹1120 lakh (based on 2nd Quarter, 2010 price level). The Revised Cost Estimate (RCE) of the transmission project was



accorded by BOD of the Petitioner company vide Memorandum No. C/CP/RCE NRSS-20 dated 13.6.2014 at an estimated cost of ₹22761 lakh, including an IDC of ₹2152 lakh (based on October, 2013 price level).

b) As per the I.A., the scope of work covered under the transmission project is as follows:

Transmission Line:

LILO of one circuit of Parbati Pooling Station-Amritsar 400 kV D/C at Hamirpur Sub-station;

Sub-station:

New 2 X 315 MVA, 400/220 kV Hamirpur Gas Insulated sub-station;

Reactive Compensation:

- i) 50 MVAR line reactor at Hamirpur end of Hamirpur-Amritsar 400 kV line; and
- ii) 80 MVAR Bus Reactor at Hamirpur Sub-station.

c) The assets covered under the transmission project are as follows:

- i) **Asset-1:** 400/220 kV, 315 MVA, ICT-1 along with associated bays at Hamirpur GIS Sub-station;
- ii) **Asset-2:** 400 kV 80 MVAR Bus Reactor along with associated bays at Hamirpur GIS Sub-station;
- iii) **Asset-3:** LILO of one circuit of 400 kV D/C Parbati-Amritsar Transmission Line at Hamirpur along with associated bays and Line reactor at Hamirpur GIS Sub-station; and
- iv) **Asset-4:** 1 number of 400/220 kV, 315 MVA ICT-II along with associated bays at Hamirpur Sub-station.

d) The transmission charges of Asset-1, Asset-2 and Asset-3 from the date of commercial operation (COD) i.e. 1.1.2014 to 31.3.2014 were approved by the Commission vide order dated 4.2.2016 in Petition No. 36/TT/2013. The tariff of Asset-1, Asset-2 and Asset-3 for the 2009-14 period was trued-up and tariff of the 2014-19 period was determined vide order dated 30.8.2017 in Petition No. 41/TT/2017. The transmission tariff of Asset-4 from provisional COD i.e. 1.4.2014 to 31.3.2019 was determined vide order dated 29.4.2016 in Petition



No. 99/TT/2014 subject to submission of RLDC certificate at the time of truing up. The same has been submitted in the present petition.

e) Asset-1, Asset-2 and Asset-3 were combined by the Petitioner in Petition No. 41/TT/2017 and tariff was claimed accordingly. Further, Asset-1, Asset-2 and Asset-3 have been combined and re-nomenclatured as Asset-I whereas Asset-4 has been re-nomenclatured as Asset-II by the Petitioner in the present petition subsequent to which trued-up tariff and determination of tariff of the Combined Asset for the respective periods have been claimed.

f) The time over-run of 11 months in case of Asset-I was condoned by the Commission vide order dated 4.2.2016 in Petition No. 36/TT/2013. Out of the total time over-run of 14 months 10 days in case of Asset-II, time over-run of 3 months and 14 days was not condoned in order dated 29.4.2016 in Petition No. 99/TT/2014.

g) The transmission tariff for Asset-I and Asset-II allowed for the 2014-19 tariff period vide order dated 30.8.2017 and order dated 29.4.2016 in Petition No. 41/TT/2017 and Petition No. 99/TT/2014 respectively and the tariff based on truing up claimed by the Petitioner in the instant petition is as follows:

(₹ in lakh)						
Particulars	Tariff	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	Annual Fixed Charges (AFC) approved vide order dated 30.8.2017 in Petition No. 41/TT/2017	2777.86	2899.38	3035.80	3113.61	3055.23
	AFC claimed by the Petitioner based on truing up in the instant Petition	2814.84	2922.23	2981.41	2987.77	2952.66
Asset-II	Annual Fixed Charges approved vide order dated 29.4.2016 in Petition No. 99/TT/2014	736.05	759.32	763.47	759.64	756.22
	AFC claimed by the Petitioner based on truing up in the instant Petition	716.53	731.70	747.62	748.38	744.39



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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the 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. Uttar Pradesh Power Corporation Ltd. (UPPCL), Respondent No.9 vide affidavit dated 14.7.2020 has filed reply and has raised issues of capital cost, initial spares, cost and time over-run, floating rate of Interest on Loan (IoL), Return on Equity (RoE), Minimum Alternate Tax (MAT), cumulative depreciation, recovery of licence fees, recovery of RLDC fees, capital spares and O&M Expenses. The Petitioner vide affidavit dated 26.2.2021 has filed rejoinder to the reply of UPPCL. BSES Rajdhani Power Ltd. (BRPL), Respondent No. 12 vide affidavit dated 17.3.2021 has filed reply and has raised issues of capital cost and Additional Capital Expenditure (ACE), addition of accrual IDC in ACE, Initial Spares, Optical Ground Wire (OPGW), adoption of Indian Accounting Standards (IAS), tax on transmission business, grossing up of RoE, deferred tax liability and over payment of Income Tax (I.T.) for 2009-14 and 2014-19 period, Security Expenses, Capital Spares, GST, application filing fee and publication of notices and engagement of agency to represent consumers. The Petitioner vide affidavit dated 25.3.2021 has filed rejoinder to the reply of BRPL.

6. It is observed that the issues raised by UPPCL and BRPL in the instant petition were raised in many other petitions and the Commission has also given its decisions on almost all the issues. Therefore, in the instant petition we do not go into details of



the contentions of the Respondents and the clarifications given by the Petitioner on issues where the Commission has already given its decision earlier. We have highlighted the issue raised by the Respondents and the decision taken by the Commission. The issues which are specific to the instant petition and not dealt by the Commission earlier are considered in the relevant paragraphs of this order taking into consideration the submissions of the Respondents and the Petitioner. It is further noticed that BRPL and UPPCL have been mechanically raising some of these issues in almost every petition despite there being clear orders of the Commission. In our view, raising the very same issues in every petition, unnecessarily consumes a lot of time of the Commission which is avoidable. We urge management of BRPL and UPPCL to take note of this and ensure that the issues which have achieved finality are not raised time and again.

7. This order is issued considering the submissions of the Petitioner vide affidavits dated 27.12.2019, 30.9.2020, 26.2.2021, 25.3.2021 and 30.3.2021, UPPCL and BRPL's affidavit dated 14.7.2020 and 17.3.2021 respectively.

8. The hearing in this matter was held on 3.3.2021 and 31.3.2021 through video conference and the order was reserved.

9. Having heard the representatives of the Petitioner, learned counsel for BRPL and BYPL (who adopted the reply and submissions made by BRPL on affidavit and during the hearing of the matter) and having careful perusal of the materials on record, we proceed to dispose of the petition.

Re: Information on OPGW

10. BRPL has submitted that information regarding usage of OPGW as earth wire on the assets mentioned in the petition is to be provided by the Petitioner, as it has



been noted that OPGW is being used by the Petitioner in the newly constructed transmission lines besides replacing the earth wire with OPGW in the existing lines.

11. In response, the Petitioner has submitted that earth wire was replaced with OPGW on the Parbati-Hamirpur section and the same is covered under “Establishment of Fibre Optic communication system in Northern Region” Project. Further, original earth wire is being used for Hamirpur–Amritsar Transmission Line section covered under the transmission project.

12. As the Petitioner has clarified that the tariff for the OPGW used on the Hamirpur–Amritsar Transmission Line is claimed under a different transmission project, we do not go into the issue.

Re: Consumer Representation

13. BRPL has submitted that an entity may be instructed to represent the consumer’s interest in the instant case and the same is also provided for in Section 94(3) of the Electricity Act, 2003.

14. We have considered the submissions of BRPL. BRPL has raised this issue earlier in other petitions and the Commission had held that as sufficient opportunity was given to the general public as provided in the Electricity Act, 2003 and the regulations, there is no need to engage any entity as suggested by BRPL to represent the interest of consumers. Therefore, we are of the view that there is no need to go into this issue any further.

Re: Adoption of IAS

15. BRPL has submitted that adoption of IND AS 101 has resulted in increase of tariff. The Commission vide order dated 24.1.2021 in Petition No. 136/TT/2020 has already held that that the adoption of the new accounting standards by the Petitioner



would not have any impact on the tariff as it is determined purely on the basis of the applicable tariff regulations. As such, we would not like go into the details of the submissions made by BRPL and the clarifications given by the Petitioner in this order.

Truing-up of Annual Fixed Charges of the 2014-19 tariff period

16. The Commission vide order dated 30.8.2017 in Petition No. 41/TT/2017 and order dated 29.4.2016 in Petition No. 99/TT/2014 approved the following transmission tariff for the 2014-19 period in respect of Asset-I and Asset-II respectively:

(₹ in lakh)

Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	610.66	665.06	702.03	735.20	735.20
Interest on Loan	912.02	917.94	927.96	912.23	842.48
Return on Equity	846.86	903.85	968.34	1014.73	1014.73
Interest on Working Capital	73.06	76.15	79.58	81.70	80.78
O&M Expenses	335.26	346.39	357.90	369.74	382.04
Total	2814.84	2922.23	2981.41	2987.77	2952.66

(₹ in lakh)

Asset-II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	132.18	139.77	142.11	142.11	142.11
Interest on Loan	160.65	157.33	146.82	133.19	119.57
Return on Equity	146.75	155.96	158.57	158.57	158.57
Interest on Working Capital	25.11	25.91	26.30	26.52	26.75
O&M Expenses	271.35	280.35	289.67	299.26	309.21
Total	736.05	759.32	763.47	759.64	756.22

17. The details of the trued-up transmission charges claimed by the Petitioner for Asset-I and Asset-II are as follows:

(₹ in lakh)

Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	621.34	665.58	700.03	724.02	729.93
Interest on Loan	924.92	913.12	881.61	820.97	756.25
Return on Equity	859.43	920.48	963.51	994.17	1005.97
Interest on Working Capital	73.89	76.66	78.36	78.87	78.47
O&M Expenses	335.26	346.39	357.90	369.74	382.04
Total	2814.84	2922.23	2981.41	2987.77	2952.66



(₹ in lakh)

Asset-II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	129.17	135.40	142.10	144.81	144.81
Interest on Loan	156.88	148.87	141.01	126.46	112.18
Return on Equity	143.50	151.12	158.54	161.56	161.99
Interest on Working Capital	24.39	25.01	25.65	25.96	26.18
O&M Expenses	262.59	271.30	280.32	289.59	299.23
Total	716.53	731.70	747.62	748.38	744.39

18. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner for Asset-I and Asset-II are as follows:

(₹ in lakh)

Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	27.94	28.87	29.83	30.81	31.84
Maintenance Spares	50.29	51.96	53.69	55.46	57.31
Receivables	469.14	487.04	496.90	497.96	492.11
Total Working Capital	547.37	567.87	580.42	584.23	581.26
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	73.89	76.66	78.36	78.87	78.47

(₹ in lakh)

Asset-II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	21.88	22.61	23.36	24.13	24.94
Maintenance Spares	39.39	40.70	42.05	43.44	44.88
Receivables	119.42	121.95	124.60	124.73	124.07
Total Working Capital	180.69	185.26	190.01	192.30	193.89
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	24.39	25.01	25.65	25.96	26.18

Capital Cost and Additional Capital Cost(ACE)

19. The capital cost was determined by the Commission for Asset-I vide order dated 30.8.2017 in Petition No. 41/TT/2017 and for Asset-II vide order dated 29.4.2016 in Petition No. 99/TT/2014. The details of approved capital cost as on 31.3.2019 are as follows:

(₹ in lakh)

Asset	Apportioned Approved Capital Cost as per FR	Expenditure up to 31.3.2014/ COD	ACE			Total Capital Cost as on 31.3.2019
			2014-15	2015-16	2016-17	



Asset-1	19576.21	13734.04	1322.13	615.22	1577.08	17248.47
Asset-2	3185.25	2395.10	198.77	88.47	0.00	2682.34
Total	22761.46	16128.14	1520.90	703.69	1577.08	19930.81

20. The Petitioner vide Auditor's Certificate dated 30.7.2019 has submitted the capital cost incurred up to 31.3.2014/COD and ACE up to 31.3.2019 in respect of the Asset-I and Asset-II. The details of apportioned approved capital cost, capital cost as on COD/ 31.3.2014 and ACE incurred up to 31.3.2019 as claimed by the Petitioner for Asset-I and Asset-II are as follows:

Particulars	Approved Capital Cost as per FR	Expenditure up to 31.3.2014/ COD (As per Auditor's Certificate)	ACE					Total Completion Cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-1	19576.21	13939.42	1316.10	615.22	856.30	180.93	126.99	17034.96
Asset-2	3185.25	2493.45	18.30	151.28	69.89*	0.00	0.00	2732.92
Total	22761.46	16432.87	1334.40	766.50	926.19	180.93	126.99	19767.88

*Note: LD recovered from the contractor amounting to ₹32.28 lakh was credited to capital cost of Asset-II in the year 2016-17 on its recovery.

21. BRPL has submitted that the Petitioner has not claimed the capital cost as per order dated 30.8.2017 in Petition No. 41/TT/2017 and has adopted some values for the Asset-I as on 31.3.2014 which are not in accordance with the provisions of Regulation 9(3)(a) of the 2014 Tariff Regulations as the said regulation provides that capital cost of an existing project shall include capital cost admitted by the Commission prior to 1.4.2014 duly tried-up by excluding liability, if any, as on 1.4.2014. BRPL has further submitted the cost claimed for Asset-II as on 31.3.2014 are also not in accordance with aforementioned regulations.

22. In response, the Petitioner has submitted that capital cost for Asset-I was approved after disallowing initial spares and shifting them to 2014-15. The same initial spares have been added back to capital cost as project-wise initial spares are within limit. The Commission vide order dated 30.8.2017 in Petition No. 41/TT/2017



subtracted total initial spares from capital cost and added back to corresponding year in which same were discharged. However, the Auditor's certificate was based on cash basis. Regarding Asset-II, the Petitioner has submitted that it is claiming the capital cost as on 1.4.2014 which is commensurate to the capital cost allowed by the Commission vide order dated 29.4.2016 in Petition No. 99/TT/2014. The Petitioner has submitted that as per Auditor's certificate, the Petitioner is claiming the capital cost as on COD which includes accrued IDC but discharged after COD. Therefore, the Petitioner has deducted IDC and IEDC dis-allowed by the Commission due to non-condonation of time over-run from cost as on COD. In addition, accrual IDC has been removed from cost as on COD and same has been capitalized during 2014-15 i.e. year of discharge. Accordingly, the net capital cost has been claimed after IDC and IEDC deduction and accrual IDC adjustment as provided in the petition.

23. UPPCL has submitted that for Asset-II, there is an inconsistency in capital cost as on COD claimed by the Petitioner as compared to the cost admitted by the Commission vide order dated 29.4.2016 in Petition No. 99/TT/2014. In response, the Petitioner has submitted that the Petitioner has claimed the capital cost for Asset-II as on COD. The Petitioner is deducting IDC and amount dis-allowed by the Commission due to non-condonation of time over-run in Petition No. 99/TT/2014 from COD cost. In addition, accrual IDC has been removed from COD cost and the same has been capitalized during 2014-15 period. Accordingly, the net capital cost has been claimed after IDC and IEDC deduction and accrual IDC adjustment as provided in the petition.

24. The completion cost including ACE claimed by the Petitioner for the transmission project is within the FR apportioned approved cost as mentioned above. Hence, there is no cost over-run of the assets.



Time Over-run

25. As per the date of I.A. (22.10.2010), the transmission assets were scheduled to be put into commercial operation within 27 months from the date of I.A. Hence, the scheduled date of commercial operation was 21.1.2013. Asset-I has been put under commercial operation on 1.1.2014 with time over-run of 11 months which was condoned by the Commission vide order dated 4.2.2016 in Petition No. 36/TT/2013. Asset-II was put under commercial operation on 1.4.2014 with time over-run of 14 months and 10 days out of which time over-run of 3 months and 14 days was disallowed by the Commission vide order dated 29.4.2016 in Petition No. 99/TT/2014 and accordingly, disallowed IDC and IEDC for the said period of 3 months and 14 days.

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

26. IDC and IEDC claimed by the Petitioner in case of Asset-I has been dealt vide order dated 30.8.2017 in Petition No. 41/TT/2017. These have already been discharged during the 2009-14 tariff period. With respect to Asset-II, the Petitioner has claimed IDC and has submitted the Auditor's Certificates in support of the same. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged. The Petitioner in reply dated 30.9.2020 has submitted the IDC discharge statement showing details of accrued IDC discharged up to COD, after COD and during the 2014-15 period.

27. The allowable IDC has been worked out considering the information submitted by the Petitioner for Asset-II on cash basis. The loan details submitted in Form-9C for the 2014-19 tariff period and IDC computation sheet have been considered for the



purpose of IDC calculation on cash and accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.

28. BRPL has submitted that the Petitioner has included accrual IDC as ACE for Asset-II, which is required to be rejected by the Commission. In response, the Petitioner has submitted that the total IDC as per the Auditor's Certificate is ₹301.22 lakh, whereas, the Petitioner has claimed only ₹235.15 lakh as on 1.4.2014, as the same has been discharged up to COD and the balance IDC was discharged during 2014-15 and accordingly the same has been claimed during the 2014-15 period. However, the Petitioner has submitted Form-5 which states that IDC amounting to ₹275.84 lakh has been discharged up to COD. Further, the Petitioner has claimed an amount of ₹66.07 lakh during 2014-15 as IDC to be discharged.

29. IDC allowable to the Petitioner is calculated on the basis of IDC to be discharged during 2014-15. Accordingly, based on the information furnished by the Petitioner, IDC considered is summarized as follows:

(₹ in lakh)						
Particulars	IDC as per Auditor's Certificate	IDC Admissible	Computational difference	IDC discharged as on COD	IDC Undischarged as on COD	IDC Discharged during 2014-15
A	B	C	D=B-C	E	F=C-E	G
Asset-II	301.22	238.38	62.84	215.89	22.49	22.49

30. The Petitioner has claimed an IEDC of ₹81.77 lakh in respect of Asset-II and has submitted the Auditor's certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD. IEDC claimed is within the estimated expenditure of IEDC as indicated in the Abstract Cost Estimate. However, due to time over-run, which was not condoned by the Commission, an amount of ₹6.90 lakh has been disallowed as on COD.



Initial Spares

31. Regulation 8 of the 2009 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of plant and machinery cost up to cut-off date, subject to following ceiling norms. The Petitioner has claimed the following Initial Spares for the assets for 2009-14 tariff period and prayed to revise the Initial Spares allowed earlier in light of the judgment of the Appellate Tribunal for Electricity (APTEL) dated 14.9.2019 in Appeal No. 74 of 2017:

Particulars	Estimated Completion Cost (A) (₹ in lakh)	Initial Spares claimed originally (B) (₹ in lakh)	Ceiling Limit (%) (C)	Initial Spares worked out (₹ in lakh)
				$D = (A-B) \times C \div (100-C)$
Asset-I	16184.69	606.97	3.50	565.00
Asset-II	2349.93	63.49	5.00	120.34
Total	18534.62	670.46		685.34

32. BRPL has submitted that while truing up tariff for 2014-19 period, Regulation 8(1) of the 2014 Tariff Regulations does not allow the recalculation of Initial Spares based on capital cost for the 2009-14 tariff period. BRPL has submitted that as per the provisions of the Code of Civil Procedure, review of a judgment cannot be sought on the ground of modification of a judgment/ order by a superior court on which such judgment was based. BRPL has further submitted that APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017 is clearly distinguishable from the present case as APTEL had not rendered any finding on the issue of true up for the 2014-19 period. In response, the Petitioner has reiterated that the Initial Spares may be allowed as per APTEL judgment dated 14.9.2019 in Appeal No. 74 of 2017. UPPCL has submitted that the Petitioner has not given details of Initial Spares.

33. We have considered the submissions of the Petitioner, BRPL and UPPCL. As per APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017, the Initial Spares



are to be allowed as per the ceiling on overall project cost. In the present case, Asset-I was put into commercial operation in the 2009-14 period whereas Asset-II was put under commercial operation in the 2014-19 tariff period. Therefore, the 2009 Tariff Regulations are applicable for Asset-I and 2014 Tariff Regulations are applicable for Assets-II. However, even though the assets were put into commercial operation during 2009-14 and 2014-19 tariff periods and the entire transmission project was completed during 2014-19 tariff period, the overall project cost of the assets is arrived at only when all the assets are combined while claiming the tariff for the 2019-24 tariff period. Therefore, the Initial Spares are allowed on the basis of the cost of the individual assets in the 2014-19 tariff period and are allowed on the basis of the overall project cost in the 2019- 24 tariff period.

34. The details of Initial Spares allowed for the 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	Capital Cost/P&M cost considered as on cut-off date	Initial Spares claimed	Norms as per the 2009/2014 Tariff Regulations (in %)	Initial Spares allowable as per the 2009/2014 Tariff Regulations	Initial Spares allowed	Discharge of Initial Spares			
						As on COD	2014-15	2015-16	2016-17
Asset-I	16184.69	606.97	3.50	565.00	565.00	401.59	17.92	88.01	57.48
Asset-II	2349.93	63.49	5.00	120.34	63.49	63.49	0.00	0.00	0.00

Capital Cost as on COD

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

(₹ in lakh)

Particulars	Capital Cost as on 31.3.2014 /COD as per Auditor's Certificate	Less: IDC as on COD due to		Less: Excess Initial Spares dis-allowed	Less: Un-discharged initial Spares	Less: IEDC disallowed due to time over-run	Capital Cost as on 31.3.2014/ COD (on cash asis)
		IDC Disallowed	Un-discharged IDC				
Asset-I	13939.42	0.00	0.00	41.97	163.41	0.00	13734.04
Asset-II	2493.45	62.84	22.49	0.00	0.00	6.90	2401.22



Additional Capital Expenditure (ACE)

36. The Commission had allowed ACE of ₹3514.43 lakh for Asset-I for the 2014-19 tariff period vide order dated 30.8.2017 in Petition No. 41/TT/2017. Further, vide order dated 29.4.2016 in Petition No. 99/TT/2014, the Commission had allowed ACE of ₹287.24 lakh for Asset-II for the 2014-19 tariff period.

37. The Petitioner has claimed the following ACE for Asset-I and Asset-II and has submitted the Auditor's Certificate in support of the same:

(₹ in lakh)

Particulars	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	1316.10	615.22	856.30	180.93	126.99
Asset-II	18.30	151.28	69.89*	0.00	0.00
Total	1334.40	766.50	926.19	180.93	126.99

**LD recovered to the extent of IDC and IEDC disallowed of ₹32.28 lakh has been added back to capital cost of Asset-2 in 2016-17.*

38. The Petitioner has submitted that the cut-off date of Asset-I is 31.3.2017 and ACE of ₹1316.10 lakh, ₹615.22 lakh and ₹856.30 lakh during the 2014-15, 2015-16 and 2016-17 respectively is within the cut-off date and is on account of balance and retention payment. Further, ACE of ₹180.93 lakh and ₹126.99 lakh during 2017-18 and 2018-19 respectively is on account of balance and retention payment due to work already executed after cut-off date. The cut-off date of Asset-II is 31.3.2017 and ACE of ₹18.30 lakh, ₹151.28 lakh and ₹102.17 lakh during 2014-15, 2015-16 and 2016-17 respectively is within the cut-off date. ACE claimed in the instant petition is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for work executed within the cut-off date. Further, ACE within the cut-off date has been claimed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations whereas the same beyond cut-off date has been claimed under



Regulation 14(3)(v) of the 2014 Tariff Regulations. The Petitioner has also submitted the details of party wise expenditure for the assets before and after the cut-off date.

39. BRPL has submitted that the mere fact that the recovery of liquidated damages (LD) has been credited in 2016-17 shows that the amount was included in the determination of tariff which evidently was not required to be included in the capital cost. In response, the Petitioner has submitted that the Commission vide order dated 29.4.2016 in Petition No. 99/TT/2014 disallowed IDC and IEDC of ₹32.28 lakh on account of time over-run. As a result, the contractor paid LD during 2016-17 period and the same has been excluded from the capital cost in 2017-18. Hence, the amount of ACE is after exclusion of the LD.

40. UPPCL has submitted that it is not possible to comment upon the justification of ACE which is on account of balance and retention payments in the absence of item-wise, year-wise liability flow statement. In reply, the Petitioner has submitted that liability flow statement has been submitted vide affidavit dated 30.9.2020 in compliance of technical validation letter.

41. We have considered the submissions of the Petitioner, BRPL and UPPCL. It is observed that the actual audited ACE claimed by the Petitioner is on account of balance and retention payment for works executed within the cut-off date, accrued IDC discharged in 2014-15, un-discharged spares and unexecuted/ balance works. The same has been considered for computation of total capital cost as on 31.3.2019. ACE claimed for the period up to cut-off date is allowed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations whereas ACE claimed for the period beyond cut-off date is allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations. Further, we have also verified the Petitioner's claim and treatment of LD from the



Auditor's Certificates. The Petitioner's Auditor, in his certificates, in respect of the Asset-II, has certified that LD of ₹32.28 lakh was recovered from the contractor(s) and the same was added back to the capital cost of Asset-II in the year 2016-17. LD recovered is adjusted to the capital cost during 2016-17. APTEL vide judgment dated 27.4.2011 in Appeal No. 72 of 2010 held that the generator or the transmission service provider is entitled to retain LD in case the time over-run is not condoned.

42. In view of APTEL's judgement, the Petitioner is entitled to retain LD in such cases wherein time over-run is not condoned. The time over-run of 3 months 14 days was disallowed in case of Asset-II. Therefore, the Petitioner is allowed to adjust the recovered LD of ₹32.28 lakh against Asset-II after making necessary adjustments in ACE during 2016-17.

43. The details of ACE allowed is as follows:

Particulars	Capital Cost as on 31.3.2014/ COD	ACE					Total Capital Cost as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-I	13734.04	1316.10	615.22	814.33#	180.93	126.99	16787.61
Asset-II	2401.22	40.79*	151.28	102.17^	0.00	0.00	2695.46
Total	16135.26	1356.89	766.50	916.50	180.93	126.99	19483.07

#after disallowing excess initial spares
 *Including IDC Discharge during FY 2014-15
 ^ Including LD recovered of ₹32.28 lakh

Capital Cost for the 2014-19 tariff period

44. The Capital Cost considered for true up of transmission tariff of Asset-I and Asset-II for the 2014-19 tariff period after including ACE is as follows:

(₹ in lakh)

Asset-I	Capital Cost as on 31.3.2014	ACE					Total Capital Cost as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19	
Approved vide order dated 30.8.2017 in Petition No. 41/TT/2017	13734.04	1322.13	615.22	1577.08	0.00	0.00	17248.47
As claimed by the Petitioner in the instant petition	13939.42	1316.10	615.22	856.30	180.93	126.99	17034.96
Allowed after true-up in this order	13734.04	1316.10	615.22	814.33	180.93	126.99	16787.61

(₹ in lakh)

Asset-II	Capital Cost as on COD	ACE			Total Capital Cost as on 31.3.2019
		2014-15	2015-16	2016-17	
Approved vide order dated 29.4.2016 in Petition No. 99/TT/2014	2395.10	132.70	88.47	0.00	1877.64
As claimed by the Petitioner in the instant petition	2493.45	18.30	151.28	69.89	2732.92
Allowed after true-up in this order	2401.22	40.79	151.28	102.17	2695.46

Debt-Equity Ratio

45. The Petitioner has considered debt-equity ratio as 70:30 as on 31.3.2014/COD and for ACE during the 2014-19 period. The debt-equity ratio of 70:30 has been considered for capital cost as on 31.3.2014/COD and ACE during the 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of the debt-equity as on the COD and 31.3.2019 of Asset-I and Asset-II are as follows:

Asset-I	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	9613.83	70.00	11751.33	70.00
Equity	4120.21	30.00	5036.28	30.00
Total	13734.04	100.00	16787.61	100.00
Asset-II	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1680.85	70.00	1886.83	70.00



Equity	720.37	30.00	808.63	30.00
Total	2401.22	100.00	2695.46	100.00

Depreciation

46. UPPCL has submitted that there is an inconsistency in cumulative depreciation claimed by the Petitioner vis-à-vis that admitted in the order dated 30.8.2017 in Petition No. 41/TT/2017 in case of Asset-I. In response, the Petitioner has submitted that cumulative depreciation as on 1.4.2014 considered for Asset-I is commensurate with that was allowed by the Commission vide order dated 30.8.2017 in Petition No. 41/TT/2014.

47. The Petitioner has claimed depreciation considering gross block of ₹13939.42 lakh for Asset-I and ₹2395.10 lakh for Asset-II as on 31.3.2014 and ACE of ₹3095.54 lakh and ₹337.82 lakh for Asset-I and Asset-II respectively during the 2014-19 tariff period.

48. Depreciation has been allowed considering capital expenditure as on 31.3.2014/ COD and approved ACE during the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD) and working of WAROD is given in Annexure-I. 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 the 2014-19 tariff period for Asset-I and Asset-II is as follows:

(₹ in lakh)					
Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	13734.04	15050.14	15665.36	16479.69	16660.62
Additional Capital Expenditure	1316.10	615.22	814.33	180.93	126.99
Closing Gross Block	15050.14	15665.36	16479.69	16660.62	16787.61
Average Gross Block	14392.09	15357.75	16072.53	16570.16	16724.12
Rate of Depreciation (%)	4.242	4.263	4.281	4.291	4.286



Balance useful life (at the beginning of the year) (Year)	21	20	19	18	17
Aggregate Depreciable Value	10421.23	10640.87	10629.42	10389.22	9816.82
Depreciation during the year	610.50	654.74	688.08	710.96	716.86
Remaining Aggregate Depreciable Value	9810.73	9986.13	9941.35	9678.26	9099.96

(₹ in lakh)

Asset-2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	2401.22	2442.01	2593.29	2695.46	2695.46
Additional Capital Expenditure	40.79	151.28	102.17	0.00	0.00
Closing Gross Block	2442.01	2593.29	2695.46	2695.46	2695.46
Average Gross Block	2421.61	2517.65	2644.37	2695.46	2695.46
WAROD (%)	5.300	5.299	5.299	5.299	5.299
Balance useful life of the asset at the beginning of the year (Year)	25	24	23	22	21
Aggregated Depreciable Value	2179.45	2137.55	2118.19	2024.06	1881.23
Depreciation during the year	128.33	133.41	140.11	142.83	142.83
Remaining Aggregated Depreciable Value	2051.12	2004.14	1978.08	1881.23	1738.41

49. The details of depreciation allowed vide orders dated 30.8.2017 and 29.4.2016 in Petition No. 41/TT/2017 and Petition No. 99/TT/2014 for Asset-I and Asset-II respectively, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	Approved vide order dated 30.8.2017 in Petition No. 41/TT/2017	610.66	655.06	702.03	735.20	735.20
	Claimed by the Petitioner in the instant petition	621.34	665.58	700.03	724.02	729.93
	Approved after true-up in this order	610.50	654.74	688.08	710.96	716.86
Asset-II	Approved vide order dated 29.4.2016 in Petition No. 99/TT/2014	132.18	139.77	142.11	142.11	142.11
	As claimed by the Petitioner	129.17	135.40	142.10	144.81	144.81
	Allowed after true-up in this order	128.33	133.41	140.11	142.83	142.83



Interest on Loan (IoL)

50. The Petitioner has claimed IoL based on actual interest rates for each year during the 2014-19 period and has prayed to consider floating rate of interest applicable during truing up of the tariff during the said period.

51. UPPCL has submitted that in case of IoL for Asset-I, the figures of cumulative depreciation adopted by the Petitioner may be verified. In reply, the Petitioner has submitted that the cumulative depreciation approved vide order dated 30.8.2017 in Petition No. 41/TT/2014 is claimed in the instant petition.

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

53. IoL has been worked by considering:

- a) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition;
- b) The repayment for the 2014-19 tariff period has been considered to be equal to the depreciation allowed for that period.

54. The trued-up IoL approved in respect of Asset-I and Asset-II is as follows:

(₹ in lakh)					
Asset-I					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	9613.83	10535.10	10965.75	11535.78	11662.43
Cumulative Repayments upto Previous Year	139.45	749.95	1404.69	2092.76	2803.72
Net Loan-Opening	9474.38	9785.15	9561.06	9443.02	8858.71



Additions due to ACE	921.27	430.65	570.03	126.65	88.89
Repayment during the year	610.50	654.74	688.08	710.96	716.86
Net Loan-Closing	9785.15	9561.06	9443.02	8858.71	8230.74
Average Loan	9629.76	9673.11	9502.04	9150.87	8544.73
Weighted Average Rate of Interest on Loan (%)	9.469	9.317	9.152	8.843	8.728
Interest on Loan	911.82	901.25	869.64	809.21	745.78

(₹ in lakh)

Asset-II					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1680.85	1709.41	1815.31	1886.83	1886.83
Cumulative Repayments upto Previous Year	0.00	128.33	261.74	401.85	544.68
Net Loan-Opening	1680.85	1581.07	1553.57	1484.97	1342.15
Additions due to ACE	28.55	105.90	71.52	0.00	0.00
Repayment during the year	128.33	133.41	140.11	142.83	142.83
Net Loan-Closing	1581.07	1553.57	1484.97	1342.15	1199.32
Average Loan	1630.96	1567.32	1519.27	1413.56	1270.73
Weighted Average Rate of Interest on Loan (%)	9.557	9.353	9.146	8.819	8.702
Interest on Loan	155.87	146.59	138.96	124.66	110.58

55. The details of IoL allowed vide orders dated 30.8.2017 and 29.4.2016 in Petition No. 41/TT/2017 and Petition No. 99/TT/2014 for Asset-I and Asset-II respectively, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Particulars	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	Allowed vide order dated 30.8.2017 in Petition No. 41/TT/2017	912.02	917.94	927.96	912.23	842.48
	Claimed by the Petitioner in the instant petition	924.92	913.12	881.61	820.97	756.25
	Approved after true-up in this order	911.82	901.25	869.64	809.21	745.78
Asset-II	Allowed vide order dated 29.4.2016 in Petition No. 99/TT/2014	160.65	157.33	146.82	133.19	119.57
	As claimed by the Petitioner in	156.88	148.87	141.01	126.46	112.18



	the instant Petition					
	Approved after true-up in this order	155.87	146.59	138.96	124.66	110.58

Return on Equity (RoE)

56. 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 it is 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

57. UPPCL has submitted that the grossed-up rate of RoE for the period 2016-17 to 2018-19 is not based on the MAT rates approved by the Income Tax Authorities.

58. BRPL has submitted that the Petitioner has calculated the effective tax rate after grossing up the rate of RoE at the end of every financial year which is not based on actual tax paid and the Petitioner has not enclosed the details of the actual tax paid. The Petitioner has submitted the clarifications given in other petitions on similar issues.

59. We have considered the contentions of UPPCL and BRPL and the clarifications given by the Petitioner. The issues raised by UPPCL and BRPL and the clarifications given by the Petitioner, are similar to several other petitions. We have already considered the contentions and set aside their contentions in order dated



24.1.2021 in Petition No. 136/TT/2020 and several other orders. Therefore, we are of the view that there is no necessity to dwell on these issues again.

60. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same are as follows:

Year	Notified MAT rates (in %) (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

61. 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 true-up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations as follows:

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

62. RoE is true-up on the basis of the MAT rate applicable for the respective years and is allowed as follows:

(₹ in lakh)					
Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Net Opening Equity	4120.21	4515.04	4699.61	4943.91	4998.19
Increase in Equity due to addition during the year	394.83	184.57	244.30	54.28	38.10
Closing Equity	4515.04	4699.61	4943.91	4998.19	5036.28
Average Equity	4317.63	4607.33	4821.76	4971.05	5017.23



Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Applicable ROE Rate (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity for the year	846.69	907.87	950.13	979.54	991.31

(₹ in lakh)

Asset-II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	720.37	732.60	777.98	808.63	808.63
Addition due to Additional Capitalization	12.24	45.38	30.65	0.00	0.00
Closing Equity	732.60	777.98	808.63	808.63	808.63
Average Equity	726.48	755.29	793.31	808.63	808.63
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
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)	142.46	148.83	156.32	159.34	159.77

63. The details of RoE allowed vide orders dated 30.8.2017 and 29.4.2016 in Petition No. 41/TT/2017 and Petition No. 99/TT/2014 for Asset-I and Asset-II respectively, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	Allowed vide order dated 30.8.2017 in Petition No. 41/TT/2017	846.86	903.85	968.34	1014.73	1014.73
	Claimed by the Petitioner in the instant petition	859.43	920.48	963.51	994.17	1,005.97
	Approved after true-up in this order	846.69	907.87	950.13	979.54	991.31
Asset-II	Allowed vide order dated 29.4.2016 in Petition No. 99/TT/2014	146.75	155.96	158.57	158.57	158.57
	As claimed by the Petitioner in the instant Petition	143.50	151.12	158.54	161.56	161.99
	Approved after true-up in this	142.46	148.83	156.32	159.34	159.77



	order					
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Operation & Maintenance Expenses (O&M Expenses)

64. UPPCL has submitted that the Petitioner has not provided table for O&M Expenses of ICT bays for ICT-I and ICT-II at Hamirpur. Therefore, the same cannot be calculated and full figure of O&M Expenses cannot be arrived at nor compared with the figures of O&M Expenses claimed by the Petitioner. In response, the Petitioner has submitted that the transmission lines and bay details at Hamirpur Sub-station have been filed in Form-2 along with calculations of O&M Expenses which has been submitted with the instant petition.

65. We have considered the submissions of the Petitioner and UPPCL. The details of O&M Expenses claimed by the Petitioner for Asset-I and Asset-II, and allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of tariff are as follows:

Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Line (LILO of one ckt of 400 kV D/C Parbati Pooing Station-Amritsar line at Hamirpur Sub-station)					
Norm (₹ in lakh) (Double Circuit Double Conductor)	0.707	0.731	0.755	0.78	0.806
Line Length (km)	3.5	3.5	3.5	3.5	3.5
O&M Transmission Line	2.47	2.56	2.64	2.73	2.82
Sub-station					
Norms- Sub-station Bays (₹ lakh/bay)					
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					
400 kV Bay (GIS) at Hamirpur Sub-station (Number)	4	4	4	4	4
220 kV Bay (GIS) at Hamirpur Sub-station (Number)	3	3	3	3	3
O&M Sub-station	332.79	343.83	355.26	367.01	379.22
Total O&M Expenses (₹ in lakh)	335.26	346.39	357.90	369.74	382.04



Asset-II					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Norms- Sub-station Bays (₹ lakh/bay)					
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					
400 kV Bay (GIS) at Hamirpur Sub-station (Number)	1	1	1	1	1
220 kV Bay (GIS) at Hamirpur Sub-station (Number)	5	5	5	5	5
Total O&M Expenses (₹ in lakh)					
	261.59	271.30	280.32	289.59	299.23

66. The details of O&M Expenses allowed vide orders dated 30.8.2017 and 29.4.2016 in Petition No. 41/TT/2017 and Petition No. 99/TT/2014 for Asset-I and Asset-II respectively, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)						
Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	Allowed vide order dated 30.8.2017 in Petition No. 41/TT/2017	335.26	346.39	357.90	369.74	382.04
	Claimed by the Petitioner in the instant petition	335.26	346.39	357.90	369.74	382.04
	Approved after true-up in this order	335.26	346.39	357.90	369.74	382.04
Asset-II	Allowed vide order dated 29.4.2016 in Petition No. 99/TT/2014	271.35	280.35	289.67	299.26	309.21
	As claimed by the Petitioner in the instant Petition	262.59	271.30	280.32	289.59	299.23
	Approved after true-up in this order	262.59	271.30	280.32	289.59	299.23

Interest on Working Capital (IWC)

67. The Petitioner is entitled to claim IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as follows:



a) Maintenance Spares:

Maintenance spares have been worked out based on 15% of O&M Expenses specified in Regulation 28 of the 2014 Tariff Regulations.

b) O&M Expenses:

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

c) Receivables:

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

d) Rate of interest on working capital

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

68. IWC allowed for the Asset-I and Asset-II is as follows:

(₹ in lakh)

Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	27.94	28.87	29.83	30.81	31.84
Maintenance Spares	50.29	51.96	53.69	55.46	57.31
Receivables	462.89	481.02	490.54	491.24	485.60
Total Working Capital	541.12	561.84	574.05	577.51	574.74
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	73.05	75.85	77.50	77.96	77.59

(₹ in lakh)

Asset-II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	21.88	22.61	23.36	24.13	24.94
Maintenance Spares	39.39	40.70	42.05	43.44	44.88
Receivables	118.93	120.83	123.54	123.71	123.07
Total Working Capital	180.20	184.13	188.94	191.28	192.89
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	24.33	24.86	25.51	25.82	26.04

69. The details of IWC allowed for Asset-I and Asset-II vide orders dated 30.8.2017 and 29.4.2016 in Petition No. 41/TT/2017 and Petition No. 99/TT/2014 respectively, claimed in the instant petition and trued-up in the instant order are as follows:



(₹ in lakh)

Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	Allowed vide order dated 30.8.2017 in Petition No. 41/TT/2017	73.06	76.15	79.58	81.70	80.78
	Claimed by the Petitioner in the instant petition	73.89	76.66	78.36	78.87	78.47
	Approved after true-up in this order	73.05	75.85	77.50	77.96	77.59
Asset-II	Allowed vide order dated 29.4.2016 in Petition No. 99/TT/2014	25.11	25.91	26.30	26.52	26.75
	As claimed by the Petitioner in the instant Petition	24.39	25.01	25.65	25.96	26.18
	Approved after true-up in this order	24.33	24.86	25.51	25.82	26.04

Approved Annual Fixed Charges of the 2014-19 Tariff Period

70. The trued-up AFC of the Asset-I and Asset-II of the 2014-19 tariff period are as follows:

(₹ in lakh)

Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	610.50	654.74	688.08	710.96	716.86
Interest on Loan	911.82	901.25	869.64	809.21	745.78
Return on Equity	846.69	907.87	950.13	979.54	991.31
Interest on Working Capital	73.05	75.85	77.50	77.96	77.59
O&M Expenses	335.26	346.39	357.90	369.74	382.04
Total	2777.32	2886.09	2943.24	2947.42	2913.58

(₹ in lakh)

Asset-II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	128.33	133.41	140.11	142.83	142.83
Interest on Loan	155.87	146.59	138.96	124.66	110.58
Return on Equity	142.46	148.83	156.32	159.34	159.77
Interest on Working Capital	24.33	24.86	25.51	25.82	26.04
O&M Expenses	262.59	271.30	280.32	289.59	299.23
Total	713.58	724.98	741.22	742.24	738.44

71. AFC allowed vide orders dated 30.8.2017 and 29.4.2016 in Petition No. 41/TT/2017 and Petition No. 99/TT/2014 for Asset-I and Asset-II respectively, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:



(₹ in lakh)

Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	Allowed vide order dated 30.8.2017 in Petition No. 41/TT/2017	2777.86	2899.38	3035.80	3113.61	3055.23
	Claimed by the Petitioner in the instant petition	2814.84	2922.23	2981.41	2987.77	2952.66
	Approved after true-up in this order	2777.32	2886.09	2943.24	2947.42	2913.58
Asset-II	Allowed vide order dated 29.4.2016 in Petition No. 99/TT/2014	736.04	759.32	763.47	759.65	756.21
	As claimed by the Petitioner in the instant Petition	716.53	731.70	747.62	748.38	744.39
	Approved after true-up in this order	713.58	724.98	741.22	742.24	738.44

Determination of Annual Fixed Charges of the 2019-24 tariff period

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

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	878.99	880.69	880.69	880.69	880.69
Interest on Loan	802.37	726.67	650.49	574.39	497.07
Return on Equity	1115.78	1117.71	1117.71	1117.71	1117.71
Interest on Working Capital	62.54	62.32	61.91	61.54	61.02
O&M Expenses	469.86	486.53	503.52	521.38	539.01
Total	3329.54	3273.92	3214.32	3155.71	3095.50

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	39.16	40.54	41.96	43.45	44.92



Maintenance Spares	70.48	72.98	75.53	78.21	80.85
Receivables	409.37	403.63	396.29	389.06	380.59
Total	519.01	517.15	513.78	510.72	506.36
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	62.54	62.32	61.91	61.54	61.02

Effective Date of Commercial Operation (E-COD)

75. The Petitioner has claimed E-COD of the Combined Asset as 13.1.2014. Based on the trued-up admitted capital cost and actual COD of the assets, E-COD has been worked out as follows:

Asset	Actual COD	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Weight of the cost	Number of days from last COD	Weighted days
Asset-I	1.1.2014	16787.61	86.17	90.00	77.55
Asset-II	1.4.2014	2695.46	13.83	0.00	0.00
Total		19483.07	100.00		77.55
Effective COD 13.1.2014					

76. E-COD is used to determine the lapsed life of the project as a whole, which works out as five (5) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL)

77. The life as defined in Regulation 33 of the 2019 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.

78. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this



purpose. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 25 years as shown below:

Particulars	Combined Cost (₹ in lakh)* (a)	Life as per 2014 Regulation (b)	Weight (C) = (a) x (b)	Weighted Average life of Asset (in years) (d) = (c)/(a)
Building	1299.99	25	32499.75	
Transmission Line	919.05	35	32166.75	
Sub-station	14431.22	25	360780.46	
PLCC	131.52	15	1972.78	
Total	16781.78		427419.74	25.47 years, rounded off to 25 years

* Excluding land of ₹ 2701.29 lakh

79. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. E-COD of the assets is 13.1.2014 and the lapsed life of the project as a whole, works out as five (5) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from ECOD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 20 years.

Capital Cost

80. Regulation 19 of the 2019 Tariff Regulations provides as follows:

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

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

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

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

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



- (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
- (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
- (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

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

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
- (b) Additional Capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
- (c) Capital expenditure on account of 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.”

81. The Petitioner has claimed the capital cost of Combined Asset as ₹19767.88 lakh as on 31.3.2019.

82. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, sub-station and PLCC) as admitted by the Commission as on 31.3.2019 for the assets are clubbed together and the capital cost has been considered as capital cost for Combined Asset as on 1.4.2019 as per following details:

(₹ in lakh)

Particulars	Capital Cost as on 1.4.2019		
	Asset-I	Asset-II	Capital cost for combined assets as on 31.3.2019
Freehold Land	2701.29	0.00	2701.29
Leasehold Land	1299.99	0.00	1299.99



Building & Other Civil Works	919.05	0.00	919.05
Transmission Line	11783.89	2647.33	14431.22
Sub-Station Equipment	83.39	48.13	131.52
PLCC	0.00	0.00	0.00
IT Equipment and Software	0.00	0.00	0.00
TOTAL	16787.61	2695.46	19483.07

Additional Capital Expenditure (ACE)

83. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as follows:

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

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

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

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

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

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

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

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



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

(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;

(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;

(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”

84. The Petitioner has claimed ACE of ₹68.78 lakh during 2019-20. The Petitioner has submitted that projected ACE of ₹68.78 lakh is beyond the cut-off date and is on account of liability for works executed prior to the cut-off date and has been claimed as per Regulation 25(1)(d) of the 2019 Tariff Regulations.

85. We have considered the submissions of the Petitioner. It is observed that ACE claimed in the 2019-24 period falls beyond the cut-off date. The Petitioner is directed to submit the actual details of ACE for the 2019-24 period at the time of true-up. ACE allowed is summarized as below subject to true-up:

Particulars	Regulation	(₹ in lakh)
		Combined Asset 2019-20
ACE to the extent of un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date	Regulation 25(1)(d)	68.78

Initial Spares

86. As stated in above in the relevant paragraph of this order, Initial Spares are allowed for the 2014-19 period on the basis of the cost of individual assets. The assets covered in the transmission project are combined during the 2019-24 tariff



period and hence, the Initial Spares are allowed on the basis of the overall project cost as per APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017.

87. Accordingly, Initial Spares allowed in the 2019-24 tariff period are as follows:

Asset	Project cost up to cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2009/2014 Tariff Regulations (%)	Initial Spares as per the norms of the 2009/2014 Tariff Regulations (₹ in lakh)	Initial Spares already allowed during 2014-19 (₹ in lakh)	Additional Initial Spares to be allowed for combined asset (₹ in lakh)
Asset-I	16184.69	606.97	3.50	565.00	565.00	
Asset-II	2349.93	63.49	5.00	120.334	63.49	
Total	18566.90	670.46		685.33	628.49	41.97*

* Additional Initial Spares of ₹41.97 lakh (₹670.46-₹628.49) are allowed for sub-station.

88. Thus, in line with APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017, additional Initial Spares of ₹41.97 lakh are admissible.

Asset	(₹ in lakh)		
	Total Capital Cost as on 31.3.2019	Additional Initial Spares as per APTEL's judgment dated 14.9.2019	Total Capital Cost as on 1.4.2019
Asset-I	16787.61	41.97	16829.58
Asset-II	2695.46	0.00	2695.46

Capital Cost considered for the 2019-24 Tariff Period:

89. Accordingly, the capital cost considered in respect of Combined Asset for the 2019-24 tariff period is as follow:

Particulars	Apportioned Approved Cost as per FR	Capital Cost as on 31.3.2019	Projected ACE	Total Capital Cost as on 31.3.2024
			2019-20	
Combined Asset	22761.46	19525.04	68.78	19593.82

Debt-Equity Ratio

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



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

Provided that:

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

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

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

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

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

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

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

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



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

Combined Asset	Capital Cost as on 1.4.2019 (in ₹ lakh)	(%)	Total Cost as on 31.3.2024 (in ₹ lakh)	(%)
Debt	13667.53	70.00	13715.68	70.00
Equity	5857.51	30.00	5878.14	30.00
Total	19525.04	100.00	19593.82	100.00

Depreciation

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

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

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

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

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

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

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

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

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not



be allowed to be recovered at a later stage during the useful life or the extended life.

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

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the 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.”

93. Depreciation for the Combined Asset has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019 and WAROD. WAROD has been worked out and placed at Annexure-II after taking into account the depreciation rates as prescribed in the 2019 Tariff Regulations. The depreciation allowed for the Combined Asset is as follows:

(₹ in lakh)					
Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	19525.04	19593.82	19593.82	19593.82	19593.82
Additional Capital Expenditure during the year	68.78	0.00	0.00	0.00	0.00
Closing Capital Cost	19593.82	19593.82	19593.82	19593.82	19593.82
Average Capital Cost	19559.43	19593.82	19593.82	19593.82	19593.82
Balance useful life at the beginning of the year (Year)	20.00	19.00	18.00	17.00	16.00
Rate of Depreciation (%)	4.428	4.429	4.429	4.429	4.429
Depreciable Value	15172.32	15203.27	15203.27	15203.27	15203.27
Depreciation during the year	866.15	867.85	867.85	867.85	867.85



Depreciation upto previous year	4208.09	5074.24	5942.10	6809.95	7677.81
Aggregate Cumulative Depreciation	5074.24	5942.10	6809.95	7677.81	8545.66
Remaining Aggregate Depreciable Value	10098.08	9261.18	8393.32	7525.47	6657.61

Interest on Loan (IoL)

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

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

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

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

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

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

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

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

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

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

95. UPPCL has requested to examine the validity of weighted average rates of interest on loan.



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

(₹ in lakh)

Combined Asset					
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	13667.53	13715.68	13715.68	13715.68	13715.68
Cumulative Repayments upto Previous Year	4208.09	5074.24	5942.10	6809.95	7677.81
Net Loan-Opening	9459.44	8641.44	7773.58	6905.73	6037.87
Additions	48.15	0.00	0.00	0.00	0.00
Repayment during the year	866.15	867.85	867.85	867.85	867.85
Net Loan-Closing	8641.44	7773.58	6905.73	6037.87	5170.02
Average Loan	9050.44	8207.51	7339.65	6471.80	5603.95
Weighted Average Rate of Interest on Loan (%)	8.773	8.766	8.780	8.798	8.801
Interest on Loan	794.04	719.47	644.40	569.42	493.22

Return on Equity (RoE)

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

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

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

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



Provided further that:

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

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

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

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

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

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

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

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

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

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.”

98. UPPCL has submitted that RoE in respect of assets covered under this petition has to be revised on the basis of MAT rates approved by the Income Tax Authorities. In response, the Petitioner has submitted that RoE has been calculated at the rate of 18.782% after grossing up RoE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given as per Regulation 31(2) of the 2019 Tariff Regulations for 2019-24 tariff period. The Petitioner has further submitted that as per Regulation 31(3) of the 2019 Tariff Regulations, the grossed-up rate of RoE at the end of every financial year shall be trued-up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2019-24 tariff period on actual gross income of any financial year.

99. BRPL has submitted that as per Regulation 31(3) of the 2019 Tariff Regulations, the Petitioner has a statutory duty to undertake the true-up of the grossed-up rate of RoE at the end of every financial year based on actual tax paid. In response, the Petitioner has submitted that the Commission has approved effective



tax rate as notified MAT rates and for 2019-24 tariff period, tariff has been claimed with grossing up of RoE as 18.782% considering MAT rate of 17.472%. Further, issue of under-recovery or over-recovery of grossed-up rate of RoE should be taken up at the time of true-up for the 2019-24 tariff period. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company

100. We have considered the submissions of the Petitioner, UPPCL and BRPL. MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be true-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE approved for the Combined Asset is as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Net Opening Equity	5857.51	5878.14	5878.14	5878.14	5878.14
Increase in Equity due to addition during the year	20.63	0.00	0.00	0.00	0.00
Closing Equity	5878.14	5878.14	5878.14	5878.14	5878.14
Average Equity	5867.82	5878.14	5878.14	5878.14	5878.14
RoE (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Applicable RoE Rate (%)	18.782	18.782	18.782	18.782	18.782
RoE for the year	1102.09	1104.03	1104.03	1104.03	1104.03

Operation & Maintenance Expenses (O&M Expenses)

101. Regulation 35(3)(a) and Regulation 33(4) of the 2019 Tariff Regulations provide as follows:

“35.Operation and Maintenance Expenses:

.....

(3) Transmission system:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
<i>765 Kv</i>	<i>45.01</i>	<i>46.60</i>	<i>48.23</i>	<i>49.93</i>	<i>51.68</i>
<i>400 kV</i>	<i>32.15</i>	<i>33.28</i>	<i>34.45</i>	<i>35.66</i>	<i>36.91</i>
<i>220 kV</i>	<i>22.51</i>	<i>23.30</i>	<i>24.12</i>	<i>24.96</i>	<i>25.84</i>



132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;



- iii. the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);
- iv. the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;
- v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

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

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

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

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

102. The Petitioner has claimed the following O&M Expenses for the 2019-24 period for the Combined Asset as follows:

(₹ in lakh)					
Combined Asset					
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line (LILO of one ckt of 400kV D/C Parbati Pooing Station-Amritsar line at Hamirpur Sub-station)					
Norm (₹ in lakh) (Double Circuit Double Conductor)	0.881	0.912	0.944	0.977	1.011
Line Length (km)	3.5	3.5	3.5	3.5	3.5
O&M Transmission Line	3.08	3.19	3.30	3.42	3.54
Sub-station					
Norms- Sub-station Bays (₹ lakh/bay)					
400 kV Bay (GIS)	22.505	23.296	24.115	24.962	25.837



220 kV Bay (GIS)	15.757	16.31	16.884	17.472	18.088
Number of Bays					
400 kV Bay (GIS) at Hamirpur Sub-station (Number)	5	5	5	5	5
220 kV Bay (GIS) at Hamirpur Sub-station (Number)	8	8	8	8	8
O&M Bays	238.60	246.97	255.66	264.58	273.90
Transformer					
ICT Capacity (MVA)	2*315	2*315	2*315	2*315	2*315
Norm (₹ in lakh/MVA)	0.358	0.371	0.384	0.398	0.411
O&M ICT	225.54	233.73	241.92	250.74	258.93
Communication System (PLCC)					
Original Project Cost	132.22	132.22	132.22	132.22	132.22
Norm (%of Project Cost)	2	2	2	2	2
O&M PLCC	2.64	2.64	2.64	2.64	2.64
Total O&M Expenses (₹ in lakh)	469.86	486.53	503.52	521.38	539.01

103. UPPCL has submitted that the Petitioner has considered wrong norms for calculation of O&M Expenses with respect to 400 kV and 220 kV GIS Sub-station bays which does not match with the norms of O&M Expenses given in the Petition. In response, the Petitioner has submitted that the details of O&M Expenses has been provided in Form-2 in the petition. Further, the Petitioner has submitted that the calculation of O&M Expenses is based on proviso of Regulation 35(3) of the 2019 Tariff Regulations.

104. We have considered the submissions of UPPCL and the Petitioner. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 @2% of its original project cost in the instant petition and the Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 and 2019 Tariff Regulations and the norms for sub-station has been specified accordingly. Accordingly, the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be



allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system.

105. In view of the order dated 24.1.2021 in Petition No.126/TT/2020, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The O&M Expenses approved for the Combined Asset for the 2019-24 period are as follows:

Combined Asset					
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line (LILO of one ckt of 400kV D/C Parbati Pooing Station-Amritsar line at Hamirpur Sub-station)					
Norm (₹ in lakh) (Double Circuit Double Conductor)	0.881	0.912	0.944	0.977	1.011
Line Length (km)	3.5	3.5	3.5	3.5	3.5
O&M Transmission Line	3.08	3.19	3.30	3.42	3.54
Sub-station					
Norms-Sub-station Bays (₹ lakh/bay)					
400 kV Bay (GIS)	22.505	23.296	24.115	24.962	25.837
220 kV Bay (GIS)	15.757	16.31	16.884	17.472	18.088
Number of Bays at Hamirpur Sub-station					
400 kV Bay (GIS) (Number)	5	5	5	5	5
220 kV Bay (GIS) (Number)	8	8	8	8	8
O&M Sub-station	238.60	246.97	255.66	264.58	273.90
Transformer					
ICT Capacity (MVA)	630	630	630	630	630
Norm (₹ in lakh/MVA)	0.358	0.371	0.384	0.398	0.411
O&M ICT	225.54	233.73	241.92	250.74	258.93
Total O&M Expenses (₹ in lakh)	467.20	483.88	500.87	518.75	536.36

Interest on Working Capital (IWC)

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

- “34. *Interest on Working Capital:*
 (1)...
 (c) *For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:*
 (i) *Receivables equivalent to 45 days of annual fixed cost;*



- (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
 (iii) Operation and maintenance expenses, including security expenses for one month."

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

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

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

"3. Definitions...

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

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

(₹ in lakh)					
Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	38.93	40.32	41.74	43.23	44.70
Maintenance Spares	70.08	72.58	75.13	77.81	80.45
Receivables	404.68	398.56	391.36	384.28	375.96
Total Working Capital	513.69	511.47	508.23	505.32	501.11
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working	61.90	57.54	57.18	56.85	56.38



Capital					
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Annual Fixed Charges for the 2019-24 Tariff Period

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

(₹ in lakh)					
Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	866.15	867.85	867.85	867.85	867.85
Interest on Loan	794.04	719.47	644.40	569.42	493.22
Return on Equity	1102.09	1104.03	1104.03	1104.03	1104.03
Interest on Working Capital	61.90	57.54	57.18	56.85	56.38
O&M Expenses	467.20	483.88	500.87	518.75	536.36
Total	3291.39	3232.78	3174.33	3116.90	3057.84

Filing Fee and Publication Expenses

109. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that though the Commission can allow filing fee and publication expenses at 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 further referring to the Commission's order dated 11.9.2009 in Petition No. 129 of 2005 has submitted that the Petitioner's claim for reimbursement for the application fee may be declined. In response, the Petitioner has submitted that it is entitled for reimbursement of expenditure in terms of Regulation 70(1) of the 2019 Tariff Regulations.

110. We have considered the submissions of the Petitioner and BRPL. Regulation 70(1) of the 2019 Tariff Regulations provides for reimbursement of filing fees and publication paid by the Petitioner. Accordingly, the Petitioner is entitled for reimbursement of the filing fees and publication expenses in connection with the



present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

111. The Petitioner has claimed reimbursement of license fee and recovery of RLDC fees and charges. However, UPPCL has submitted that licence fee is the onus of the Petitioner. In response, the Petitioner has submitted that the Regulation 70(3) and 70(4) of the 2019 Tariff Regulations authorize the Petitioner to bill and recover licensee fee from the beneficiaries. License fee is to be reimbursed directly by beneficiaries as per manner specified in the Tariff Regulations.

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

Goods and Services Tax

113. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. However, BRPL has objected to the prayer of the Petitioner regarding GST as transmission of electricity is exempted from GST.

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



Security Expenses

115. The Petitioner has submitted that security expenses for the 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 a similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall 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 per the audited accounts may be allowed to be recovered from the beneficiaries on yearly basis.

116. BRPL has submitted that the approach adopted by the Petitioner towards claim of security expenses does not warrant the need for IWC as the same is claimed in advance. BRPL has also submitted that the Petitioner should clarify under which Regulations the claim has been made. In response, the Petitioner has submitted that the expenses are not claimed in the instant petition and shall be claimed separately in a separate petition along with other assets.

117. 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 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

118. The Petitioner has sought reimbursement of capital spares at the end of tariff period. UPPCL has submitted that the claim of capital spares at the end of the tariff period is permissible only to the extent of the provision of the Tariff Regulations which is the ceiling value and therefore anything over and above the same may not be allowed. In response, the Petitioner has submitted that the capital spares shall be claimed at the end of tariff period as per actual. Accordingly, the Petitioner has not claimed capital spares in the instant petition and has informed that the same shall be claimed in a separate petition along with all other assets in accordance with the 2019 Tariff Regulations.

119. BRPL has submitted that capital spares may be allowed separately after prudence check. In response, the Petitioner has reiterated the submissions made by it in the above relevant paragraphs.

120. We have considered the submissions of the Petitioner, UPPCL and BRPL. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

Sharing of Transmission Charges

121. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43



of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

122. To summarise:

(a) The trued-up AFC approved for the Asset-I and Asset-II for the 2014-19 tariff period are:

		(₹ in lakh)				
Particulars	Asset	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	Asset-I	2777.32	2886.09	2943.24	2947.42	2913.58
	Asset-II	713.58	724.98	741.22	742.24	738.44

(b) The AFC allowed for the Combined Asset for the 2019-24 tariff period in this order are:

		(₹ in lakh)				
Particulars		2019-20	2020-21	2021-22	2022-23	2023-24
AFC		3291.39	3232.78	3174.33	3116.90	3057.84

123. The Annexure-I and Annexure-II given hereinafter form part of the order.

124. This order disposes of Petition No. 132/TT/2020 in terms of the above discussion and findings.

sd/-
(Pravas Kumar Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson



Annexure-I

Asset-I													
2014-19	Capital Expenditure as on 31.3.2014 (₹ in lakh)	Additional Capitalization (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	2614.71	86.58	0.00	0.00	0.00	0.00	2701.29	0.00	0.00	0.00	0.00	0.00	0.00
Building	403.04	209.19	251.41	206.79	146.90	82.66	1299.99	3.34	16.96	24.65	32.30	38.21	42.04
Transmission Line	701.67	141.77	50.42	25.15	0.04	0.00	919.05	5.28	40.79	45.86	47.86	48.52	48.53
Sub Station	9940.37	877.24	313.39	574.57	33.99	44.33	11783.89	5.28	548.01	579.44	602.89	618.95	621.02
PLCC	74.25	1.32	0.00	7.82	0.00	0.00	83.39	6.33	4.74	4.78	5.03	5.28	5.28
Total	13734.04	1316.10	615.22	814.33	180.93	126.99	16787.61		610.50	654.74	688.08	710.96	716.86
							Average Gross Block (₹ in lakh)		14392.09	15357.75	16072.53	16570.16	16724.12
							Weighted Average Rate of Depreciation (%)		4.24	4.26	4.28	4.29	4.29

Asset-II													
2014-19	Capital Expenditure as on 31.3.2014 (₹ in lakh)	Additional Capitalization (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Sub Station	2350.41	40.37	151.28	99.26	0.00	0.00	2647.33	5.28	125.48	130.54	137.16	139.78	139.78
PLCC	44.69	0.42	0.00	2.91	0.00	0.00	48.13	6.33	2.85	2.86	2.95	3.05	3.05
Total	2395.10	40.79	151.28	102.17	0.00	0.00	2695.46		128.33	133.41	140.11	142.83	142.83
							Average Gross Block (₹ in lakh)		2421.61	2517.65	2644.37	2695.46	2695.46
							Weighted Average Rate of Depreciation (%)		5.30	5.30	5.30	5.30	5.30



Annexure-II

2019-24	Capital Expenditure as on 31.3.2019 (₹ in lakh)	Additional Capitalization (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation as per Regulations (₹ in lakh)				
					2019-20	2020-21	2021-22	2022-23	2023-24
Land	2701.29	0.00	2701.29	0.00	0.00	0.00	0.00	0.00	0.00
Building	1299.99	11.95	1311.94	3.34	43.62	43.82	43.82	43.82	43.82
Transmission Line	919.05	0.00	919.05	5.28	48.53	48.53	48.53	48.53	48.53
Sub Station	14473.19	56.83	14530.02	5.28	765.68	767.18	767.18	767.18	767.18
PLCC	131.52	0.00	131.52	6.33	8.33	8.33	8.33	8.33	8.33
Total	19525.04	68.78	19593.82		866.15	867.85	867.85	867.85	867.85
Average Gross Block (₹ in lakh)					19559.43	19593.82	19593.82	19593.82	19593.82
Weighted Average Rate of Depreciation (%)					4.43	4.43	4.43	4.43	4.43

