

**Central Electricity Regulatory Commission  
New Delhi**

**Petition No. 35/TT/2023**

**Coram:**

**Shri Jishnu Barua, Chairperson  
Shri Arun Goyal, Member**

**Date of Order: 02.08.2024**

**In the matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for determination and truing up of the transmission tariff for the 2014-19 period and determination of the transmission tariff for the 2019-24 tariff block for communication assets (2 Nos.) under "Fibre Optic Communication System under Expansion of Wideband Communication Network" Scheme in Eastern Region.

**And in the matter of:**

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

**...Petitioner**

**Versus**

1. Bihar State Power (Holding) Company Limited,  
Vidyut Bhavan, Bailey Road,  
Patna – 800 001
2. West Bengal State Electricity Distribution Company Limited,  
Bidyut Bhawan, Bidhan Nagar  
Block DJ, Sector-II, Salt Lake City,  
Calcutta - 700 091
3. Grid Corporation of Orissa Limited,  
Shahid Nagar, Bhubaneswar - 751 007
4. Damodar Valley Corporation,  
DVC Tower, Maniktala,  
Civic Centre, VIP Road, Calcutta - 700 054
5. Power Department,  
Govt. of Sikkim, Gangtok - 737 101



6. Jharkhand State Electricity Board,  
In Front of Main Secretariat,  
Doranda- 834002, Ranchi.

...Respondents

**Parties Present:**

1. Shri Amit Yadav, PGCIL
2. Shri Vivek Singh, PGCIL
3. Shri Anup Jain, Advocate, BSPHCL
4. Shri Vyom Chaturvedi, Advocate, BSPHCL

**ORDER**

The instant Petition has been filed by Power Grid Corporation of India Limited for the determination-cum-true up of the transmission tariff for 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 determination of the transmission tariff for the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as 'the 2019 Tariff Regulations') in respect of the two (2) assets (hereinafter referred to as 'the communication assets') under the "Fibre Optic Communication System under Expansion of Wideband Communication Network" Scheme in Eastern Region (hereinafter referred to as 'the transmission project'), namely **Asset-I:** 1 No. link {Sasaram – Daltonganj} under Central Sector (196.132 km) and **Asset-II:** 1 No. link {Barh – Kahalgaon} under Central Sector (215.22 km).

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

*"1. Allow the Petitioner to approach the Commission for claiming the transmission tariff along with trueing up tariff for the period 2014-19 owing to merit of the instant special case.*

*2. Approve the Transmission Tariff –cum- Trueing Up tariff for the tariff block 2014-19 block for the asset covered under this petition, as per para –8.2 above and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9.2 above.*

*3. Admit the capital cost as claimed in the Petition and approve the Additional Capitalization projected to be incurred.*



4. Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 8.2 and 9.2 above for respective block.

5. 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.

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

7. Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 9.9 above

8. Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff regulations 2014.

9. Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition.

10. Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

11. 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 2014-19 period, if any, from the respondents.

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

13. Allow tariff as 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the PoC charges.

14. Allow the petitioner to bill Tariff from actual DOCO and also the petitioner may be allowed to submit revised Certificate and tariff Forms (as per the Relevant Regulation) based on actual DOCO.”



## **Background**

3. The brief facts of the case are as follows:
- a. The Investment Approval (IA) of the transmission project was accorded on 26.3.2012 by the Board of Directors of the Petitioner *vide* Ref. No. C/CP/FO-ER dated 27.3.2012 for ₹11580 lakh, including an Interest During Construction (IDC) of ₹654 lakh based on the 4<sup>th</sup> Quarter, 2011 price level.
  - b. The scope of work covered under the transmission project is as under:
    - i. Installations of an estimated 1159 km of OPGW fibre optic cable on the existing EHV transmission line.
    - ii. Installations of an estimated 2500 km of OPGW fibre optic cable on the new/upcoming EHV transmission line.
    - iii. Installation of 53 Nos. terminal equipment for communication based upon Synchronous Digital Hierarchy (SDH) technology shall be installed in the sub-stations of constituents and POWERGRID.
    - iv. Installation of 76 Nos. drop insert multiplexers at wide band nodes.
    - v. To monitor the network, Network management System (NMS) would also be envisaged.
    - vi. 53 Nos. DC power supply have been envisaged at all the wide-band location. However, this requirement shall be optimized during detailed engineering.
  - c. As per the IA communicated through the Memorandum dated 27.3.2012, the communication assets were scheduled to be commissioned within 30 months from the date of the IA, i.e., 26.3.2012. The details of the Scheduled Commercial Operation Date (SCOD), Date of Commercial Operation (COD), and time over-run in the case of the communication assets are as under:

<b>Name of Asset</b>	<b>SCOD</b>	<b>COD</b>	<b>Time over-run</b>
Asset- I	25.9.2014	1.2.2018	1225 days
Asset-II		1.2.2018	1225 days

4. The project was discussed and deliberated in the 15<sup>th</sup> Eastern Regional Power



Committee (ERPC), 16<sup>th</sup> ERPC, 17<sup>th</sup> ERPC, 22<sup>nd</sup> ERPC, 25<sup>th</sup> ERPC, and 31<sup>st</sup> ERPC meetings along with the 2<sup>nd</sup> Standing Committee Meeting (SCM) of Eastern Region (ER) held on 27.8.2013.

5. The details of Petitions filed by the Petitioner under the transmission project in Eastern Region are as under:

Sl. No.	Name of Asset	Actual DOCO	Petition No.
1	02 Nos. OPGW links under the Central Sector (127 km){therein referred as Asset-1}	1.11.2013	Covered in Petition No. 474/TT/2020 for truing up of the 2014-19 period.
2	03 Nos. OPGW links under the Central Sector (170.234 km) {therein referred as Asset-2}	1.3.2014	
3	11 Nos. of OPGW link under the central sector (789.635 km) {therein referred as Asset-3}	1.10.2014	
4	03 Nos. OPGW links under the Central Sector (112.886 km) {therein referred as Asset-4}	20.4.2015	
5	05 Nos. links under the Central Sector (527.751 km) {therein referred as Asset-5}	5.1.2016	
6	06 Nos. links under the Central Sector (562.873 km) {therein referred as Asset-6}	31.3.2016	
7	07 Nos. links under the Central Sector (664.53 km) {therein referred as Asset-7}	1.3.2017	
<b>Balance Scope under the current Petition</b>			
8	<b>Asset-I:</b> 01 No. link {Sasaram – Daltonganj} under the Central Sector (196.132 km)	1.2.2018	<b>Covered in the instant Petition</b>
9	<b>Asset-II:</b> 01 No. link {Barh – Kahalgaon} under the Central Sector (215.22 km)	1.2.2018	
<b>Balance Scope (to be filed under tariff block 2019-24)</b>			
10	01 No. link {Punatsangchu - Alipurduar} under Central Sector	Works complete. Yet to be declared under commercial operation	To be filed subsequently
11	01 No. link {Jeypore- Bolangir} under the Central Sector	19.5.2019	
12	01 No. link {Biharsharif - Koderma} under the Central Sector	19.1.2021	
13	01 No. link {Biharsharif - Banka} under the Central Sector	Dec' 2022 (anticipated)	



6. The communication assets, as mentioned above at Sl. Nos. 1 to 7 are covered in Petition No. 474/TT/2020 for truing up of tariff for the 2014-19 period. The communication assets, mentioned above at Sl. Nos. 8 to 9 are covered in the instant Petition, and the same are the last two elements of the communication project, which have been commissioned in the 2014-19 tariff block. Further, a separate Petition will be filed by the Petitioner for the balance scope of work, as mentioned above at Sl. Nos. 10 to 13, commissioned/ to be commissioned in the 2019-24 tariff block.

7. The Petitioner has served a copy of the Petition on the Respondents, and notice regarding the filing of this Petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. Bihar State Power (Holding) Company Limited (BSPHCL), Respondent No. 1, *vide* affidavit dated 3.1.2024, has filed its reply and has raised the issues of time overrun, Initial Spares, Return on Equity (RoE), Tax on RoE, and Interest on Loan (IoL). The Petitioner has filed a rejoinder to the reply of BSPHCL *vide* affidavit dated 15.2.2024. The issues raised by BSPHCL and the clarifications thereto given by the Petitioner have been considered in the preceding paragraphs of this order.

8. The final hearing in this matter was held on 27.2.2024, and the order was reserved.

9. Having heard the representatives of the Petitioner, learned counsel for the Respondent, BSPHCL, and perused the material on record, we proceed to dispose of the Petition.



**DETERMINATION-CUM-TRUE UP OF THE ANNUAL FIXED CHARGES (AFC) FOR THE 2014-19 TARIFF PERIOD**

10. The details of the transmission tariff-cum-trued up tariff claimed by the Petitioner in respect of the communication assets for the 2014-19 tariff period are as under:

**Asset-I**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18 (pro-rata 59 days)	2018-19
Depreciation	0.00	0.00	0.00	4.61	28.99
Interest on Loan	0.00	0.00	0.00	3.99	23.78
Return on Equity	0.00	0.00	0.00	4.31	27.15
Interest on Working Capital	0.00	0.00	0.00	0.28	1.71
O&M Expenses	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>13.19</b>	<b>81.63</b>

**Asset-II**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18 (pro-rata 59 days)	2018-19
Depreciation	0.00	0.00	0.00	5.65	35.52
Interest on Loan	0.00	0.00	0.00	4.92	29.40
Return on Equity	0.00	0.00	0.00	5.27	33.26
Interest on Working Capital	0.00	0.00	0.00	0.34	2.11
O&M Expenses	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>16.18</b>	<b>100.29</b>

11. The details of the Interest on Working Capital (IWC) cum-trued up IWC claimed by the Petitioner in respect of the communication assets for the 2014-19 tariff period are as under:

**Asset-I**

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18 (pro-rata 59 days)	2018-19
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	0.00	0.00	0.00	13.60	13.61
Total Working Capital	0.00	0.00	0.00	13.60	13.61
Rate of Interest (in %)	0.00	0.00	0.00	12.60	12.60





<b>Interest on Working Capital</b>	0.00	0.00	0.00	<b>0.28</b>	<b>1.71</b>
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## Asset-II

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18 (pro-rata 59 days)	2018-19
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	0.00	0.00	0.00	16.68	16.72
Total Working Capital	0.00	0.00	0.00	16.68	16.72
Rate of Interest (in %)	0.00	0.00	0.00	12.60	12.60
<b>Interest on Working Capital</b>	0.00	0.00	0.00	<b>0.34</b>	<b>2.11</b>

### Date of Commercial Operation (COD)

12. The Petitioner has claimed the COD of the communication assets, namely Assets I and II, as of 1.2.2018. Regulation 4 of the 2014 Tariff Regulations dealing with COD provides as under:

**“4. Date of Commercial Operation:** The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

(1) Date of commercial operation in case of a generating unit or block of the thermal generating station shall mean the date declared by the generating company after demonstrating the maximum continuous rating (MCR) or the installed capacity (IC) through a successful trial run after notice to the beneficiaries, if any, and in case of the generating station as a whole, the date of commercial operation of the last generating unit or block of the generating station:

Provided that

(i) where the beneficiaries have been tied up for purchasing power from the generating station, the trial run shall commence after seven days notice by the generating company to the beneficiaries and scheduling shall commence from 0000 hr after completion of the trial run:

(ii) the generating company shall certify to the effect that the generating station meets the key provisions of the technical standards of Central Electricity Authority (Technical Standards for Construction of Electrical plants and electric lines) Regulations, 2010 and Grid Code:

(iii) the certificate shall be signed by CMD/CEO/MD of the company subsequent to its approval by the Board of Directors in the format enclosed at Appendix VI and a copy of the certificate shall be submitted to the Member Secretary, (concerned Regional Power Committee) and concerned RLDC before declaration of COD:

(2) Date of commercial operation in relation to a generating unit of hydro generating station including pumped storage hydro generating station shall mean the date declared by the generating company from 0000 hour after the scheduling process in accordance





with the Grid code is fully implemented, and in relation to the generating station as a whole, the date declared by the generating company after demonstrating peaking capability corresponding to installed capacity of the generating station through a successful trial run:

*Provided that:*

*(i) where beneficiaries have been tied up for purchasing power from generating station, scheduling process for a generating unit of the generating station or demonstration of peaking capability corresponding to installed capacity of the generating station through a successful trial run shall commence after seven days notice by the generating company to the beneficiaries and scheduling shall commence from 0000 hr after completion of trial run:*

*(ii) the generating company shall certify to the effect that the generating station meets key provisions of the technical standards of Central Electricity Authority (Technical Standards for Construction of Electrical plants and electric lines) Regulations, 2010 and Grid code:*

*(iii) the certificate shall be signed by CMD/CEO/MD of the company subsequent to its approval by the Board of Directors in the format enclosed at Appendix VI and a copy of the certificate shall be submitted to the Member Secretary, (concerned Regional Power Committee) and concerned RLDC before declaration of COD:*

*(iv) in case a hydro generating station with pondage or storage is not able to demonstrate peaking capability corresponding to the installed capacity for the reasons of insufficient reservoir or pond level, the date of commercial operation of the last unit of the generating station shall be considered as the date of commercial operation of the generating station as a whole, and it will be mandatory for such hydro generating station to demonstrate peaking capability equivalent to installed capacity of the generating unit or the generating station as and when such reservoir/pond level is achieved:*

*(v) if a run-of-river hydro generating station or a generating unit thereof is declared under commercial operation during lean inflows period when the water inflow is insufficient for such demonstration of peaking capability, it shall be mandatory for such hydro generating station or generating unit to demonstrate peaking capability equivalent to installed capacity as and when sufficient water inflow is available.*

*(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end:*

*Provided that:*

*(i) where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations:*

*(ii) in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof.*

*(4) Date of commercial operation in relation to a communication system or element thereof shall mean the date declared by the transmission licensee from 0000 hour of which a communication system or element is put into service after completion of site*



*acceptance test including transfer of voice and data to respective control centre as certified by the respective Regional Load Dispatch Centre.”*

13. In support of the COD of Asset-I and Asset-II, the Petitioner has submitted a copy of the Charging Certificate issued by Eastern Regional Load Despatch Centre (ERLDC) dated 22.11.2018 and self-declaration COD letters dated 26.4.2018 and 7.1.2022.

14. The communication system under the transmission project considered in the instant Petition comprises fibre optic communication systems. The operating voltage for communication system operation is 24/48 Volt DC supply. Therefore, as per the Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2010, a minimum of 650 volts is required for inspection by CEA. Further, the Central Government has specified the notified voltage for the purpose of self-certification under Regulations 30 and 43 of the Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2010, to be 11 kV, i.e., up to 11 kV no inspection is required to be done by the Inspector of the Central Electricity Authority (CEA). Hence, a CEA clearance letter is not applicable in a case of the communication system.

15. Taking into consideration the ERLDC Charging Certificates dated 22.11.2018, certifying the successful commissioning of the communication links on 31.1.2018, and the self-declaration COD letters dated 26.4.2018 and 7.1.2022, the COD of Asset-I and Asset-II is approved as 1.2.2018 for the purpose of determination of tariff in terms of Regulation 4(4) of the 2014 Tariff Regulations.

### **Capital Cost**

16. Regulation 9 of the 2014 Tariff Regulations provides as under:

**“9. Capital Cost:** (1) *The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of*



determination of tariff for existing and new projects.

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

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

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;

Increase in cost in contract packages as approved by the Commission;

Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;

Capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;

Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;

Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and

Adjustment of any revenue earned by the transmission licensee by using the assets before COD.”

17. The Petitioner vide Auditor’s Certificates dated 15.3.2022 has claimed the capital cost as on COD as per Regulation 9 of the 2014 Tariff Regulations and Additional Capital Expenditure (ACE) projected in the Financial Year (FY) 2017-18 and FY 2018-19 in respect of the communication assets and the details of the same are as under:

Asset Name	Apportioned Approved Cost as per FR	Cost as on COD	Actual ACE		Estimated Completion Cost up to 31.3.2019	ACE	Total Estimated Completion Cost up to 31.3.2024
						2022-23	
			2017-18	2018-19			
Asset-I	490.58	465.29	0.00	0.00	465.29	0.00	465.29
Asset-II	611.73	570.37	0.00	0.00	570.37	30.00	600.37
<b>TOTAL</b>	<b>1102.31</b>	<b>1035.66</b>	<b>0.00</b>	<b>0.00</b>	<b>1035.66</b>	<b>30.00</b>	<b>1065.66</b>

### Cost Over-run

18. According to the Petitioner, the total FR approved cost is ₹1102.31 lakh, and the estimated completion cost is ₹1065.66 lakh. Since the estimated completion cost of both communication assets is within the apportioned FR cost, there is no cost overrun.



### Time Over-run

19. As per the IA dated 26.3.2012, the transmission project was scheduled to be put under commercial operation within 30 months from the date of the IA, i.e., by 25.9.2014. However, the details of the actual commissioning of the communication assets are as under:

Name of Asset	SCOD as per the IA	COD	Delay vis-à-vis SCOD
Asset-I	25.9.2014	1.2.2018	1225 days
Asset-II		1.2.2018	1225 days

20. There is a delay of 1225 days in the execution of both Asset-I and Asset-II. The detailed reasons for the time overrun in the case of the communication assets, as submitted by the Petitioner, vide affidavit dated 28.11.2022, are as follows:

### Asset-I

21. The Petitioner has submitted that the delay in commissioning of Asset-I was due to the delayed completion of the main transmission line, i.e., 400 kV D/C Sasaram-Daltonganj transmission line, which was covered under the ERSS-III Project and covered in Petition No. 105/TT/2018. The details of the commissioning of the D/C Sasaram-Daltonganj transmission line are as under:

For ERSS-III				
Name of Asset	SCOD as per IA	COD		Delay vis-à-vis SCOD
400 kV D/C Sasaram-Daltonganj line	2.11.2012	<i>CEA charging application</i>	15.12.2017	1975 days
		<i>CEA compliance reports</i>	January, 2018	
		<i>CEA charging clearance receipt</i>	27.3.2018	
		COD	31.3.2018	

22. The Petitioner has submitted that as per the IA dated 2.7.2010 submitted in Petition No. 105/TT/2018, the commissioning schedule of the 400 kV D/C Sasaram –



Daltonganj line was 28 months from the date of the IA. Hence, the communication assets under the ERSS-III Project were to be commissioned in a progressive manner by 2.11.2012, against which the transmission line was commissioned on 31.3.2018 with a delay of 1975 days. The Petitioner has further submitted that though the commercial operation of the transmission line was declared on 31.3.2018, the line was physically completed by the Petitioner in December 2017.

23. The Petitioner has submitted that since the Optical Ground Wire (OPGW) works of Asset-I were to be executed over the transmission line, the completion of the transmission line was a pre-condition for completion of the corresponding OPGW works. As the transmission line was completed by December 2017, the commercial declaration was effective subsequent to the final CEA charging clearance in March 2018. The Petitioner has submitted that the OPGW works on this transmission line were going on parallelly, and the balance of OPGW works had been executed in the months of December 2017-January, 2018, i.e., subsequent to physical completion of the transmission line leading to actual COD on 1.2.2018, post SLDC charging approval dated 31.1.2018.

24. The Petitioner has submitted that there had been an inordinate delay of 1975 days (approximately 66 months) in the completion of this transmission line which was declared under commercial operation w.e.f. 31.3.2018 (though completed in December 2017) as against its SCOD, i.e., 2.11.2012 under the ERSS-III Project. The delay in execution of the main line was mainly on account of the delay in land acquisition, law and order issues, and obstruction caused by the existing line, etc. The Petitioner has submitted that the delay, as mentioned above, has been condoned by the Commission *vide* its order dated 21.11.2019 in Petition No. 105/TT/2018. The Petitioner has



requested that the delay for the OPGW link corresponding to the 400 kV D/C Saasaram-Daltonganj transmission line may be condoned on merits as mentioned in the order dated 21.11.2019 in Petition No. 105/TT/2018 since the instant OPGW expansion works could have been completed/ commissioned only after the completion of the said transmission line.

### **Asset-II**

25. The Petitioner has submitted that there is a delay of 1225 days (approximately 40 months) in the commissioning of the Asset-II as against its SCOD, i.e. on 25.9.2014. The reasons for delay primarily include non-availability of shutdowns, Right of Way (RoW) issues at certain locations, and slow mobilization by the contractors. Further, since the instant link had to be carried out on an existing transmission line, i.e., 400 kV Barh-Kahalgaon, the availability of shut-down was imperative for the execution of the OPGW works. The Petitioner has submitted that the shutdown was not available for the desired durations and the work had to be carried out as and when the shutdown was approved. Further, the nature of shutdowns granted was mostly on a daily basis, while the same was needed on a continuous basis. Thus, the delay in commissioning of Asset-II was mainly due to RoW problems at several locations during the installation of the OPGW cable and the non-availability of the PTW/shut-down from the grid operators owing to system constraints. Further, the delay in commissioning was also on account of the RoW issues encountered at various locations from time to time which took considerable time to get the same resolved. This resulted in the delay of installation of OPGW cable at various locations. In view of the above, the Petitioner has prayed that the delay was beyond its control and same may be condoned.

26. BSPHCL, vide affidavit dated 3.1.2024, has submitted that as per the IA, the



transmission scheme was scheduled to be commissioned within 30 months from the date of IA, i.e., 26.3.2012. However, there is a delay of 1255 days in the communication assets. Further, in reply to the submissions of the Petitioner in respect of the commissioning of the assets getting delayed on account of reasons beyond its control, the BSPHCL has submitted that with regard to the controllable and uncontrollable parameters, the 2019 Tariff Regulations provides for prudence check by the Commission for deciding the time overrun, and cost escalation. Therefore, the delay on account of each reason in case of time over-run should be quantified and substantiated with necessary documents.

27. BSPHCL has made the following submissions with regard to the time overrun of the communication assets:

- (i) The delay on account of each reason in case of time overrun should be quantified and substantiated with the necessary documents. The Petitioner has not provided any supporting documents to substantiate its claim regarding the non-availability of the shutdowns with respect to Asset-II.
- (ii) Since the time overrun in the case of Asset-II on account of the slow mobilization by the contractors is covered under contractual issues, falls under controllable events.
- (iii) BSPHCL has placed reliance on the Commission's order dated 29.8.2023 in Petition No. 113/TT/2021. The responsibility to mitigate the procedural delay is on the Petitioner and the reasons for the delay mentioned in the Petition, such as the non-availability of shutdowns and slow mobilization by contractors, should have been considered at the time of planning.





Slow mobilization by the contractors is a contractual issue between the Petitioner and its contractors and these are operational and commercial risks involved in the implementation of a project. The reasons cited by the Petitioner are not tenable, and as such, the delay may not be condoned.

- (iv) Prior to the IA of the transmission project, the Petitioner is expected to foresee the issue related to RoW issue. Therefore, the RoW issue cannot be said to be an unforeseen circumstance and the delay on this count may not be condoned.
- (v) Since the reasons for the delay cited by the Petitioner are controllable in nature, the claim under this head is liable to be rejected as the period of delay is huge in nature, which in turn increases the tariff.

28. In response, the Petitioner has reiterated its submissions as made in the Petition and submitted that justifications for the time overrun are given in the Petition and that delay reasons are substantiated by the documentary evidence.

### **Analysis and Decision on Time Overrun**

#### **Asset-I**

29. We have examined the submissions of the Petitioner and Respondent and have gone through the documents available on record. As per the IA dated 26.3.2012, Asset-I was scheduled to be put into commercial operation within 30 months from the date of the IA, i.e., by 25.9.2014. However, Asset-I was put into commercial operation on 1.2.2018, with a delay of 1225 days. The main reason for the time overrun in the commissioning of the OPGW link was due to the delay in completion of the associated



transmission line, i.e., 400 kV D/C Sasaram – Daltonganj transmission line.

30. The Board of Directors of the Petitioner accorded a separate IA on 2.7.2010 for the implementation of the 400 kV D/C Sasaram– Daltonganj transmission line under the ERSS-III Project. As per the IA dated 2.7.2010, the said transmission line was scheduled to be put into commercial operation within 28 months, i.e., by 2.11.2012, against which it was put into commercial operation on 31.3.2018 with a time overrun of about 1975 days. The Petitioner has submitted that the delay in the main transmission line was mainly due to delayed land acquisition at Daltonganj, law and order issues, and obstruction caused by the existing line of M/s JUSNL, etc. However, the said delay in the commissioning of the main transmission line had been condoned by the Commission in its order dated 21.11.2019 in Petition No. 105/TT/2018. The relevant portions of the said order are extracted as under:

*“44. ...The Petitioner has claimed COD of Asset-I(A)(i) and Asset-I(B) as 31.3.2018 and 5.11.2018 with a time delay of 1975 days and 2194 days. The COD of the Asset-II has been considered as 16.9.2018 with a time delay of 2144 days.*

*45. The Petitioner has attributed the time overrun in case of Asset-I and Asset-II to delay in getting land acquisition for the Daltonganj Substation, delay due to retendering of LOA and delay due to obstruction from JUSNL transmission line. The Petitioner had made application for 40.10 acre of land on 27.5.2009 much before i.e. about one year prior to the Investment Approval of 2.7.2010. Thereafter, the Petitioner vide letter dated 20.3.2010, deposited ₹ 4 crore towards land acquisition. The Petitioner, followed it up with letters dated 14.5.2010, 8.6.2010, 4.8.2010, 19.10.2010, 28.10.2010, 3.11.2010, 14.12.2010, 15.12.2010, 23.3.2011, 18.3.2011, 27.6.2011, 12.9.2011, 9.11.2011, 23.11.2011, 20.1.2012, 19.3.2012 and 10.4.2012. The Petitioner obtained certificate of possession of land on 31.7.2015. The time period prior to Investment Approval date of 2.7.2010 is not condonable as the same is considered under normal scheduled activity. Normal time in land acquisition is about one year from date of IA. However, the time taken for obtaining land was from 2.7.2010 to 31.7.2015 (1855 days). Therefore the time delay of about 1490 days (1855-365) due to acquisition of land is beyond the control of the Petitioner and the same has been condoned.....*

*47. The Petitioner has submitted that after possession of land at Daltonganj, the work was hampered due to severe law & order and ROW problems. The Petitioner has submitted letters dated 18.9.2015, 26.11.2015 to substantiate its claim. We have gone through the submissions of the Petitioner and observe that the time delay from 18.9.2015 to 26.11.2015 (69 days) due to ROW problem is beyond the control of the Petitioner and the same has been condoned.*

*48. The Petitioner has submitted that delay in diversion of 220 KV Latehar- Daltonganj*



*D/C line of JUSNL led to delay in construction of Daltonganj Substation. The Petitioner has submitted that it took up the issue with JUSNL in the month of April, 2014 and also sent various letters dated 21.4.2015, 18.9.2015, 2.9.2016, 7.10.2016, 8.1.2017 and 17.3.2017. The Petitioner has submitted that the issue was discussed in 37th ERPC meeting held on 3.8.2017 and finally the said diversion work was completed by JUSNL on December, 2017. The issue was resolved on 9.3.2018 and the Petitioner, thereafter, commissioned the 400/220 kV Daltonganj Sub-station on 31.3.2018.*

*49. We have gone through the submissions of the Petitioner and the supporting documentary evidence. However, we note that the time delay from April 2014 to 31.7.2015 is subsumed in the activities of land acquisition while that from 18.9.2015 to 26.11.2015 is subsumed in delay due to law & order and ROW problems. The delay on account of this is not attributable to the Petitioner. Therefore, the period from 26.11.2015 to 31.12.2017 of 765 days was beyond the control of the Petitioner and, therefore, condoned.*

*50. In view of the above, the delay due to Land acquisition of 1490 days, ROW issues of 69 days and obstruction of JUSNL line of 765 days totaling to 2324 days was beyond the control of the Petitioner. However, **the Petitioner compressed the execution time and commissioned the Asset-I(A)(i), Asset-I(B) and Asset-II with an overall delay of 1975 days, 2194 days and 2144 days, respectively. Therefore, the total time delay of 1975 days, 2194 days and 2144 days in commissioning of Asset- I(A)(i), Asset-I(B) and Asset-II is condoned.***

31. It is noticed from the above order dated 21.11.2019 that the delay was on account of RoW issues at various locations, delay in land acquisition at Daltonganj Sub-station and, as such, the time overrun of 1975 days (from SCOD to COD, i.e., from 2.11.2012 to 31.3.2018) was condoned. In the instant Petition, IA was granted on 26.3.2012 and SCOD of the communication assets was 25.9.2014. The Petitioner was required to install the OPGW fibre optic cable on the new EHV transmission line, i.e., 400 kV D/C Sasaram- Daltonganj Transmission Line. Therefore, the delay in the commissioning of the transmission line had a direct impact on the completion and installation of the OPGW fibre cable. As the delay in commissioning of the main line, i.e., 400 kV D/C Sasaram- Daltonganj Transmission Line, was condoned in Petition No. 105/TT/2018, we condone the delay of 1225 days in case of the instant OPGW link, i.e., from 25.9.2014 to 1.2.2018.



## **Asset-II**

32. The Petitioner has submitted that the Asset-II is delayed due to the non-availability of shutdown, ROW issues at certain locations and slow mobilization by contractors.

33. We have gone through the submissions of the Petitioner. With respect to the non-availability of shutdown, the Commission observes from the submissions of the petitioner that it is not clear when the petitioner required the shutdown, when he got the shutdown approval, and the period affected due to shutdown. Due to the non-submission of documentary evidence, we are not inclined to condone the time overrun on account of delay in obtaining shutdown approval. The Petitioner has submitted due to ROW problems at several locations the installation of OPGW on the existing transmission line is affected. We have gone through the submissions of the Petitioner. The Petitioner has not submitted the locations where he had faced the ROW problem and when he had finally resolved the ROW issue at various locations. The Petitioner has not submitted any documentary evidence in support of ROW problems faced at various locations. Due to the non-submission of any documentary evidence in support of ROW problems, we are not inclined to condone the delay on account of ROW problems, considering that the work was being carried out on an existing transmission line. The Petitioner has submitted that the asset is delayed due to the slow mobilization of contractors. As per Regulation 22(1)(b) of the 2019 Tariff Regulations, if the delay is on account of the contractor or supplier, the same falls under controllable factor and is not condonable. Accordingly, the delay on account of the mobilization of contractors is not condoned. It is further observed that the Petitioner has not provided specific date-wise chronology and supporting documents to arrive at the event-wise quantum of delay caused during the period. . Due to the non-submission of documentary evidence and the precise time period affected by



these activities, we are not in a position to analyze the time overrun in the case of Asset-II. Accordingly, the time overrun of 1225 days in case of Asset-II, is not condoned.

34. Accordingly, the details of time overrun condoned and not condoned in respect of the communication assets are as under:

Asset name	SCOD	COD	Time over-run	Time over-run condoned	Time overrun not condoned
Asset-I	25.9.2014	1.2.2018	1225 days	1225 days	-
Asset-II		1.2.2018	1225 days	-	1225 days

**Interest During Construction (IDC) / Incidental Expenditure During Construction (IEDC)**

35. The Petitioner has claimed the IDC of the communication assets covered in the instant Petition and has submitted the details of the statement showing IDC claim, discharge of IDC liability as on COD, and thereafter, and the same are as under:

(₹ in lakh)

Assets	IDC as per Auditor's Certificate	IDC discharged up to COD	IDC discharged during 2018-19	IDC discharged during 2019-20
Asset-I	37.92	23.38	14.54	0.00
Asset-II	46.56	28.12	18.44	0.00

36. We have considered the submissions of the Petitioner. As discussed above in this order, the time overrun for Asset-I has been completely condoned, while the time over-run for Asset-II has not been condoned. Accordingly, IDC on a cash basis up to the COD, has been worked out based on the loan details submitted by the Petitioner for Asset-I. The IDC claimed and considered as on the COD and discharge summary of the IDC liability up to the COD and thereafter of the communication assets for the purpose of tariff determination and truing up are as under:



(₹ in lakh)

Assets	IDC as per Auditor's Certificate	IDC disallowed due to time over-run not condoned	IDC Allowed	IDC Discharged up to COD	IDC discharged during 2018-19
Asset-I	37.92	0.00	37.92	23.38	14.54
Asset-II	46.56	46.56	0.00	0.00	0.00

37. Further, the Petitioner has claimed IEDC for the communication assets as per the Auditor's Certificate. The Petitioner has further submitted that the entire amount of IEDC for the communication assets has been discharged up to the COD, and the time overrun for Asset-I has been fully condoned; the IEDC for Asset-I is fully allowed. Since the time overrun for Asset-II has not been condoned, the IEDC for the time over-run, which has not been condoned is disallowed. Accordingly, IEDC claimed as per the Auditor's Certificate, IEDC considered and discharged up to the COD for the purpose of tariff determination and truing up in respect of the communication assets as under:

(₹ in lakh)

Assets	IEDC claimed as per Auditor's Certificate (A)	IEDC disallowed due to time over-run not condoned (B)	IEDC allowed (C)=(A-B)
Asset-I	0.74	0.00	0.74
Asset-II	0.90	0.52	0.38

### Initial Spares

38. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of Initial Spares in respect of the communication assets as under:

#### ***"13. Initial Spares***

*Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:*

*(d) Transmission system*

*(i) Transmission line - 1.00%*

*(ii) Transmission Sub-station (Green Field) - 4.00%*

*(iii) Transmission Sub-station (Brown Field) - 6.00%*

*(iv) Series Compensation devices and HVDC Station - 4.00%*

*(v) Gas Insulated Sub-station (GIS)-5.00%*



(vi) Communication system-3.5%

Provided that:

(i) where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:

(ii)

(iii) Once the transmission project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the transmission project at the time of truing up:

(iv) for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the breakup of head wise IDC & IEDC in its tariff application.”

39. The Petitioner has claimed Initial Spares for the communication assets and submitted the Auditor’s Certificates in support thereof. The Petitioner has submitted that the 2014 Tariff Regulations provide that once the project is commissioned, the cost of the Initial Spares shall be restricted on the basis of the plant and machinery cost corresponding to the transmission project at the time of truing up. The Petitioner has requested to allow the Initial Spares to consider the project as a whole after the commissioning of the entire project.

40. The Petitioner has submitted that the entire amount incurred towards Initial Spares has been discharged up to the COD. The amount towards balance liabilities on account of the Initial Spares has been considered in the ACE of the respective year and the Petitioner has prayed to allow the entire Initial Spares claimed in the instant Petition. The details of the Initial Spares claimed by the Petitioner in respect of the communication assets are as under:

(₹ in lakh)

Asset name	Capital Cost (A)		Ceiling (B)		Spares claimed (C)		Spares Limit D = [(A-C)*B / (100-B)]	
	TL/SS	PLCC	TL/SS	PLCC	TL/SS	PLCC	TL/SS	PLCC
Asset-I	0	465.29	-	3.50%	-	6.17	-	16.65
Asset-II	0	600.37	-	3.50%	-	6.80	-	24.73

41. BSPHCL has submitted that the Initial Spares may be considered as per





Regulation 23 of the 2019 Tariff Regulations and any claims beyond the same are liable to be rejected. In response, the Petitioner has submitted that the Initial Spares for the communication assets are within the ceiling prescribed in the 2014 Tariff Regulations and the same may be allowed.

42. We have considered the submissions of the Petitioner and BSPHCL. It is noticed that the COD of the communication assets has been considered as 1.2.2018. Therefore, Regulation 13 of the 2014 Tariff Regulations will be applicable for the purpose of computation of Initial Spares. Accordingly, the contention of BSPHCL that the Initial Spares may be considered as per Regulation 23 of the 2019 Tariff Regulations is not sustainable. The details of Initial Spares allowed for the purpose of tariff determination and truing up are as follows:

(₹ in lakh)

Assets	Elements	Plant and Machinery Cost (A)	Initial Spares Claimed (B)	Ceiling (In %) (C)	Initial Spares worked out	Excess [B-D] if B>D	Initial Spares Allowed
					$D = [(A-B)*C/(100-C)]$		
Asset-I	PLCC	426.63	6.17	3.50	15.25	0.00	6.17
Asset-II	PLCC	522.91	6.80	3.50	18.72	0.00	6.80

**Capital Cost as on COD**

43. The details of the capital cost approved as on COD in respect of the communication assets are as follows:

(₹ in lakh)

Assets	Capital Cost claimed as on COD (Auditor's Certificate) (A)	IDC disallowed due to computational difference / time over-run not condoned (B)	Undischarged IDC as on COD (C)	Less: IEDC disallowed (D)	Excess Initial Spares disallowed as on COD (E)	Capital Cost as on COD (F) = (A-B- C-D-E)
Asset-I	465.29	0.00	14.54	0.00	0.00	450.75
Asset-II	570.37	46.56	0.00	0.52	0.00	523.29



### **Additional Capital Expenditure (ACE)**

44. The Petitioner has not claimed ACE for the communication assets for the 2014-19 tariff period.

45. We have considered the submissions of the Petitioner. As per Regulation 3(13) of the 2014 Tariff Regulations, the cut-off date for the communication assets is 31.3.2021. As the Petitioner has not claimed any ACE for the 2014-19 period, we have not allowed the same in the instant Petition. Further, IDC discharge of ₹14.54 lakh during the FY 2018-19 has been allowed for the Asset-I. However, as the Petitioner has not claimed any ACE for Asset-II, the same is not being considered in the instant Petition.

### **Capital Cost for Determination and Truing-up of Tariff for the 2014-19 Period**

46. Accordingly, the capital cost considered in respect of the communication assets for the purpose of tariff determination and truing up of the 2014-19 tariff period is as follows:

Asset	Apportioned Approved Capital Cost (FR)	Capital Cost allowed as on COD	ACE allowed in 2014-19	(₹ in lakh)
				Capital Cost allowed as on 31.3.2019
Asset-I	490.58	450.75	14.54*	465.29
Asset-II	611.73	523.29	0.00	523.29

\*IDC discharge during 2018-19

### **Debt-Equity Ratio**

47. The Petitioner has claimed a debt-equity ratio in respect of communication assets as provided under Regulation 19 of the 2014 Tariff Regulations., The details of the debt-equity ratio of the communication assets as on the COD and 31.3.2019 are as follows:



## Asset-I

Funding	Capital Cost as on COD (₹ In lakh)	(In %)	ACE during 2014-19 (₹ in lakh)	(In %)	Capital Cost as on 31.3.2019 (₹ in lakh)	(In %)
Debt	315.53	70.00	10.18	70.00	325.70	70.00
Equity	135.23	30.00	4.36	30.00	139.59	30.00
<b>Total</b>	<b>450.75</b>	<b>100.00</b>	<b>14.54</b>	<b>100.00</b>	<b>465.29</b>	<b>100.00</b>

## Asset-II

Funding	Capital Cost as on COD (₹ in lakh)	(In %)	ACE during 2014-19 (₹ in lakh)	(In %)	Capital Cost as on 31.3.2019 (₹ in lakh)	(In %)
Debt	366.31	70.00	0.00	70.00	366.31	70.00
Equity	156.99	30.00	0.00	30.00	156.99	30.00
<b>Total</b>	<b>523.29</b>	<b>100.00</b>	<b>0.00</b>	<b>100.00</b>	<b>523.29</b>	<b>100.00</b>

## Depreciation

48. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation provides as under:

### **"27. Depreciation:**

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. 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 or elements thereof.

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 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 68 be allowed up to maximum of 90% of the capital cost of the asset:

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

Provided further 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 generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and 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-II 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 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2014 from the gross depreciable value of the assets.

...”

49. The Gross Block during the 2014-19 period has been depreciated at the Weighted Average Rate of Depreciation (WAROD). The WAROD at Annexure-I has been worked out after taking into account the depreciation rates of the assets as prescribed under Regulation 27 of the 2014 Tariff Regulations. Accordingly, the depreciation allowed for the purpose of determination of the tariff and truing up of the communication assets during the 2014-19 tariff period is as follows:

Particulars	(₹ in lakh)	
	Asset-I	
	2017-18 (Pro-rata 59 days)	2018-19
Opening Gross Block (A)	450.75	450.75
Additional Capitalisation (B)	0.00	14.54
Closing Gross Block (C=A+B)	450.75	465.29
Average Gross Block $D=(A+C)/2$	450.75	458.02
Freehold Land	0.00	0.00
Weighted Average Rate of Depreciation (WAROD) (in %) (E)	6.33	6.33
Lapsed useful life at the beginning of the year	0	0
Balance useful life at the beginning of the year	15	15
Aggregated Depreciable Value (F=D*90%)	405.68	412.22
<b>Depreciation during the Year (G=D*E)</b>	<b>4.61</b>	<b>28.99</b>



Particulars	Asset-I	
	2017-18 (Pro-rata 59 days)	2018-19
Cumulative Depreciation at the end of the year <b>(H)</b>	4.61	33.60
Remaining Aggregate Depreciable Value at the end of year <b>I=(F-H)</b>	401.07	378.62

(₹ in lakh)

Particulars	Asset-II	
	2017-18 (Pro-rata 59 days)	2018-19
Opening Gross Block <b>(A)</b>	523.29	523.29
Additional Capitalisation <b>(B)</b>	0.00	0.00
Closing Gross Block <b>(C=A+B)</b>	523.29	523.29
Average Gross Block <b>D=(A+C)/2</b>	523.29	523.29
Freehold Land	0.00	0.00
Weighted Average Rate of Depreciation (WAROD) (in %) <b>(E)</b>	6.33	6.33
Lapsed useful life at the beginning of the year	0	0
Balance useful life at the beginning of the year	15	15
Aggregated Depreciable Value <b>(F=D*90%)</b>	470.96	470.96
<b>Depreciation during the Year (G=D*E)</b>	<b>5.35</b>	<b>33.12</b>
Cumulative Depreciation at the end of the year <b>(H)</b>	5.35	38.47
Remaining Aggregate Depreciable Value at the end of year <b>I=(F-H)</b>	465.61	432.49

### Interest on Loan (IoL)

50. Regulation 26 of the 2014 Tariff Regulations provides as under:

*“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.*

*The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.*

*The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization 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 up to the date of decapitalisation of such asset.*

*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.*



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.

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

51. The Petitioner has claimed the Weighted Average Rate of Interest (WAROI) on the basis of the actual loan portfolio and rate of interest. IoL has been calculated based on the actual interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. The IoL for the purpose of tariff determination and truing up allowed in respect of the communication assets is as follows:

Particulars	(₹ in lakh)	
	Asset-I	
	2017-18 (Pro-rata 59 days)	2018-19
Gross Normative Loan (A)	315.53	315.53
Cumulative Repayment up to previous Year(B)	0.00	4.61
Net Loan-Opening C=(A-B)	315.53	310.91
Addition due to ACE (D)	0.00	10.18
Repayment during the year (E )	4.61	28.99
Net Loan-Closing F=(C+D-E)	310.91	292.10
Average Loan G=(C+F)/2	313.22	301.51
Weighted Average Rate of Interest on Loan (in %) (H)	7.885	7.888
<b>Interest on Loan I=(G*H)</b>	<b>3.99</b>	<b>23.78</b>

Particulars	(₹ in lakh)	
	Asset-II	
	2017-18 (Pro-rata 59 days)	2018-19
Gross Normative Loan (A)	366.31	366.31
Cumulative Repayment up to previous Year(B)	0.00	5.35
Net Loan-Opening C=(A-B)	366.31	360.95
Addition due to ACE (D)	0.00	0.00
Repayment during the year (E )	5.35	33.12
Net Loan-Closing F=(C+D-E)	360.95	327.83
Average Loan G=(C+F)/2	363.63	344.39
Weighted Average Rate of Interest on Loan (in %) (H)	7.939	7.960
<b>Interest on Loan I=(G*H)</b>	<b>4.67</b>	<b>27.41</b>



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

52. Clauses (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014

Tariff Regulations provide as under:

**“24. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the 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:

(i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in

**Appendix-I:**

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% 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)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.

**“25. Tax on Return on Equity:**

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 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 the 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 income on other income stream (i.e., income of non- generation or non-transmission business, as the case may be) shall not be considered 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.”*

53. The Petitioner has claimed RoE for the communication 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 the MAT rates and it has claimed the following effective tax rates for the 2014-19 tariff period:

<b>Year</b>	<b>Claimed effective tax rate (in %)</b>	<b>Grossed-up RoE [(Base Rate)/(1-t)] (in %)</b>
2014-15	20.961	19.610
2015-16	21.342	19.705
2016-17	21.342	19.705
2017-18	21.342	19.705
2018-19	21.549	19.758

54. The Commission, vide order dated 27.4.2020 in Petition No. 274/TT/2019, has arrived at the effective tax rate based on the notified MAT rates for the Petitioner. The relevant extracts of the order dated 27.4.2020 are as under:

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

<b>Year</b>	<b>Notified MAT rates (In %) (inclusive of surcharge &amp; cess)</b>	<b>Effective tax (In %)</b>
2014-15	20.9605	20.9605
2015-16	21.3416	21.3416
2016-17	21.3416	21.3416
2017-18	21.3416	21.3416
2018-19	21.5488	21.5488

”

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



Year	Notified MAT rates (inclusive of surcharge and cess) (in %)	Base rate of RoE (in %)	Grossed-up RoE [(Base Rate)/(1- t)] (in %)
2014-15	20.9605	15.50	19.610
2015-16	21.3416	15.50	19.705
2016-17	21.3416	15.50	19.705
2017-18	21.3416	15.50	19.705
2018-19	21.5488	15.50	19.758

56. The Petitioner has claimed RoE for the 2014-19 period after grossing up the RoE @15.50% with effective tax rates (based on MAT rates) each year. The RoE allowed the purpose of tariff determination and truing up in respect of the communication assets on the basis of the MAT rates applicable in the respective years for the 2014-19 tariff period is as follows:

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (Pro-rata 59 days)	2018-19
Opening Equity (A)	135.23	135.23
Additions (B)	0.00	4.36
Closing Equity (C) = (A+B)	135.23	139.59
Average Equity (D) = (A+C)/2	135.23	137.41
Return on Equity (Base Rate) (in%) (E)	15.500	15.500
MAT Rate for respective year (in %) (F)	21.342	21.549
Rate of Return on Equity (In %) $G=E/(1-F)$	19.706	19.758
<b>Return on Equity( H=D*G)</b>	<b>4.31</b>	<b>27.15</b>

(₹ in lakh)

Particulars	Asset-II	
	2017-18 (Pro-rata 59 days)	2018-19
Opening Equity (A)	156.99	156.99
Additions (B)	0.00	0.00
Closing Equity (C) = (A+B)	156.99	156.99
Average Equity (D) = (A+C)/2	156.99	156.99
Return on Equity (Base Rate) (in%) (E)	15.500	15.500
MAT Rate for respective year (in %) (F)	21.342	21.549
Rate of Return on Equity (in %) $G=E/(1-F)$	19.706	19.758
<b>Return on Equity( H=D*G)</b>	<b>5.00</b>	<b>31.02</b>



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

57. The Petitioner has not claimed O&M Expenses for the communication assets for the 2014-19 tariff period. Accordingly, we have not considered any O&M Expenses.

### Interest on Working Capital (IWC)

58. IWC has been worked out as per the methodology provided under Regulation 28 of the 2014 Tariff Regulations. The IWC-cum-trued-up IWC allowed for the communication assets for the period from the COD to 31.3.2019 is as follows:

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (Pro-rata 59 days)	2018-19
Maintenance Spares	0.00	0.00
O&M Expenses	0.00	0.00
Receivables	13.60	13.60
<b>Total</b>	<b>13.60</b>	<b>13.60</b>
Rate of Interest (in %)	12.60	12.60
<b>Interest on Working Capital</b>	<b>0.28</b>	<b>1.71</b>

(₹ in lakh)

Particulars	Asset-II	
	2017-18 (Pro-rata 59 days)	2018-19
Maintenance Spares	0.00	0.00
O&M Expenses	0.00	0.00
Receivables	15.82	15.59
<b>Total</b>	<b>15.82</b>	<b>15.59</b>
Rate of Interest (in %)	12.60	12.60
<b>Interest on Working Capital</b>	<b>0.32</b>	<b>1.96</b>

### Trued-up Annual Fixed Charges (AFC) for the 2014-19 Tariff Period

59. The details of the transmission charges approved as determined and trued for the communication assets for the 2014-19 tariff period are as follows:

#### **Asset-I**

(₹ in lakh)

	Particulars	2017-18 (Pro-rata 59 days)	2018-19
A	Depreciation	4.61	28.99
B	Interest on Loan	3.99	23.78



C	Return on Equity	4.31	27.15
D	O&M Expenses	0.00	0.00
E	Interest on Working Capital	0.28	1.71
F	<b>Total</b>	<b>13.19</b>	<b>81.63</b>

#### Asset-II

		(₹ in lakh)	
	Particulars	2017-18 (Pro-rata 59 days)	2018-19
A	Depreciation	5.35	33.12
B	Interest on Loan	4.67	27.41
C	Return on Equity	5.00	31.02
D	O&M Expenses	0.00	0.00
E	Interest on Working Capital	0.32	1.96
F	<b>Total</b>	<b>15.34</b>	<b>93.51</b>

### DETERMINATION OF ANNUAL FIXED CHARGES (AFC) FOR THE 2019-24 TARIFF PERIOD

60. The details of the transmission charges claimed by the Petitioner for the communication assets for the 2019-24 tariff period in this Petition are as follows:

#### Asset -I

						(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Depreciation	29.45	29.45	29.45	29.45	29.45	
Interest on Loan	21.93	19.59	17.24	14.89	12.55	
Return on Equity	26.22	26.22	26.22	26.22	26.22	
Interest on Working Capital	1.42	1.48	1.54	1.47	1.43	
O&M Expenses	5.70	7.84	9.97	9.31	9.31	
<b>Total</b>	<b>84.72</b>	<b>84.58</b>	<b>84.42</b>	<b>81.34</b>	<b>78.96</b>	

#### Asset -II

						(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Depreciation	36.10	36.10	36.10	37.05	38.00	
Interest on Loan	27.14	24.25	21.56	19.70	17.50	
Return on Equity	32.14	32.14	32.14	32.98	33.83	
Interest on Working Capital	1.75	1.84	1.91	1.88	1.87	
O&M Expenses	7.36	10.12	12.86	12.01	12.01	
<b>Total</b>	<b>104.49</b>	<b>104.45</b>	<b>104.57</b>	<b>103.62</b>	<b>103.21</b>	

61. The details of IWC claimed by the Petitioner for the communication assets for the 2019-24 tariff period in this Petition are as follows:



## Asset -I

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses - one month	0.48	0.65	0.83	0.78	0.78
Maintenance Spares 15% of O&M Expenses	0.86	1.18	1.50	1.40	1.40
Receivables equivalent to 45 days of AFC	10.42	10.43	10.41	10.03	9.71
Total Working Capital	11.76	12.26	12.74	12.21	11.89
Bank rate as on 1.4.2019 or as on 1st April of the COD year, whichever is later. (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>1.42</b>	<b>1.48</b>	<b>1.54</b>	<b>1.47</b>	<b>1.43</b>

## Asset -II

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses - one month	0.61	0.84	1.07	1.00	1.00
Maintenance Spares 15% of O&M Expenses	1.10	1.52	1.93	1.80	1.80
Receivables equivalent to 45 days of AFC	12.85	12.88	12.89	12.78	12.69
Total Working Capital	14.56	15.24	15.89	15.58	15.49
Bank rate as on 1.4.2019 or as on 1st April of the COD year, whichever is later. (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>1.75</b>	<b>1.84</b>	<b>1.91</b>	<b>1.88</b>	<b>1.87</b>

## Capital Cost

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

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

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

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*



- (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
  - (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
  - (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
  - (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
  - (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
  - (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
  - (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
  - (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
  - (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
  - (n) Expenditure on account of change in law and force majeure events; and
  - (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (3) The Capital cost of an existing project shall include the following:
- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
  - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
  - (c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;
  - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
  - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
  - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (4) The capital cost in case of existing or new hydro generating station shall also include:
- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
  - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.



- (5) *The following shall be excluded from the capital cost of the existing and new projects:*
- (a) *The assets forming part of the project, but not in use, as declared in the tariff petition;*
  - (b) *De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:  
Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be de-capitalised only after its redeployment;*  
  
*Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.*
  - (c) *In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*
  - (d) *Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*
  - (e) *Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”*

63. The Petitioner has claimed the capital cost of ₹465.29 lakh for Asset-I and ₹570.37 lakh for Asset-II as on 31.3.2019. In the instant order, we have allowed the capital cost of ₹465.29 lakh for Asset-I and ₹523.29 lakh for Asset-II as on 31.3.2019. Accordingly, the capital cost of ₹465.29 lakh for Asset-I and ₹523.29 lakh for Asset-II has been considered as on 1.4.2019 for the determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

#### **Additional Capital Expenditure (ACE)**

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

#### ***“24. Additional Capitalisation within the original scope and upto the cut-off date***

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

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





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

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

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

*(1) The ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cutoff 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.”*

65. The Petitioner has submitted that the ACE for the FY 2022-23 amounting to ₹30 lakh is against the balance and retention payment, which has been kept as a part of the 10% retention amount corresponding to the contract closing to be done during the FY 2022-23. Thus, the Petitioner has claimed ACE of ₹30 lakh, which is admissible under Regulation 25(1)(d) of the 2019 Tariff Regulations.

66. The Petitioner has submitted the liability flow statement for the Asset-II, which is as follows:



(₹ in lakh)

Asset	Party	Particulars	Outstanding Liability as on COD	Discharge			Additional Liability (Unexecuted work)			Outstanding Liability as on 31.3.2023
				2021-22	2022-23	Total (19-24)	2021-22	2022-23	Total (19-24)	
Asset-II	M/s KEC and etc.	Fiber Optical Cable and Accessories	30.00	0.00	30.00	30.00	0.00	0.00	0.00	0.00
	M/s Commtel and etc.	Communication Equipment along with auxiliary power supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>			<b>30.00</b>	<b>0.00</b>	<b>30.00</b>	<b>30.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

67. BSPHCL has submitted that the Petitioner has not claimed any ACE during the 2014-19 and 2019-24 tariff periods with respect to Asset-I and has claimed ₹30 lakh as ACE for the 2019-24 tariff period with respect to Asset-II. However, the Petitioner has not substantiated the claim properly in the instant Petition. According to BSPHCL, in the absence of any pleading/data, no relief of ACE should be granted for Asset-II.

68. We have considered the submissions of the Petitioner and BSPHCL. The actual/ projected ACE allowed in respect of Asset-II under Regulation 25(1)(d) of the 2019 Tariff Regulations subject to truing-up is as follows:

**Asset-II**

Particulars	(₹ in lakh)	
	2022-23	Total
ACE as per Auditor's Certificate	30.00	30.00
Add: IDC Discharged	0.00	0.00
<b>ACE allowed in the instant order</b>	<b>30.00</b>	<b>30.00</b>

69. The capital cost considered for the communication assets for the 2019-24 tariff period is as follows:

Asset	Capital Cost as on 31.3.2019	(₹ in lakh)	
		Allowed ACE 2022-23	Capital Cost as on 31.3.2024
Asset-I	465.29	0.00	465.29
Asset-II	523.29	30.00	553.29



### **Liquidated Damages (LD)**

70. Vide Record of Proceedings (ROP) for the hearing dated 27.2.2024 the Petitioner was directed to submit the details of LD recovered/to be recovered/to be adjusted from each of the vendors on account of the delay in execution of works for both the communication assets. In response, the Petitioner has submitted the following information:

<b>Name of Asset</b>	<b>LD Amount (₹ in lakh)</b>
Asset-I 1 No. link {Sasaram-Daltonganj} under the Central Sector (196.132 km)	38.36
Asset-II 1 No. link {Barah-Kahalgaon} under the Central Sector (215.22 km)	28.35

71. As evident from the above information, the Petitioner has not mentioned whether the LD amount has been recovered, or it is to be recovered or it is required to be adjusted. In order to give an appropriate adjustment of the LD amount for the tariff determination, the Petitioner is directed to provide further details in the Auditor's Certificate regarding the date and the year of recovery of the LD amount at the time of truing up for the 2019-24 tariff period.

### **Debt-Equity ratio**

72. 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.

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation.”

73. The debt-equity ratio for the 2019-24 period is allowed as per Regulation 18 of the 2019 Tariff Regulations. The details of the debt-equity ratio considered in respect of the communication assets for the purpose of tariff for the 2019-24 tariff period are as follows:

#### Asset-I

Funding	Capital Cost as on 31.3.2019 (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	325.70	70.00	0.00	70.00	325.70	70.00
Equity	139.59	30.00	0.00	30.00	139.59	30.00
<b>Total</b>	<b>465.29</b>	<b>100.00</b>	<b>0.00</b>	<b>100.00</b>	<b>465.29</b>	<b>100.00</b>



## Asset-II

Funding	Capital Cost as on 31.3.2019 (₹ in lakh)	(in %)	ACE during 2019-24 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	366.31	70.00	21.00	70.00	387.31	70.00
Equity	156.99	30.00	9.00	30.00	165.99	30.00
<b>Total</b>	<b>523.29</b>	<b>100.00</b>	<b>30.00</b>	<b>100.00</b>	<b>553.29</b>	<b>100.00</b>

## Depreciation

74. 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 31<sup>st</sup> 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.*

*(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.*

*(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-*

*a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or*

*b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or*

*c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”*

75. We have considered the submissions of the Petitioner. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The WAROD at Annexure-II has been worked out for Assets-I and II as per the rates of depreciation prescribed in the 2019 Tariff Regulations. Depreciation allowed in respect of the communication assets for the 2019- 24 tariff period is as follows:





**Asset-I**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Depreciation</b>					
Opening Gross Block (A)	465.29	465.29	465.29	465.29	465.29
ACE (B)	0.00	0.00	0.00	0.00	0.00
Closing Gross Block C=(A+B)	465.29	465.29	465.29	465.29	465.29
Average Gross Block D= (A+C)/2	465.29	465.29	465.29	465.29	465.29
Weighted average rate of Depreciation (WAROD) (in %) (E)	6.33	6.33	6.33	6.33	6.33
Lapsed life at the beginning of the year	1.00	2.00	3.00	4.00	5.00
Balance useful life at the beginning of the year	14.00	13.00	12.00	11.00	10.00
Aggregate Depreciable Value F=(D*90%)	418.76	418.76	418.76	418.76	418.76
<b>Depreciation during the year G=(D*E)</b>	<b>29.45</b>	<b>29.45</b>	<b>29.45</b>	<b>29.45</b>	<b>29.45</b>
Cumulative Depreciation at the end of the year (H)	63.06	92.51	121.96	151.42	180.87
Remaining Aggregate Depreciable Value at the end of the year I=(F-H)	355.71	326.25	296.80	267.35	237.89

**Asset-II**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Depreciation</b>					
Opening Gross Block (A)	523.29	523.29	523.29	523.29	553.29
ACE (B)	0.00	0.00	0.00	30.00	0.00
Closing Gross Block C=(A+B)	523.29	523.29	523.29	553.29	553.29
Average Gross Block D= (A+C)/2	523.29	523.29	523.29	538.29	553.29
Weighted average rate of Depreciation (WAROD) (in %) (E)	6.33	6.33	6.33	6.33	6.33
Lapsed life at the beginning of the year (Year)	1.00	2.00	3.00	4.00	5.00
Balance useful life at the beginning of the year	14.00	13.00	12.00	11.00	10.00
Aggregate Depreciable Value F=(D*90%)	470.96	470.96	470.96	484.46	497.96
<b>Depreciation during the year G=(D*E)</b>	<b>33.12</b>	<b>33.12</b>	<b>33.12</b>	<b>34.07</b>	<b>35.02</b>
Cumulative Depreciation at the end of the year (H)	71.60	104.73	137.85	171.93	206.95
Remaining Aggregate Depreciable Value at the end of the year I=(F-H)	399.36	366.24	333.11	312.54	291.01





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

76. 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.*

(5a) *The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company 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.”*

77. The WAROI has been considered on the basis of the rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to the floating rate of interest applicable, if any, during the 2019-24 tariff period may be allowed to be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of truing-up. Therefore, we have allowed the IoL in accordance with Regulation 32 of



the 2019 Tariff Regulations for the communication assets as under:

**Asset-I**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan (A)	325.70	325.70	325.70	325.70	325.70
Cumulative Repayments up to Previous Year (B)	33.60	63.06	92.51	121.96	151.42
Net Loan-Opening C=(A-B)	292.10	262.65	233.19	203.74	174.29
Additions due to ACE (D)	0.00	0.00	0.00	0.00	0.00
Repayment during the year (E)	29.45	29.45	29.45	29.45	29.45
Net Loan-Closing F= (C+D-E)	262.65	233.19	203.74	174.29	144.84
Average Loan G=(C+F)/2	277.37	247.92	218.47	189.01	159.56
Weighted Average Rate of Interest on Loan (in %) (H)	7.906	7.900	7.891	7.880	7.861
Interest on Loan I=(G*H)/100	21.93	19.59	17.24	14.89	12.54

**Asset-II**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan (A)	366.31	366.31	366.31	366.31	387.31
Cumulative Repayments up to Previous Year (B)	38.48	71.60	104.73	137.85	171.93
Net Loan-Opening C=(A-B)	327.83	294.70	261.58	228.45	215.38
Additions due to ACE (D)	0.00	0.00	0.00	21.00	0.00-
Repayment during the year (E)	33.12	33.12	33.12	34.07	35.02
Net Loan-Closing F= (C+D-E)	294.70	261.58	228.45	215.38	180.36
Average Loan G=(C+F)/2	311.26	278.14	245.02	221.92	197.87
Weighted Average Rate of Interest on Loan (in %) (H)	7.982	7.977	8.048	8.150	8.150
Interest on Loan I=(G*H)/100	24.84	22.19	19.72	18.09	16.13

**Return on Equity (RoE)**

78. Regulations 30 and 31 of the 2019 Tariff Regulations provide as under:

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

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

Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on 7 account of emission control system, shall be computed at the weighted average rate of



interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

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.”

(3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODe) occurs plus 350 basis point, subject to ceiling of 14%.”

**“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 ₹ 1,000 crore;

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

(c) Effective Tax Rate for the year 2019-20 = ₹ 240 Crore / ₹ 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."

79. BSPHCL has submitted that the RoE and tax on RoE may be considered only as per Regulations 30 and 31 of the 2019 Tariff Regulations. BSPHCL has further submitted that nothing substantially has been pleaded by the Petitioner on this count. In response, the Petitioner has sought to refute BSPHCL's submissions and reiterated the submissions made in the Petition.

80. We have considered the submissions of the Petitioner and BSPHCL and have perused the record. According to the Petitioner, the MAT rate is applicable to it. Accordingly, the MAT rate applicable in the 2019-24 tariff period has been considered for the purpose of RoE, which will be trued-up in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed for the communication assets is as follows:



**Asset-I**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity (A)	139.59	139.59	139.59	139.59	139.59
Additions (B)	0.00	0.00	0.00	0.00	0.00
Closing Equity (C) = (A+B)	139.59	139.59	139.59	139.59	139.59
Average Equity (D) = (A+C)/2	139.59	139.59	139.59	139.59	139.59
Return on Equity (Base Rate) (In %) (E)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (In %) (F)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %) $G=(E/1-F)$	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity H=(D*G)</b>	<b>26.22</b>	<b>26.22</b>	<b>26.22</b>	<b>26.22</b>	<b>26.22</b>

**Asset-II**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity (A)	156.99	156.99	156.99	156.99	165.99
Additions (B)	0.00	0.00	0.00	9.00	0.00
Closing Equity (C) = (A+B)	156.99	156.99	156.99	165.99	165.99
Average Equity (D) = (A+C)/2	156.99	156.99	156.99	161.49	165.99
Return on Equity (Base Rate) (in %) (E)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %) (F)	17.47	17.47	17.47	17.47	17.47
Rate of Return on Equity (in %) $G=(E/1-F)$	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity H=(D*G)</b>	<b>29.48</b>	<b>29.48</b>	<b>29.48</b>	<b>30.33</b>	<b>31.18</b>

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

81. The Petitioner has claimed the actual O&M Expenses for the FY 2019-20 to FY 2021-22 and has submitted the Auditor's Certificate in support of the same, and for the FY 2022-23 and FY 2023-24, the O&M Expenses are claimed at 2% of the cost in line with Regulation 35(4) of the 2019 Tariff Regulations. The O&M Expenses claimed by the Petitioner for the communication assets for the 2019-24 tariff period are as follows:

**Asset-I**

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Original Project Cost	465.29	465.29	465.29	465.29	465.29
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Normative O&M Expenses	9.31	9.31	9.31	9.31	9.31



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	5.70*	7.84*	9.97*	9.31	9.31

\* Actual O&M Expenses claimed by Petitioner

#### Asset-II

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Original Project Cost	523.29	523.29	523.29	523.29	523.29
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Normative O&M Expenses	10.47	10.47	10.47	10.47	10.47
O&M Expenses	7.36*	10.12*	12.86*	12.01	12.01

\* Actual O&M Expenses claimed by Petitioner

82. The norms specified under Regulations 35(3)(a) and 35(4) of the 2019 Tariff

Regulations provides as follows:

**“35 (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.”

83. We have considered the submissions of the Petitioner. The Petitioner has claimed the actual O&M Expenses for the FY 2019-20 and FY 2020-21 in the case of Asset-I, and the actual O&M Expenses for the FY 2019-20, FY 2020-21, and FY 2021-22 in the case of Asset-II. It is noticed that the Petitioner has not submitted the break-up of the actual O&M Expenses for Assets-I and II. Accordingly, the Petitioner is directed to submit the detailed break-up of the actual O&M Expenses at the time of truing-up.

84. Accordingly, we have approved the O&M Expenses for the communication assets as per Regulation 35(4) of the 2019 Tariff Regulations subject to truing up, and the same are as under:

#### Asset-I

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Original Project Cost	465.29	465.29	465.29	465.29	465.29
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Normative O&M Expenses	9.31	9.31	9.31	9.31	9.31
O&M Expenses Claimed	5.70	7.84	9.97	9.31	9.31
<b>Total O&amp;M Expenses</b>	<b>5.70</b>	<b>7.84</b>	<b>9.31</b>	<b>9.31</b>	<b>9.31</b>





## Asset-II

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Original Project Cost	523.29	523.29	523.29	523.29	523.29
Norms (in %)	2.00	2.00	2.00	2.00	2.00
Normative O&M Expenses	10.47	10.47	10.47	10.47	10.47
Actual O&M Expenses	7.36	10.12	12.86	12.01	12.01
<b>Total O&amp;M Expenses</b>	<b>7.36</b>	<b>10.12</b>	<b>10.47</b>	<b>10.47</b>	<b>10.47</b>

### Interest on Working Capital (IWC)

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

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

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

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

(1) *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 1<sup>st</sup> 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 triuing-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.*

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

**“3. Definitions.** - *In these regulations, unless the context otherwise requires:-*

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

86. The Petitioner has submitted that it has computed IWC for the 2019-24 tariff period considering the SBI Base Rate plus 350 basis points as on 1.4.2021. The Petitioner has considered the rate of IWC as 10.50%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points and SBI 1





year MCLR applicable as on 1.4.2022 of 7.00% plus 350 basis points) for the FY 2021-22 and FY 2022-23 respectively. Similarly, the rate of IWC considered is 12.00% (SBI 1 year MCLR applicable) as on 1.4.2023 of 8.50% plus 350 basis points for the FY 2023-24. The components of the working capital and interest allowed thereon with respect to the communication assets are as follows:

#### Asset-I

		(₹ in lakh)				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	0.48	0.65	0.78	0.78	0.78
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	0.86	1.18	1.40	1.40	1.40
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	10.42	10.41	10.30	10.00	9.71
<b>D</b>	<b>Total Working Capital</b>	<b>11.75</b>	<b>12.24</b>	<b>12.47</b>	<b>12.18</b>	<b>11.88</b>
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
<b>F</b>	<b>Interest on Working Capital(D*E)</b>	<b>1.42</b>	<b>1.38</b>	<b>1.31</b>	<b>1.28</b>	<b>1.43</b>

#### Asset-II

		(₹ in lakh)				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for 1 month)	0.61	0.84	0.87	0.87	0.87
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	1.10	1.52	1.57	1.57	1.57
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	11.86	11.90	11.62	11.64	11.62
<b>D</b>	<b>Total Working Capital</b>	<b>13.58</b>	<b>14.26</b>	<b>14.06</b>	<b>14.08</b>	<b>14.06</b>
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
<b>F</b>	<b>Interest on Working Capital(D*E)</b>	<b>1.64</b>	<b>1.60</b>	<b>1.48</b>	<b>1.48</b>	<b>1.69</b>

#### Annual Fixed Charges (AFC) for the 2019-24 Tariff Period

87. The details of the transmission charges allowed for the communication assets for the 2019-24 tariff period are as follows:

#### Asset-I

		(₹ in lakh)				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Depreciation	29.45	29.45	29.45	29.45	29.45
B	Interest on Loan	21.93	19.59	17.24	14.89	12.54
C	Return on Equity	26.22	26.22	26.22	26.22	26.22
D	O&M Expenses	5.70	7.84	9.31	9.31	9.31
E	Interest on Working Capital	1.42	1.38	1.31	1.28	1.43
<b>F</b>	<b>Total</b>	<b>84.72</b>	<b>84.48</b>	<b>83.53</b>	<b>81.15</b>	<b>78.95</b>



## Asset-II

(₹ in lakh)

	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Depreciation	33.12	33.12	33.12	34.07	35.02
B	Interest on Loan	24.84	22.19	19.72	18.09	16.13
C	Return on Equity	29.48	29.48	29.48	30.33	31.18
D	O&M Expenses	7.36	10.12	10.47	10.47	10.47
E	Interest on Working Capital	1.64	1.60	1.48	1.48	1.69
F	<b>Total</b>	<b>96.44</b>	<b>96.51</b>	<b>94.27</b>	<b>94.44</b>	<b>94.49</b>

### Filing Fee and the Publication Expenses

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

89. The Petitioner shall be entitled to reimbursement of the filing fees and publication expenses in connection with the instant Petition directly from the beneficiaries on a pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

### Licence Fee and RLDC Fees and Charges

90. The Petitioner has sought reimbursement of the licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period.

91. BSPHCL has submitted that under the scheme of the Electricity Act, 2003, the Petitioner is duty-bound to approach this Commission for approval of the tariff. As such the expenses incurred towards discharge of their statutory obligation cannot be passed on to the beneficiaries hereunder, as erroneously being so claimed by the Petitioner.

92. We have considered the submissions of the Petitioner and BSPHCL and have perused the record. Regulation 70(4) of the 2019 Tariff Regulations specifically provides that licence fees paid by the inter-State transmission licensees (including the deemed inter-State transmission licensee) in terms of the Central Electricity Regulatory Commission (Payment of Fees) Regulations, 2012 shall be reimbursed directly by the



beneficiary as provided under Regulation 70 of the 2019 Tariff Regulations. In view of the provisions of Regulation 70 of the 2019 Tariff Regulations, the plea taken by BSPHCL is not sustainable. The Petitioner shall be entitled to reimbursement of the licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall also be entitled to recovery of the RLDC fees and charges in accordance with Regulation 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

### **Goods and Services Tax**

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

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

### **Security Expenses**

95. The Petitioner has submitted that security expenses in respect of the transmission system are not claimed in the instant Petition, and it would file a separate Petition for claiming the overall security expenses and the consequential IWC.

96. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on a projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in the FY 2018-19 in Petition



No. 260/MP/2020. The Commission *vide* order dated 3.8.2021 in Petition No. 260/MP/2020 has approved the security expenses for the period from 1.4.2019 to 31.3.2024. Therefore, the security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Accordingly, the Petitioner's prayer in the instant Petition for allowing it to file a separate Petition for claiming the overall security expenses and consequential IWC has become infructuous.

### **Sharing of Transmission Charges**

97. With effect from 1.7.2011, the sharing of the transmission charges for inter-State transmission systems was governed by the 2010 Sharing Regulations, and with effect from 1.11.2020 (after the repeal of the 2010 Sharing Regulations), the sharing of transmission charges is governed by the 2020 Sharing Regulations. The transmission charges approved in this order for the 2014-19 tariff period shall be recovered in accordance with Regulation 43 of the 2014 Tariff Regulations, and the transmission charges approved in this order for the 2019-24 tariff period shall be recovered in accordance with Regulation 57(2) of the 2019 Tariff Regulations.

98. To summarize, the details of the approved AFC as determined and trued-up for the 2014-19 tariff period and AFC allowed for the 2019-24 tariff periods are as follows:

(₹ in lakh)		
<b>Asset name</b>	<b>2017-18 (Pro rata 59 days)</b>	<b>2018-19</b>
Asset-I	13.19	81.63
Asset-II	15.34	93.51

(₹ in lakh)					
<b>Asset name</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Asset-I	84.72	84.48	83.53	81.15	78.95
Asset-II	96.44	96.51	94.27	94.44	94.49

99. The Annexures to this order form part of the order.



100. This order disposes of Petition No. 35/TT/2023 in terms of the above findings and discussions.

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

**sd/-  
(Jishnu Barua)  
Chairperson**



**ANNEXURE I and II****Asset-I**

2014-19 Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	Projected ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations (In %)	Annual Depreciation as per Regulation (₹ in lakh)	
		Total			2017-18	2018-19
PLCC	450.75	14.54	465.29	6.33	28.52	28.99
<b>Total</b>	<b>450.75</b>	<b>14.54</b>	<b>465.29</b>		<b>28.52</b>	<b>28.99</b>
<b>Average Gross Block (₹ in lakh)</b>					<b>450.75</b>	<b>458.02</b>
<b>Weighted Average Rate of Depreciation (In %)</b>					<b>6.33</b>	<b>6.33</b>

**Asset-II**

2014-19 Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	Projected ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations (In %)	Annual Depreciation as per Regulation (₹ in lakh)	
		Total			2017-18	2018-19
PLCC	523.29	-	523.29	6.33	33.12	33.12
<b>Total</b>	<b>523.29</b>	<b>-</b>	<b>523.29</b>		<b>33.12</b>	<b>33.12</b>
<b>Average Gross Block (₹ in lakh)</b>					<b>522.29</b>	<b>523.29</b>
<b>Weighted Average Rate of Depreciation (In %)</b>					<b>6.33</b>	<b>6.33</b>



## Asset-I

2019-24 Capital Expenditure	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Projected ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations (In %)	Annual Depreciation as per Regulations (₹ in lakh)				
		Total			2019-20	2020-21	2021-22	2022-23	2023-24
PLCC	465.29	-	465.29	6.33	29.45	29.45	29.45	29.45	29.45
<b>Total</b>		-	<b>465.29</b>		29.45	29.45	29.45	29.45	29.45
<b>Average Gross Block (₹ in lakh)</b>					465.29	465.29	465.29	465.29	465.29
<b>Weighted Average Rate of Depreciation (In %)</b>					6.33	6.33	6.33	6.33	6.33

## Asset-II

2019-24 Capital Expenditure	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Projected ACE (₹ in lakh)			Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations (In %)	Annual Depreciation as per Regulations (₹ in lakh)				
		2022-23	2023-24	Total			2019-20	2020-21	2021-22	2022-23	2023-24
PLCC	523.29	30.00	0.00	30.00	553.29	6.33	33.12	33.12	33.12	34.07	35.02
<b>Total</b>	<b>523.29</b>	<b>30.00</b>	<b>0.00</b>	<b>30.00</b>	<b>553.29</b>		33.12	33.12	33.12	34.07	35.02
<b>Average Gross Block (₹ in lakh)</b>							523.29	523.29	523.29	538.29	553.29
<b>Weighted Average Rate of Depreciation (In %)</b>							6.33	6.33	6.33	6.33	6.33

