

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 254/TT/2021

Coram:

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

Date of Order: 26.09.2022

In the Matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for truing up of transmission tariff of 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of 02 Nos. of 220 kV equipped line bays at 400 kV Subhasgram Sub-station under Transmission System for "Eastern Region Strengthening Scheme-VIII" in Eastern Region.

And in the matter of:

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

....Petitioner

Vs

1. Bihar State Power (Holding) Company Limited,
(Formerly Bihar State Electricity Board -BSEB)
Vidyut Bhavan, Bailey Road, Patna-800001.
2. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Calcutta-700091.
3. Grid Corporation of Orissa Limited,
Shahid Nagar, Bhubaneswar-751007.
4. Jharkhand State Electricity Board,
In Front of Main Secretariat,
Doranda, Ranchi-834002.
5. Damodar Valley Corporation,
DVC Tower, Maniktala,



Civic Centre, VIP Road, Calcutta-700054.

6. Power Department,
Government of Sikkim, Gangtok-737101.
7. West Bengal State Electricity Transmission Company Limited,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Calcutta-700091.

...Respondent(s)

For Petitioner : Shri S.S. Raju, PGCIL
Shri D.K. Biswal, PGCIL
Shri A.K. Verma, PGCIL
Shri Ved Prakash Rastogi, PGCIL

For Respondents : None

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, a deemed transmission licensee, for truing up of transmission tariff for the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of 02 Numbers of 220 kV equipped line bays at 400 kV Subhasgram Sub-station (hereinafter referred to as “the transmission asset”) under transmission system for “Eastern Region Strengthening Schem-VIII” (hereinafter referred to as the “transmission system”) in Eastern Region.

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

“1) Allow the Petitioner to “Invoke the provision of regulation - 4(3)(ii) of CERC (Terms and Conditions of Tariff) Regulations’ 2014 and Regulation – 24 of CERC (Conduct of Business) Regulations’ 1999 for approval of DOCO of Asset-I (Part) as 29.01.2015”.



2) Approve the Transmission Tariff –cum- Truing Up tariff for the tariff block 2014-19 block for the asset covered under this petition, as per para – 11.5 above and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 12.2 above.

3) Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred.

4) Allow the petitioner to recover the shortfall or refund the excess Transmission Tariff, 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 regulations 2014 and Tariff regulations 2019 as per para 11.5 & 12.2 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 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.

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

Background

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

(a) Investment Approval (IA) in respect of the transmission system was accorded by the Board of Directors of the Petitioner vide C/CP/ERSS VIII dated 28.8.2013 for ₹7348 lakh including an IDC of ₹361 lakh based on April, 2013 price level.

(b) Subsequently, the Revised Cost Estimate (RCE) of the transmission system was accorded by the Board of Directors of the Petitioner in its 325th meeting held on 27.1.2016 vide memorandum C/CP/RCE-ERSS VIII dated 19.2.2016 for ₹9568 lakh including an IDC ₹111 lakh based on August, 2015 price level.

(c) The scope of work covered under transmission system is as follows :

- Installation of Bus Reactor
 - i. 2x125 MVAR bus reactor at Muzaffarpur (one 125 MVAR reactor would be installed by replacing the existing 63 MVAR bus reactor at Muzaffarpur, which shall be used as spare)
 - ii. 1x125 MVAR bus reactor at Rourkela
 - iii. 1x125 MVAR bus reactor at Indravati



iv. Replacement of existing 1x63 MVAR bus reactor with 1x125 MVAR bus reactor at Jeypore (63 MVAR reactor thus released shall be used as spare reactor)

- **Shifting of Line Reactor**

i. Shifting of 2x50 MVAR line reactor from Patna end of 400 kV Kahalgaon/Barh-Patna D/C line to Balia end of 400 kV Patna-Balia D/C line.

- **Augmentation of Transformation Capacity**

i. Addition of 1x500 MVA, 400/220 kV ICT with associated bays at Subhashgram along with 2 numbers of 220 kV equipped line bays.

(d) The details of the transmission assets under the transmission system are as follows:

Name of Asset	Actual COD	Petition No.
Asset-I: 125 MVAR Bus Reactor-I Muzaffarpur Sub-station along with bays	5.3.2015	Covered in Petition No. 100/TT/2020
Asset-II: 125 MVAR Bus Reactor II replacing existing 63 MVAR Bus Reactor at Muzaffarpur along with bays	1.4.2015	(earlier covered under Petition No. 475/TT/2014 for tariff period 2014-19)
Asset-III: 1 number 125 MVAR Bus Reactor and associated bays at 400 kV Rourkela Sub-station	2.2.2015	Covered in Petition No. 100/TT/2020 (earlier covered under Petition No. 142/TT/2015 for tariff period 2014-19)
Asset-IV: 01 number of 1x125 MVAR Bus Reactor and associated bay at 400 kV Indravati Sub-station	3.8.2015	Covered in Petition No. 100/TT/2020 (earlier covered under Petition No. 174/TT/2015 for tariff period 2014-19)
Asset-V: 01 number of 1x125 MVAR Bus Reactor and associated bay at 400 kV Jeypore Sub-station	2.12.2015	
Asset-VI: 01 number 1X500 MVA ICT at 400/220 kV Subhasgram Sub-station along with associated bays	29.1.2015	Covered in Petition No. 100/TT/2020 (earlier covered under Petition No. 206/TT/2016 for tariff period 2014-19)
Asset-VII: Shifting of 2x50 MVAR line Reactor from Patna end of 400 kV Kahalgaon/Barh-Patna D/C line to Balia end of 400 kV Patna-Balia D/C line*	11.2.2016	
Asset-VIII: 2X50 MVAR Line reactor at Ballia Sub-station	11.2.2016 (Original COD 1.5.2007)	Covered under true-up Petition No. 100/TT/2020 (earlier covered under Petition



		No. 560/TT/2014 for tariff period 2014-19 under Kahalgaon stage-II Phase-I project)
Asset IX: 02 numbers of 220 kV line bays at 400 KV Subhasgram Sub-station *	29.1.2015	Covered under instant petition

**The transmission tariff for Asset-IX was earlier claimed in Petition No. 206/TT/2016. However, the tariff was not granted and the Commission, vide order dated 29.9.2017, directed the Petitioner to claim tariff for this asset in a fresh petition matching with the downstream system of WBSETCL. In compliance to above direction, the Petitioner waited for completion of downstream network i.e. 220 kV D/C Subhasgram-Sirkhol/ Baruipur (WB) under the scope of WBSETCL.*

(e) The Commission disposed of Petition No. 206/TT/2016 vide order dated 29.9.2017 wherein the Petitioner was directed to file a fresh petition matching with the downstream system of West Bengal State Electricity Transmission Company Limited (WBSETCL). The Petitioner has sought determination and truing up of tariff of Asset-IX in the instant petition from its COD to 31.3.2019.

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (hereinafter referred to as "the Act"). No comments/ objections have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. None of the Respondents have filed their replies in the matter.

6. The hearing in this matter was held on 26.7.2022 through video conference and Commission reserved the order in the matter.

7. This order is issued considering the submissions made by the Petitioner in



the petition and affidavits dated 16.11.2021 and 22.7.2022.

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

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

9. The details of the transmission charges claimed by the Petitioner in respect of the transmission asset are as follows:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2.69	28.42	31.68	31.98	31.98
Interest on Loan	3.40	32.99	33.30	29.67	26.65
Return on Equity	3.00	31.82	35.47	35.81	35.90
O & M Expenses	14.34	87.22	90.12	93.10	96.20
Interest on working capital	1.00	6.96	7.29	7.39	7.49
Total	24.43	187.41	197.86	197.95	198.22

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

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses	7.04	7.27	7.51	7.76	8.02
Maintenance Spares	12.66	13.08	13.52	13.97	14.43
Receivables	23.97	31.24	32.98	32.99	33.04
Total Working Capital	43.67	51.59	54.01	54.72	55.49
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	1.00	6.96	7.29	7.39	7.49

Date of Commercial operation (COD)

11. The Petitioner has submitted that the system strengthening at Subhasgram (PG) Sub-station including provision of additional 2 numbers 220 kV line bays at Subhasgram Sub-station to enable WBSETCL to draw power through 220 kV D/C Subhasgram (PG)-Sirkol/ Baruipur line (under the scope of WBSETCL) was discussed and agreed in the Standing Committee Meeting of ER held on 8.2.2012 at NRPC New Delhi and the same was further discussed and agreed in the 21st



TCC and ERPC Meeting held on 20-21 April, 2012 at Rajarhat, Kolkata. Accordingly, the Petitioner had undertaken the implementation of 2 numbers of line bays at Subhasgram (PG) Sub-station for termination of 220 kV D/C Subhasgram (PG) -Sirkol/ Baruipur line 220 kV D/C line under the scope of WBSETCL.

12. The Petitioner has submitted that the transmission asset was completed on 29.1.2015 and the Petitioner approached the Commission for determination of transmission tariff in Petition No. 206/TT/2016 under the second proviso to Regulation 4(3) of the 2014 Tariff Regulations. However, the Commission in order dated 29.9.2017 did not approve the COD of the two 220 kV line bays and directed the Petitioner to file a fresh petition matching with the downstream system of WBSETCL.

13. As per Central Electricity Authority (CEA) report indicating status of "CONSTRUCTION OF TRANSMISSION LINES (220 kV & ABOVE)" in RFD programme during 2020-21 as on August, 2020, completion schedule of downstream network under WBSETCL is shown as November, 2020 which is highly unlikely considering the slow rate of implementation due to acute RoW issues. Accordingly, instant petition has been filed for determination of tariff for 02 numbers of 220 kV line bays at 400 kV Subhasgram Sub-station wherein COD has been invoked using relevant proviso.

14. The Petitioner has submitted the status of downstream and mismatch issue between transmission asset and associated downstream transmission lines has been discussed in various CEA standing committee meetings, OCC and ERPC meetings and the details are as follows:



Meeting	Date	Completion schedule provided by WBSETCL for 220 kV D/C Subhasgram (PG)-Sirkol/ Baruipur line
19 th SCM of ER	1.9.2017	December, 2018
1 st ERSCT	16.7.2018	December, 2019
148 th OCC	3.9.2018	OCC in principle agreed for commercial declaration of Subashgram – Baraipur 220 kV D/C line bays at Subashgram.
2 nd ERSCT	5.7.2019	March, 2020
41 st ERPC	26/27.8.2019	January, 2020 (As provided in 160 th OCC)
CEA report of August, 2020 indicating status of construction of transmission lines (220 kV & above) in RFD programme during - 2020-21	August, 2020	November, 2020 Further, the 220/132 kV GIS sub-station at Baruipur under the scope of WBSETCL is under implementation

15. The Petitioner has submitted that WBSETCL has been shifting the completion schedule of the associated line during the discussion in various meetings. However, the Petitioner despite completing its scope of work, is being penalized due to non-completion of 220 kV D/C Subhasgram (PG)-Sirkol/ Baruipur line which is beyond its control. The Petitioner is continuously monitoring the progress report of 220 kV D/C Subhasgram (PG)-Sirkol/ Baruipur line in various meeting. The Petitioner has also sent a letter to WBSETCL requesting to complete the line at the earliest and intimate the current status of the line but no response has been received so far.

16. The Petitioner has submitted that during the 148th OCC meeting held on 3.9.2018, OCC in principle had agreed for commercial declaration of Subashgram– Baraipur 220 kV D/C line bays at Subashgram. Relevant extract of the meeting is as follows:

“WBSETCL updated the status as mentioned in above table. Powergrid informed that Subashgram bays were ready from December 2014 but construction of the line is getting delayed. Hence, Powergrid requested to consider the commercial declaration of the bays at Subashgram.



OCC in principle agreed for commercial declaration of Subhasgram – Baraipur 220kV D/c line bays at Subhasgram.”

17. The Petitioner has submitted that the downstream network is getting delayed and it is not possible to delay the completion of the ISTS/ upstream networks beyond a certain period due to financial/ contractual reasons and obligations. The Petitioner, due to denial of claimed tariff for the transmission asset, is in difficulty to meet its payment obligation towards debt servicing (repayment of loan and interest), regular operation and maintenance expenses of the asset, payment of interest on working capital loan, income tax and dividend etc. Further, the denial of tariff is affecting in generation of internal resources of the Petitioner, which in turn restrict its investment in ongoing projects.

18. The Petitioner has submitted that it is not able to provide service for the reasons not attributable to him, its suppliers or contractors. The case, accordingly, qualifies for approval of the date of commercial operation prior to the element coming into regular service. The Petitioner has prayed for approval of the COD of 02 numbers 220 kV line bays at Subhasgram w.e.f. 29.1.2015 under the proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations.

19. The Commission observed that it would like to see the response of WBSETCL especially on the Petitioner’s plea for approval of the COD of the transmission asset and the status of the associated downstream assets under its scope. The Commission directed the Respondents, including WBSETCL, to file their reply by 16.8.2022, and the Petitioner to file rejoinder, if any by 23.8.2022. The Commission further observed that if no reply and rejoinder are received within the specified time, the matter will be decided on the basis of the information already on record and no extension of time shall be granted.



20. WBSETCL has not filed any reply.

21. We have considered the Submissions of the Petitioner. The Commission vide order dated 29.9.2017 in Petition No. 206/TT/2016 held as follows:

*“22. We have considered the submissions made by the petitioner and BSP(H)CL.-----
xxx*

As regards the two line bays, the petitioner has submitted that the bays were charged and declared the commercial operation on 29.1.2015 at “no load” condition and sought the approval of COD under the second proviso of Regulation 4(3) of the 2014 Tariff Regulations as the 220 kV downstream system i.e. 220 kV D/C Subhasgram-Sirkhol (WB) under the scope of WBSETCL was not commissioned. The 220 kV bays were not utilized due to delay in completion of the downstream network under the scope of WBSETCL and the petitioner has not entered into any Indemnification Agreement with WBSETCL. Therefore, we are not inclined to grant COD of the two 220 kV line bays under the second proviso to Regulation 4(3) of the 2014 Tariff Regulations and the petitioner is directed to file a fresh petition matching with the downstream system of WBSETCL. Accordingly, tariff only for the ICT at Subhasgram Substation is allowed in this order from the COD, i.e. 29.1.2015”

22. The Petitioner has discussed the COD of the downstream transmission system in various SCM, RPC and OCC meetings.

a) The relevant extracts of the minutes of the 19th SCM of ER held on 1.9.2017, wherein the status of downstream system was discussed, is as follows:

“17. Status of downstream 220 kV or 132 kV network by STUs from the various commissioned and under-construction ISTS substations

17.1 Representative of CTU informed that various ISTS sub-stations have been commissioned/expected to be commissioned shortly (under construction) for which the down stream linking system is being implemented by STUs. Following downstream network along with expected commissioning schedule was informed by STUs in the meeting(s):

(f) Subashgram 400/220 kV S/s
(i) Subashgram – Baraipur 220 kV D/c line – December’18”



b) The relevant extracts of the minutes of the 1st meeting of ERSCT held on 16.7.2018, wherein the status of downstream system was discussed, is as follows:

“11. Status of downstream 220kV or 132kV network by STUs from the various commissioned and under-construction ISTS substations 11.1 Director, CEA informed that many ISTS sub-stations have been commissioned and some are under construction for which the downstream system is being implemented by the STUs. Based on the information provided by the states, updated information on status of implementation of planned/under-construction downstream transmission system is as follows:

A. Existing substations

(f) Subashgram 400/220kV S/s

i. Subashgram (POWERGRID) – Baraipur 220kV D/c line – Dec’19”

c) The relevant extracts of the minutes of the 2nd meeting of ERSCT held on 5.7.2019, wherein the status of downstream system was discussed, is as follows:

“A. Existing substations

(b) Subashgram 400/220kV S/s

i. Subashgram (POWERGRID) – Baraipur 220 kV D/c line – Mar’20”

d) The relevant extracts of the minutes of the 38th TCC meeting held on 29.6.2018 is as follows:

*“ITEM NO. B35: ISSUES RELATED TO ASSOCIATED / DOWNSTREAM SYSTEMS
WEST BENGAL*

1. 2 nos. 220 KV line bays at Subhashgram (PG) s/s: Bays are ready and idle charged under ERSS-VIII due to non readiness of 220 KV D/C Subhashgram – Baraipur Tr. line and associated bays at Baraipur

a	<i>Subashgram–Baraipur220kVD/c line</i>	<i>June 2019, 75% of work has been completed</i>
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”

e) The relevant extracts of the minutes of the 41th TCC meeting held on 26.8.2019 is as follows:

*“ITEM NO. C8 : ISSUES RELATED TO ASSOCIATED / DOWNSTREAM SYSTEMS
WEST BENGAL 1. 2 nos. 220 KV line bays at Subhashgram (PG) s/s: Bays are*



ready and idle charged under ERSS-VIII due to non readiness of 220 KV D/C Subhashgram – Baruipur Tr. line and associated bays at Baruipur. In 160th OCC, WBSETCL updated the completion schedule of inter-connecting system as follows:

a	Subashgram–Baraipur220kVD/cline	The line is charged from Rajathat and Jeerat. The line would be charged from Barasat end after completion of rest of the work by September 2020.
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23. The proviso (iii) to Regulation 4(3) of the 2014 Tariff Regulations provides as follows:

“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:

.....

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.”

24. The COD of the downstream transmission line under the scope of WBSETCL has been postponed and it is not possible for the Petitioner to postpone the COD of the transmission asset due to reasons as stated by the Petitioner. As per proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations, which provides that COD of a transmission system or an element thereof may be declared if the said system has been prevented from being put to regular service for reasons not attributable to the transmission licensee. In terms of Regulation 4(3), the date of commercial operation for transmission system shall be the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service. However, proviso (ii) to Regulation 4(3) of the 2014 Tariff



Regulations envisages that there might be a situation wherein the transmission system or an element thereof is prevented from regular services for reasons not attributable to the transmission licensee but on account of the delay in COD of the upstream or downstream transmission system and in such cases the transmission licensee shall approach the Commission for approval of COD of such system or element thereof.

25. The Petitioner has sought declaration of COD for the transmission asset as 29.1.2015 under proviso (ii) to the Regulation 4(3) of the 2014 Regulations. The transmission asset could not be put to regular use on account of non-readiness of downstream assets under the scope of WBSETCL. It is observed that the Petitioner has claimed COD of the transmission asset as 29.1.2015 under the said provision, which is prior to SCOD of 27.4.2015 (as per Investment Approval). However, the Petitioner has not produced any document or given any reason for claiming the COD of the transmission asset before the scheduled COD. Therefore, we are not inclined the COD of the transmission asset prior to the scheduled COD of 27.4.2015. Accordingly, the COD of the transmission asset is approved as 27.4.2015, which is the scheduled COD of the transmission asset.

Capital Cost

26. The Petitioner in the instant petition has submitted capital cost as on COD and actual ACE incurred after adjustment of IDC discharge, in respect of the transmission asset as per the Auditor's Certificates dated 9.7.2019 are as follows:

Apportioned Cost as per FR	Apportioned Cost as per RCE	Cost considered as on 29.1.2015	Additional Capital Expenditure					Total cost considered as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
499.99	749.40	117.49	364.69	111.98	11.49	-	-	605.65

(₹ in lakh)



Cost over-run

27. The total estimated completion cost of the transmission asset is ₹605.65 lakh against the apportioned approved cost of FR ₹499.99 lakh. The Petitioner has submitted that there is increase/decrease in award cost received in competitive bidding compared to initial estimates (FR cost). For procurement, open competitive bidding route is followed and by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions.

28. The Petitioner has further submitted that the cost variation was mainly due to actual site conditions, awarded rate and other associated factors which were beyond the control of the Petitioner and prayed to allow the marginal cost variation in respect of the transmission asset on its merit. Therefore, Revised Cost Estimate of ₹749.40 has been submitted.

29. We have considered the submissions of the Petitioner. As compared with FR cost of ₹499.99 lakh, the estimated completion cost is higher by ₹105.66 lakh. We have gone through Form-5, wherein the Petitioner has submitted the following reasons for cost variation:

(₹ in lakh)					
Particulars	Estimated amount	Actual amount (including liabilities/ Provisions)	Variation		
Foundation for strcutres	113.75	240.59	126.84	Variation due to actual awarded rate being on higher side	
Switch gear	172.63	163.71	-8.92	Variation due to actual	



(CT,PT,Circuit Breaker,Isolator etc.)				awarded rate being on lower side
Contro, Relay and protection panel	54.58	67.13	12.55	Variation due to actual awarded rate being on higher side
Bus bars/Conductors/Insulators	39.63	55.25	15.62	Variation due to actual awarded rate being on higher side
Structure for switch yard	58.00	64.34	6.34	Variation due to actual awarded rate being on higher side

30. The cost variation is allowed. The Petitioner has submitted RCE approved by the Board of Directors in its 325th meeting held on 27.1.2016. As compared with the RCE apportioned approved cost of ₹749.40 lakh the estimated completion cost is ₹605.65 lakh.

31. As the COD of the transmission asset is approved as 27.4.2015, there is no time over-run in the instant case.

Treatment of IDC and IEDC

32. The Petitioner has claimed Interest During Construction (IDC) for the transmission asset and has submitted Auditor's Certificates in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged.

33. The allowable IDC has been worked out considering the information submitted by the Petitioner on cash basis. The loan details submitted in Form-9C for 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of IDC calculation on cash and accrued basis. Accordingly, based on the information furnished by the Petitioner, IDC considered, is as follows:



(₹ in lakh)

IDC as per Auditor's Certificate	IDC Admissible	IDC disallowed due to computational difference / time over-run not condoned	IDC Discharged as on COD	IDC Undischarged as on COD
A	B	C=A-B	D	E=B-D
1.45	1.45	0.00	1.45	0.00

34. The Petitioner has claimed IEDC for the transmission asset and has submitted Auditor's Certificate in support of the same. Accordingly, the IEDC is allowed as claimed . The details of claimed and allowed IEDC are as follows:

(₹ in lakh)

IEDC claimed as per Auditor's Certificate	IEDC disallowed due to time over-run	IEDC allowed as on COD
1	2	3=(1-2)
1.19	0.00	1.19

Initial Spares

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

“(d) Transmission System

- (i) Transmission line: 1.00%*
- (ii) Transmission Sub-station (Green Field): 4.00%*
- (iii) Transmission Sub-station (Brown Field): 6.00%*
- (iv) Series Compensation devices and HVDC Station: 4.00%*
- (v) Gas Insulated Sub-station (GIS): 5.00%*
- (vi) Communication system: 3.5%”*

36. The Petitioner has claimed the following initial spares for the instant transmission asset:

(₹ in lakh)

Particulars	Sub-station
Expenditure upto 28.1.15	15.59
Expenditure from 29.1.2015-31.3.2015	0.98
Expenditure from 1.4.2015 - 31.3.2016	0.66
TOTAL	17.23



37. The Petitioner vide Auditor Certificate dated 9.7.2019 has submitted the details of initial spares and the same is as follows:

(₹ in lakh)		
Particular	Plant & Machinery cost excluding IDC, IEDC, land cost and cost of civil works for the purpose of Initial Spares	Spares claimed
Asset (Sub-station)	603.1	17.23

38. We have considered the submissions of the Petitioner. The initial spares claimed are within the norm of 6% for brown field AIS Sub-station and the same is allowed as follows:

(₹ in lakh)				
P&M Cost as on Cut-Off date (A)	Spare's limit (B) (in %)	Spares claimed (C)	Spares permissible D = [(A-C)*B / (100-B)]	Spares allowed
603.01	6	17.23	37.39	17.23

39. The Petitioner has submitted that the discharge of initial spare has been included in the capital cost indicated as per Auditor's Certificate. Hence, further adjustment in capital cost in case of discharge of liability, if any, in respect of initial spare is not required.

Capital Cost as on COD

40. As mentioned above, the COD of the transmission asset has been approved as 27.4.2015. The capital cost incurred as on 27.4.2015 is considered as capital cost as on COD. The details of the capital cost allowed for the transmission asset as on COD after adjustment of IDC, IEDC and initial spares is as follows:

(₹ in lakh)				
Capital cost as on 27.4.2015 as per auditor certificate	Less: IDC as on COD due to		Less: IEDC disallowed as on 27.4.2015	Capital cost considered as on 27.4.2015
	Time over-run / computational difference	Un-discharged		
490.13	0.00	0.00	0.00	490.13



Additional Capital Expenditure (ACE)

41. The Petitioner has claimed ACE under Regulations 14(1)(i) of the 2014 Tariff Regulations for the transmission assets and has submitted Auditor's Certificate in support of its claim as follows:

(₹ in lakh)				
ACE				
2014-15	2015-16	2016-17	2017-18	2018-19
364.69	111.98	11.49	0.00	0.00

42. We have considered the submissions of the Petitioner. As mentioned above, the COD of the transmission asset has been approved as 27.4.2015. The ACE claimed by the Petitioner for 2014-15 is added in the capital cost as on COD proportionately. The Petitioner has claimed an ACE of ₹111.98 lakh for 2015-16. The *pro-rata* ACE from 1.4.2015 to 27.4.2015 which works out to be ₹7.95 lakh is included in the capital cost as on COD and the balance amount, which works out to be ₹104.03 is allowed under ACE from 28.4.2015 to 31.3.2016.

43. The ACE in 2014-19 has been claimed under Regulations 14(1)(i) of the 2014 Tariff Regulations and the same is within the cut-off date. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations as it is towards Balance and Retention payments and works deferred for execution. The details of ACE allowed are as follows:

Particular	(₹ in lakh)				
	ACE				
	2014-15	2015-16	2016-17	2017-18	2018-19
ACE to the extent of Balance and Retention Payments	-	104.03	11.49	0.00	0.00
IDC Discharged	-	-	-	-	-
Less: Excess Initial Spares	-	-	-	-	-
Less: Decapitalization w.r.t cost of asset shared by telecom	-	-	-	-	-
Total ACE allowed	-	104.03	11.49	0.00	0.00



Capital cost for the 2014-19 tariff period

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

Capital Cost as on COD	ACE					Total Capital Cost as on 31.3.2019
	2014-15	2015-16	2016-17	2017-18	2018-19	
490.13	-	104.03	11.49	0.00	0.00	605.65

Debt-Equity Ratio

45. The debt-equity ratio has been allowed in accordance with Regulation 19(3) of 2014 Tariff Regulations. Accordingly, the debt-equity ratio of 70:30 as on COD and ACE has been considered for the purpose of determining tariff of the transmission asset for the 2014-19 tariff period. The details of the debt-equity ratio as on COD and 31.3.2019 of the transmission asset are as follows:

Particular	Amount as on COD (₹ in lakh)	(in %)	Amount as on 31.3.2019 (₹ in lakh)	(in %)
Debt	343.09	70.00	423.96	70.00
Equity	147.04	30.00	181.69	30.00
Total	490.13	100.00	605.65	100.00

Depreciation

46. The depreciation has been worked out as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on COD and approved ACE during 2014-19 tariff period. The Gross Block during 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD at Annexure-I has been worked out after taking into account the depreciation rates of the asset as prescribed in the 2014 Tariff Regulations and depreciation allowed during the 2014-19 tariff period is as follows:



(₹ in lakh)

	Particulars	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
A	Opening Gross Block	490.13	594.16	605.65	605.65
B	ACE	104.03	11.49	0.00	0.00
C	Closing Gross Block (A+B)	594.16	605.65	605.65	605.65
D	Average Gross Block (A+C)/2	542.15	599.91	605.65	605.65
E	Average Gross Block (90% depreciable assets)	542.15	599.91	605.65	605.65
F	Average Gross Block (100% depreciable assets)	0.00	0.00	0.00	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	487.93	539.91	545.09	545.09
H	Depreciable value of IT equipment and software	0.00	0.00	0.00	0.00
I	Total Depreciable Value (G+H)	487.93	539.91	545.09	545.09
J	Weighted Average Rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28
K	Lapsed useful life at the beginning of the year (Year)	0.00	1.00	2.00	3.00
L	Balance useful life at the beginning of the year (Year)	25.00	24.00	23.00	22.00
M	Depreciation during the year (D*J)	26.59	31.67	31.98	31.98
N	Aggregate Cumulative Depreciation at the end of the year	26.59	58.27	90.25	122.22
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	461.34	481.65	454.84	422.86

47. The details of the depreciation claimed by the Petitioner in the instant petition and determined and trued up in the instant order as follows:

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
Claimed by the Petitioner in the instant petition	28.42	31.67	31.98	31.98
Allowed after true-up in this order	26.59	31.67	31.98	31.98



Interest on Loan (IoL)

48. The Petitioner has claimed the weighted average rate of Interest based on actual loan portfolio and actual rate of interest. Accordingly, IoL is calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of IoL allowed are as follows:

(₹ in lakh)

	Particulars	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
A	Gross Normative Loan	343.09	415.92	423.96	423.96
B	Cumulative Repayments upto Previous Year	0.00	26.59	58.27	90.25
C	Net Loan-Opening	343.09	389.32	365.69	333.71
D	Addition due to Additional Capitalization	72.82	8.04	0.00	0.00
E	Repayment during the year	26.59	31.67	31.98	31.98
F	Net Loan-Closing	389.32	365.69	333.71	301.74
G	Average Loan	366.21	377.51	349.70	317.72
H	Weighted Average Rate of Interest on Loan (in %)	9.17	8.93	8.60	8.51
I	Interest on Loan	31.19	33.70	30.06	27.03

49. The details of the IoL claimed by the Petitioner in the instant petition and determined and true-up in the instant order is as follows:

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
Claimed by the Petitioner in the instant petition	32.99	33.30	29.67	26.65
Approved after true-up in this order	31.19	33.70	30.06	27.03

Return on Equity (RoE)

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



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

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

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

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

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

53. Accordingly, the RoE allowed for the 2014-19 tariff period for the transmission asset is as follows:



(₹ in lakh)

	Particulars	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
A	Opening Equity	147.04	178.24	181.69	181.69
B	Additions	31.21	3.45	0.00	0.00
C	Closing Equity (A-B)	178.24	181.69	181.69	181.69
D	Average Equity (A+B)/2	162.64	179.97	181.69	181.69
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (in %)	19.705	19.705	19.705	19.758
H	Return on Equity (DxG)	29.77	35.46	35.80	35.90

54. The details of the RoE allowed in order dated 15.2.2016 in Petition No. 196/TT/2014, claimed by the Petitioner in the instant petition and as trued up in the instant order as follows:

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
Claimed by the Petitioner in the instant petition	31.82	35.47	35.81	35.90
Allowed after true-up in this order	29.77	35.46	35.80	35.90

Operation & Maintenance Expenses (O&M Expenses)

55. The details of the O&M Expenses claimed by the Petitioner for the transmission asset are as follows:

(₹ in lakh)

Sub station					
Srl. No.	220 kV Sub-station				
1	Subhasgram: 220 kV line bays				
O&M Expenses					
	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station					
220 kV					
Number of bays	2	2	2	2	2
Total O&M Expenses (₹ in lakh)	14.34	87.22	90.12	93.10	96.20



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

Element	UoM	Norms for 2014-15	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19
220 kV Sub-station	₹ lakh/bay	42.21	43.61	45.06	46.55	48.10

57. We have considered the submissions of the Petitioner. The O&M Expenses has been worked out as per norms specified under Regulation 29(3) of the 2014 Tariff Regulations and are as follows:

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
2 number of 220 kV line bays at Subhashgram	87.22	90.12	93.10	96.20
Pro-rata O&M Expenses allowed	81.02	90.12	93.10	96.20

58. The details of the O&M Expenses claimed by the Petitioner in the instant petition, determined and trued up O&M Expenses allowed in the instant order are as follows:

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
Claimed by the Petitioner in the instant petition	87.22	90.12	93.10	96.20
Allowed after true-up in this order	81.02	90.12	93.10	96.20

Interest on Working Capital (IWC)

59. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as follows:-

i. Working Capital for Maintenance spares:

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses.



ii. Working Capital for O & M Expenses:

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

iii. Working Capital for Receivables:

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

iv. Rate of interest on working capital:

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

60. The trued up IWC allowed for the transmission asset is as follows:

(₹ in lakh)					
	Particulars	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (one month of O&M Expenses)	7.27	7.51	7.76	8.02
B	Working Capital for Maintenance Spares (Maintenance Spares @15% of O&M expenses)	13.08	13.52	13.97	14.43
C	Working Capital for Receivables (Receivable equivalent to two months of fixed cost)	31.41	33.04	33.06	33.10
D	Total Working Capital (A+B+C)	51.76	54.07	54.78	55.55
E	Rate of Interest (in %)	13.50	13.50	13.50	13.50
F	Interest on Working Capital (DxE)	6.49	7.30	7.40	7.50

61. The details of the IWC claimed by the Petitioner in the instant petition, determined and trued up IWC allowed in the instant order as follows:

(₹ in lakh)				
Particulars	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
Claimed by the Petitioner in the instant petition	6.96	7.29	7.39	7.49
Allowed after true-up in this order	6.49	7.30	7.40	7.50



Approved Annual Fixed Charges for the 2014-19 Tariff Period

62. The trued up annual fixed charges allowed for the transmission asset for 2014-19 tariff period are as follows:

Particulars	(₹ in lakh)			
	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
Depreciation	26.59	31.67	31.98	31.98
Interest on Loan	31.19	33.70	30.06	27.03
Return on Equity	29.77	35.46	35.80	35.90
Operation and Maintenance Expenses	81.02	90.12	93.10	96.20
Interest on Working Capital	6.49	7.30	7.40	7.50
Total	175.06	198.25	198.34	198.61

63. Accordingly, the Annual Transmission Charges claimed by the Petitioner in the instant petition and determined and trued up AFC allowed in the instant order are as follows:

Particulars	(₹ in lakh)			
	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
Claimed by the Petitioner in the instant petition	187.41	197.85	197.94	198.22
Allowed after true-up in this order	175.06	198.25	198.34	198.61

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	31.98	31.98	31.98	31.98	31.98
Interest on Loan	24.03	21.24	18.60	15.96	13.24
Return on Equity	34.13	34.13	34.13	34.13	34.13
Interest on Working Capital	3.32	3.35	3.38	3.41	3.45
Operation and Maintenance	45.02	46.60	48.24	49.92	51.68
Total	138.48	137.30	136.33	135.40	134.48



65. The Petitioner has claimed the following Interest on Working Capital for the transmission asset for 2019-24 tariff period:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	3.75	3.88	4.02	4.16	4.31
Maintenance Spares	6.75	6.99	7.24	7.49	7.75
Receivables	17.03	16.93	16.81	16.69	16.53
Total	27.53	27.80	28.07	28.34	28.59
Rate of Interest	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	3.32	3.35	3.38	3.41	3.45

Capital Cost

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

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

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

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



(m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
(n) Expenditure on account of change in law and force majeure events; and
(o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

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

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly tried up by excluding liability, if any, as on 1.4.2019;
(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
(c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”

(4) The capital cost in case of existing or new hydro generating station shall also include:

(a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
(b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.

(5) The following shall be excluded from the capital cost of the existing and new projects:

(a) The 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.”

67. The admitted capital cost of ₹605.65 lakh as on 31.3.2019 as determined above is considered as the capital cost as on 1.4.2019 for the purpose of determination of tariff for the 2019-24 tariff period.

Additional Capital Expenditure (ACE)

68. The Petitioner has not claimed any additional capital expenditure during 2019-24 period for the transmission asset.

Capital cost considered for the 2019-24 tariff period

69. Accordingly, the capital cost of the transmission asset considered for the 2019- 24 tariff period, are as follows:

(₹ in lakh)		
Capital Cost (as on 1.4.2019)	ACE (2019-24)	Total Estimated Completion Cost (up to 31.3.2024)
605.65	0.00	605.65

70. Against the RCE apportioned approved capital cost of ₹749.40 lakh, the estimated project cost of the transmission asset is ₹605.65 lakh which is within the RCE apportioned approved cost.

Debt-Equity Ratio

71. Regulations 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.”



72. The details of the debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period for the transmission asset are as follows:

(₹ in lakh)

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	423.96	70.00	423.96	70.00
Equity	181.69	30.00	181.69	30.00
Total	605.65	100.00	605.65	100.00

Depreciation

73. Regulation 33(1), Regulation 33(2) and Regulation 33(5) 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.”

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

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

74. WAROD placed at Annexure-II has been worked out after taking into account the depreciation rates as prescribed in the 2019 Tariff Regulations. The



depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019.

75. The depreciation allowed for the transmission asset is as follows:

		(₹ in lakh)				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	605.65	605.65	605.65	605.65	605.65
B	ACE	0.00	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	605.65	605.65	605.65	605.65	605.65
D	Average Gross Block (A+C)/2	605.65	605.65	605.65	605.65	605.65
E	Average Gross Block (90% depreciable assets)	605.65	605.65	605.65	605.65	605.65
F	Average Gross Block (100% depreciable assets)	0.00	0.00	0.00	0.00	0.00
G	Depreciable value (excluding IT equipment and software) (E*90%)	545.09	545.09	545.09	545.09	545.09
H	Depreciable value of IT equipment and software	0.00	0.00	0.00	0.00	0.00
I	Total Depreciable Value (G+H)	545.09	545.09	545.09	545.09	545.09
J	Weighted Average Rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
K	Lapsed useful life at the beginning of the year (Year)	3.00	4.00	5.00	6.00	7.00
L	Balance useful life at the beginning of the year (Year)	22.00	21.00	20.00	19.00	18.00
M	Depreciation during the year (D*J)	31.98	31.98	31.98	31.98	31.98
N	Aggregate Cumulative Depreciation at the end of the year	154.20	186.18	218.16	250.14	282.11
O	Remaining Aggregate Depreciable Value at the end of the year(I-N)	390.88	358.90	326.93	294.95	262.97

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 asset, 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 weighted average rate of interest of IoL has been considered on the basis of the rates prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period shall be adjusted in due course of time. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. In view of the above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the transmission asset are as follows:



(₹ in lakh)

		Asset-I				
Particulars		2019-20	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	423.96	423.96	423.96	423.96	423.96
B	Cumulative Repayments upto Previous Year	122.22	154.20	186.18	218.16	250.14
C	Net Loan-Opening (A-B)	301.74	269.76	237.78	205.80	173.82
D	Additions	0.00	0.00	0.00	0.00	0.00
E	Repayment during the year	31.98	31.98	31.98	31.98	31.98
F	Net Loan-Closing (C+D-E)	269.76	237.78	205.80	173.82	141.84
G	Average Loan (A+F)/2	285.75	253.77	221.79	189.81	157.83
H	Weighted Average Rate of Interest on Loan (in %)	8.545	8.522	8.562	8.613	8.637
I	Interest on Loan (GxH)	24.42	21.63	18.99	16.35	13.63

Return on Equity (RoE)

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

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

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope, excluding additional capitalization on 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 Rs 1,000 crore;

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



- (c) *Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;*
(d) *Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.*

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

79. The Petitioner has submitted that it is liable to pay Income Tax at MAT rate prescribed under the Taxation laws (Amendment) Ordinance 2019. Further, RoE has been calculated @18.782% after grossing up the RoE with MAT rate of 17.472% (Base Rate 15% + Surcharge 12% + Cess 4%) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations for the 2019-24 tariff period. As per Regulation 31(3) of the 2019 Tariff Regulations, the grossed-up rate of RoE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2019-24 tariff period on actual gross income. However, any penalty arising on account of delay in deposit or short deposit of tax amount shall not be claimed by it. Any under-recovery or over-recovery of grossed up rate on RoE after truing up shall be recovered or refunded to beneficiaries or the long-term customers on yearly basis. The Petitioner has further submitted that any adjustment due to additional tax demand including interest duly adjusted for any refund of tax including interest received from IT authorities shall be recoverable/ adjustable during the 2019-24 tariff period on yearly basis on receipt of Income Tax assessment order.



80. Accordingly, the MAT rate applicable during the year 2019-20 has been considered for the purpose of RoE, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed for the transmission asset for 2019-24 tariff period is as follows:

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	181.69	181.69	181.69	181.69	181.69
B	Addition due to ACE	0.00	0.00	0.00	0.00	0.00
C	Closing Equity (A+B)	181.69	181.69	181.69	181.69	181.69
D	Average Equity (A+C)/2	181.69	181.69	181.69	181.69	181.69
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Applicable RoE Rate (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity for the year (D*G)	34.13	34.13	34.13	34.13	34.13

Operation & Maintenance Expenses (O&M Expenses)

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

(₹ in lakh)					
Sub station					
Srl. No.	220 kV Sub-station				
1	Subhasgram: 220 kV line bays				
O&M Expenses					
	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station	220 kV				
Number of bays	2	2	2	2	2
Norms (₹ lakh/bay)					
220 kV sub-station	22.51	23.30	24.12	24.96	25.84
Total O&M Expenses (₹ in lakh)	45.02	46.60	48.24	49.92	51.68

82. The norms specified under Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations provides as follows:



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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher-Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:



- i. *the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- ii. *the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- iii. *the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
- iv. *the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
- v. *the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*
- vi. *the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*

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

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

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

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

83. We have considered the submissions of the Petitioner. The O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and the same is as follows:

(₹ in lakh)



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
2 Numbers of 220 kV line bays at Subhasgram	45.02	46.60	48.24	49.92	51.68
Total O&M Expenses	45.02	46.60	48.24	49.92	51.68

Interest on Working Capital (IWC)

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

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

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

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

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

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

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

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

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

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

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

85. The Petitioner has submitted that it has computed the IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus



350 basis points) for 2019-20 and 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21, and 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-22, and 10.50% (SBI 1 year MCLR applicable as on 1.4.2022 of 7.00% plus 350 basis points) for 2022-24 The components of the working capital and interest allowed thereon is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (Equivalent to O&M Expenses for one Month)	3.75	3.88	4.02	4.16	4.31
Working Capital for Maintenance Spares (Equivalent to 15% of O&M Expenses)	6.75	6.99	7.24	7.49	7.75
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	17.07	16.95	16.80	16.69	16.53
Total Working Capital	27.58	27.82	28.06	28.34	28.59
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest of working capital	3.32	3.13	2.95	2.98	3.00

Annual Fixed Charges for the 2019-24 Tariff Period

86. The transmission charges allowed for the transmission asset for 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	31.98	31.98	31.98	31.98	31.98
Interest on Loan	24.42	21.63	18.99	16.35	13.63
Return on Equity	34.13	34.13	34.13	34.13	34.13
Operation and Maintenance	45.02	46.60	48.24	49.92	51.68
Interest of working capital	3.32	3.13	2.95	2.98	3.00
Total	138.87	137.47	136.29	135.36	134.42

Filing Fee and Publication Expenses

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



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

Licence Fee and RLDC Fees and Charges

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

Goods and Services Tax

90. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from negative list in future. We have considered the submission of the Petitioner and are of the opinion that GST is not levied on transmission service at present. Therefore, we are of the view that Petitioner's prayer is premature and the Petitioner is at liberty to approach this Commission if GST is levied upon transmission service in future.

Security Expenses

91. The Petitioner has submitted that security expenses for the instant assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for

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

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

Capital Spares

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

Sharing of Transmission Charges

94. The COD of 02 numbers 220 kV line bays at Subhasgram is approved as 27.4.2015 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as the associated downstream system of WBSETCL is not ready. Therefore, the



transmission charges determined in this order from 27.4.2015 to till COD of the downstream transmission system shall be borne by WBSETCL.

95. After COD of associated downstream system of WBSETCL, the billing, collection and disbursement of the transmission charges approved in this order shall be dealt as per the applicable Sharing and Tariff Regulations..

96. To summarise:

(a) The trued-up Annual Fixed Charges allowed for the transmission asset for 2014-19 tariff period are as follows:

Particular	(₹ in lakh)			
	2015-16 (Pro-rata for 340 days)	2016-17	2017-18	2018-19
AFC	175.06	198.25	198.34	198.61

(b) The Annual Fixed Charges allowed for the transmission asset for 2019-24 tariff period in this order are as follows:

Particular	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	138.87	137.47	136.29	135.36	134.42

97. Annexure-I and Annexure-II given hereinafter form part of the instant order.

98. This order disposes of Petition No. 254/TT/2021 in terms of above discussions and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I.S. Jha)
Member



Annexure-I

Asset	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19				Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations			
		2015-16	2016-17	2017-18	2018-19			2015-16	2016-17	2017-18	2018-19
Sub station	490.13	104.03	11.49	0.00	0.00	605.65	5.28	28.62	31.67	31.98	31.98
Total	490.13	104.03	11.49	0.00	0.00	605.65		28.62	31.67	31.98	31.98
Weighted Average Rate of Depreciation (in %)								5.28	5.28	5.28	5.28
Average Gross Block (₹ in lakh)								542.15	599.91	605.65	605.65



Annexure-II

Asset-I	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2019-24	Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
					2019-20	2020-21	2021-22	2022-23	2023-24
Sub station	605.65	0.00	605.65	5.28	31.98	31.98	31.98	31.98	31.98
Total	605.65	0.00	605.65		31.98	31.98	31.98	31.98	31.98
Weighted Average Rate of Depreciation (in %)					5.28	5.28	5.28	5.28	5.28
Average Gross Block (₹ in lakh)					605.65	605.65	605.65	605.65	605.65

