CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 689/TT/2020

Coram:

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

Date of order: 04.04.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 for truing up of transmission tariff of 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of asset 01 Number 160 MVA, 220/132 kV, 3-Phase ICT at Baripada Sub-station (Shifted to Purnea Sub-Station) under Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Regions

And in the matter of:

Power Grid Corporation of India Limited, SAUDAMINI, Plot No-2, Sector-29, Gurgaon – 122001, (Harvana).

...Petitioner

Versus

- Bihar State Power (Holding) Company Limited, (Formerly Bihar State Electricity Board -BSEB), Vidyut Bhavan, Bailey Road, Patna – 800001.
- West Bengal State Electricity Distribution Company Limited, Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II, Salt Lake City, Calcutta – 700091.
- Grid Corporation of Orissa Limited, Shahid Nagar, Bhubaneswar – 751007.



- 4. Jharkhand State Electricity Board, In Front of Main Secretariat, Doranda, Ranchi – 834002.
- Damodar Valley Corporation, DVC Tower, Maniktala, Civic Centre, VIP Road, Calcutta – 700054.
- Power Department,
 Government of Sikkim,
 Gangtok 737101.

...Respondent(s)

For Petitioner: Shri S.S. Raju, PGCIL

Shri D.K. Biswal, PGCIL

Shri Ved Prakash Rastogi, PGCIL

Shri A.K. Verma, PGCIL

For Respondent: Shri Manish Kumar Choudhary, Advocate, BSPHCL

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, a deemed transmission licensee, for truing of transmission tariff for 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and determination of transmission tariff under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") for 2019-24 tariff period in respect of 01 Number 160 MVA, 220/132 kV, 3-Phase ICT at Baripada Sub-station (Shifted to Purnea Substation) (hereinafter referred to as "the transmission asset") under "Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Regions" (hereinafter referred to as "the transmission project").

- 2. The Petitioner has made the following prayers in the instant Petition:
 - "1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff

- for 2019-24 block for the assets covered under this petition, as per para 9.1 and 10.0 above.
- 2) Approve the Completion cost and additional capitalization incurred during 2014-19.
- 3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 9.1 and 10.0 above for respective block.
- 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
- 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
- 6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.
- 7) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- 8) Allow the petitioner to claime initial spares project as whole.
- 9) 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 10.6 above.
- 10) 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.

and pass such other relief as the 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. The Investment Approval (IA) for implementation of the transmission project was accorded by the Board of Directors of the Petitioner in 255th meeting held on 2.8.2011 at an estimated cost of ₹7777 lakh including IDC of ₹210 lakh based on 1st Quarter, 2011 price level (communicated vide Memorandum Ref. C/CP/Spare ICTs and Reactors dated 4.8.2011).

- b. The scope of work covered under the present petition consists of 01 number 160 MVA, 220/132 kV, 3-Phase ICT at Baripada Sub-station (shifted to Purnea Sub-Station) under Provision of Spare ICTs and Reactors for Eastern, Northern, Southern and Western Regions.
- c. The date of commercial operation (COD) of the transmission asset is 1.9.2013.
- d. Transmission tariff from COD to 31.3.2014 was determined *vide* order dated 10.7.2015 in Petition No. 43/TT/2013. Transmission tariff from COD to 31.3.2014 was trued up and tariff for 2014-19 period in respect of the transmission asset was allowed *vide* order dated 29.1.2020 in Petition No. 322/TT/2019.
- 4. The Respondents are distribution licensees, transmission licensees and power departments, which are procuring transmission service 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 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 23.8.2021 has filed its reply and has raised the issues of Additional Capital Expenditure (ACE) in 2014-19 period, grossing up of Return on Equity (RoE), filing fees and expenses, GST and sharing of transmission charges. The Petitioner vide affidavit dated 6.9.2021 has filed the rejoinder to the reply of BSPHCL.

- 6. It has been observed that BSPHCL has again raised the similar issues of RoE, filing fee and GST in the present petition as have been raised by it in the earlier petitions despite clear findings of the Commission on these issues in earlier petitions. The contentions of BSPHCL have been rejected by the Commission in other petitions including in Petition No. 476/TT/2019 vide order dated 28.5.2021 related to the issues of RoE, filing fees and GST. As BSPHCL has not challenged the findings of the Commission, therefore, the same have attained finality. To avoid repetition, the submissions of BSPHCL, clarifications thereto by the Petitioner and findings of the Commission have not been recorded in the present order. The issues which are specific to the instant petition and have not been dealt by the Commission in earlier orders, have been considered in the relevant paragraphs of this order.
- 7. BSPCL has submitted that that there are many factual details which ought to have been clearly spelled out in the petition such as the transmission asset being spare and has been admittedly shifted to Purnea Sub-station at Bihar from Bariparda (Orrisa). However, nowhere in the petition the details like dates/ reason/ purpose of such shifting have been mentioned. The Petitioner has nowhere averred that the transmission asset has to be treated as if located at Purnea Sub-station. BSPHCL has further submitted that the Petitioner should clearly provide basic details of the factual position of the transmission asset.
- 8. In response, the Petitioner has submitted that the transmission asset was put into commercial operation in 2009-14 tariff period and it was trued up vide order dated 29.1.2020 in Petition No. 322/TT/2019 wherein details such as shifting, decapitalization, replacement of ICT etc. have been spelt out. During the course of hearing of the matter on 17.8.2021, the Petitioner informed about the status of the transmission asset. The Petitioner informed that the 160 MVA spare ICT initially

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planned to be kept at Baripada Sub-station. However, while the same was in transit to Baripada, this 160 MVA spare ICT was diverted to Purnea Sub-station and kept as a spare at Purnea Sub-station. The Petitioner vide affidavit dated 6.9.2021 has submitted the following details with regard to de-capitalisation, re-capitalisation and the status of the transmission asset including the status of replaced 100 MVA ICT and 160 MVA ICT kept as spare at Purnea:

- a) As per IA dated 2.8.2011 of the transmission project, the spare ICTs and Reactors were to be procured to be kept in Eastern Region and to be utilized based on requirements in the Eastern Region. Certain locations were identified in the IA for stationing spare ICTs and Reactors. As per IA of the transmission project, the location identified for stationing 1 (one) number 160 MVA ICT (spare) covered under the instant petition was at Baripada Sub-station which would be utilized anywhere in Eastern Region (ER) as per the requirement of the ER grid.
- b) Before the transmission project was implemented, 3 (three) number of 220/132 kV 100 MVA ICTs were operational at Purnea Sub-station. Out of these three transformers, 2 (two) number of 100 MVA ICTs (i.e. ICT-I & ICT-II) achieved COD in December, 1986 under Chukka Transmission System in Eastern Region. The remaining 1 (one) 100 MVA ICT (i.e. ICT-III) achieved COD in November, 2003 under the project LILO of 132 kV Dalkhola-Purnea transmission system in the Eastern Region.
- c) Due to ageing, loading of these 3 (three) number 100 MVA ICTs (old transformers) were restricted to 70 MVA each and hence, the total maximum possible loading was around 210 MVA. However, the loading at

- Purnea 220/132 kV Sub-station was around 250-260 MW, including Nepal load as well at the time of conceiving the transmission project.
- d) As there was overloading on existing 3 (three) number 100 MVA ICTs at Purnea and to meet any critical situation or eventuality, 160 MVA ICT while in transit to Baripada Sub-station was diverted to Purnea Sub-station (even before this ICT could reach Baripada Sub-station). Thus, this 160 MVA Spare ICT originally meant to be stationed at Baripada Sub-station (as per IA) was diverted and stationed for the first time at Purnea Sub-station due to system requirement. Upon reaching the Purnea Sub-station, this 160 MVA spare ICT was put under commercial operation w.e.f. 1.9.2013 (as a spare ICT) under the transmission project.
- e) As such the Commission vide order dated 10.7.2015 in Petition No. 43/TT/2013 approved tariff in respect of the transmission asset for 2009-14 tariff period.

Approval of replacement of 100 MVA ICT III by 160 MVA ICT of ERSS-XII

f) BSPHCL in the 25th ERPC meeting held on 20.9.2013 and 21.9.2013, raised the issue of expeditious replacement/ up-gradation of existing 100 MVA ICTs at Purnea with new 160 MVA ICTs. Further, Chief Secretary, Government of Bihar requested the Petitioner to increase the capacity of ICTs at Purnea to meet the load requirement in Purnea area. Accordingly, ERPC in the said meeting approved the replacement of 100 MVA ICT III by 160 MVA ICT and replaced 100 MVA ICT to be kept as a spare. However, the replacement of 1 (one) number 100 MVA ICT (i.e. ICT III) by new 160 MVA ICT at Purnea (ICT III) as planned, would take its due course and replacement time was dependent upon early supply/ erection from the

manufacturer(s)/ contractor(s). Keeping in view the increasing load requirement, BSPTCL during the 96th OCC meeting of ERPC held on 25.4.2014 requested that the 160 MVA Spare ICT kept at Purnea Substation be utilized to replace the existing 100 MVA ICT-III at Purnea Substation as the new 160 MVA ICT under project ERSS-XII was being delayed due to supply issues.

- Thus, in line with the above, due to time factor anticipated in receipt of new 160 MVA ICT, under project ERSS-XII (meant for replacing the existing one number 100 MVA ICT-III at Purnea Sub-station), the replacement of 100 MVA ICT-III at Purnea Sub-station was carried out using the spare i.e. 160 MVA Spare ICT stationed at Purnea Sub-station. The replacement took place w.e.f. 1.10.2014 (ERLDC letter dated 27.10.2014). ERLDC charging certificate in this respect has been submitted.
- h) Thus, the transmission asset 160 MVA ICT which was declared under commercial operation w.e.f. 1.9.2013, had been utilized since 1.10.2014. This old 100 MVA ICT-III upon replacement was approved to be used in spare pool as per deliberations in the 25th ERPC dated 20.9.2013 and 21.9.2013 and Standing Committee Meeting of Eastern Region held on 2.5.2014.
- Subsequently, new 160 MVA ICT-III under ERSS-XII, which was initially planned to replace the existing 100 MVA ICT-III at Purnea Sub-station was put into commercial operation on 29.2.2016 and kept as spare for which tariff has been approved vide order dated 22.8.2016 in Petition No. 69/TT/2016.
- j) Summary of the ICTs is as follows:

Particulars	Existing 100 MVA ICT-III at Purnea	160 MVA Spare ICT at Purnea	New 160 MVA ICT III at Purnea
Project	Sub-station LILO of 132 kV Dalkhola Purnea & extension at Purnea transmission system in ER	(transmission asset) Provision of Spare ICTs and Reactors in ER	ERSS-XII
COD	1.11.2003	1.9.2013	29.2.2016
Petition No. (current/ old) Planned Scheme	246/TT/2019 Running critical and to be replaced with new 160 MVA ICT III of ERSS-XII. To be sent to spare pool	689/TT/2020 (Truing up of 322/TT/2019) To be stationed as spare at Baripada in ER	670/TT/2020 (Truing up of 69/TT/2020) To replace old 100 MVA ICT III of project "LILO of Purnea- Dhalkola"
Actual Execution	after replacement. Replaced w.e.f. 1.10.2014 and kept in spare pool as per approval of ERPC.	Diverted to Purnea in transit (bypassing Baripada) due to critical loading at Purnea (COD w.e.f. 1.9.2013). Used to replace old 100 MVA ICT III due to non-availability of new 160 MVA ICT of ERSS-XII.	COD declared on 29.2.2016 and kept as spare at Purnea instead of 160 MVA Spare ICT of project "Provision of Spare ICTs and Reactors in ER" as per approval of ERPC.
De-cap/ Re-cap	No de-capitalization done. ERPC approved the same to be kept as regional spare. Further, useful life still left as COD was 1.11.2003.	No de-capitalization done as per direction of CERC in Petition No. 322/TT/2019 dated 29.1.2020.	No de-capitalization done. Commission approved tariff (without decapitalization) in Petition No. 69/TT/2016 order dated 22.8.2016. Further, now being used as spare in place of 160 MVA spare ICT as per ERPC approval.
Present Status	Kept in spare pool of ER.	Continues to be utilized w.e.f. 1.10.2014 at Purnea Sub-station .	Kept as spare at Purnea in place of original spare 160 MVA ICT w.e.f 29.2.2016.

We have considered the submissions of the Petitioner and BSPHCL. To 9. recapitulate, the 160 MVA ICT was initially planned to be kept at Baripada Substation. However, while the 160 MVA ICT was in transit to Baripada Sub-station, it was diverted to Purnea Sub-station and kept as spare at Purnea Sub-station and declared COD w.e.f 1.9.2013. Thereafter, in view of the increasing load at Purnea, this spare ICT was utilised from 1.10.2014. We have noted that the Commission has already dealt with the above issue of shifting of 160 MVA ICT from Baripada Sub-station to Purnea Sub-station, trued up the tariff for 2009-14 tariff period and determined the tariff for 2014-19 tariff period in respect of the said ICT vide order dated 29.1.2020 in Petition No. 322/TT/2019. Relevant paragraph of the order dated 29.1.2020 in Petition No. 322/TT/2019 is as follows:

- "27. As per the submissions of the Petitioner, the Petitioner initially kept 160 MVA ICT as spare transformer at Purnea Sub-station and claimed the COD of the 160 MVA Spare ICT as 1.9.2013. As per the 1 st SCM of ER held on 2.5.2015, the Petitioner has replaced the 100 MVA ICT with 160 MVA ICT and the replaced 100 MVA ICT is kept as spare ICT. The 100 MVA ICT was commissioned in November, 2003 and it is replaced with 160 MVA ICT on 29.2.2016. The 160 MVA Spare ICT at Baripada (Shifted to Purnea Sub-station) was approved in 15th ERPC meeting held on 28.9.2010 and 12th SCM held on 28.12.2010. The 100 MVA ICT-III at Purnea Substation is replaced with 160 MVA ICT and the as per the 1st SCM of ER held on 2.5.2015, the replaced 100 MVA ICT-III at Purnea Sub-station shall also be kept as spare. Accordingly, keeping in view of the RPC/SCM approval and recommendation of the Spare committee, we allow the tariff without any decapitalization. However, the Petitioner is directed to submit the respective decapitalization details while filing petition for true up of transmission charges approved vide order dated 22.8.2016 in petition no. 69/TT/2016 (covering 1X160MVA ICT-III at Purnea under ERSS-XII) and order dated 22.8.2016 in Petition no.257/TT/2015 (covering 2X160 MVA ICT-I and II at Purnea S/S under Augmentation of transformation capacity project). We observe that 2X100 MVA ICT I and II with their dates of commercial operation being Dec 1986, have completed their useful life."
- 10. Accordingly, we proceed for truing up of tariff for 2014-19 tariff period in respect of the 160 MVA ICT now located at Purnea Sub-station and put to regular use since 1.10.2014.
- 11. The hearing in this matter was held on 17.8.2021 through video conference and the order was reserved.
- 12. This order is issued considering the submissions made by the Petitioner in the petition vide affidavits dated 23.6.2020, 29.7.2021 and 6.9.2021, BSPHCL's reply *vide*

affidavit dated 23.8.2021 and Petitioner's rejoinder to the reply filed by BSPHCL *vide* affidavit dated 6.9.2021.

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

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

14. 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	26.06	30.58	31.72	32.87	32.87
Interest on Loan	29.24	32.00	30.59	28.83	25.79
Return on Equity	29.04	34.24	35.52	36.80	36.90
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	1.94	2.23	2.25	2.27	2.20
Total	86.28	99.05	100.08	100.77	97.76

15. The details of the Interest on Working Capital (IWC) 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
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	14.38	16.51	16.68	16.80	16.29
Total Working Capital	14.38	16.51	16.68	16.80	16.29
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	1.94	2.23	2.25	2.27	2.20

Capital Cost

16. The capital cost of the existing project has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations. The details of capital cost approved *vide* order dated 29.1.2020 in Petition No. 322/TT/2019 are as follows:

Capital cost	Additional Expenditu	•	Capital cost	
as on 1.4.2014	2014-15	2015-16	as on 31.3.2019	
408.14	170.99	84.04	663.17	

17. The details of capital cost claimed by the Petitioner in the instant petition are as follows:

(₹ in lakh)

Capital cost	ACE			Capital cost
as on 1.4.2014	2014-15	2015-16	2016-17	as on 31.3.2019
408.14	170.99	0.00	43.43	622.56

18. The Petitioner has claimed the same capital cost of ₹408.14 lakh as on 1.4.2014 as was approved vide order dated 29.1.2020 in Petition No. 322/TT/2019. Accordingly, the admitted capital cost as on 1.4.2014 of ₹408.14 lakh has been considered for truing up of transmission tariff of 2014-19 period.

Additional Capital Expenditure ("ACE")

19. The Commission *vide* order dated 29.1.2020 in Petition No. 322/TT/2019 had allowed ACE in respect of the transmission asset for 2014-19 tariff period under Regulation 14(1)(i) (undischarged liabilities recognized to be payable at a future date) and Regulation 14(1)(ii) (works deferred for execution) of the 2014 Tariff Regulations. The details of ACE approved in respect of the transmission asset are as follows:

(₹ in lakh)

ACE admitted				
2014-15	2015-16			
170.99	84.04			

20. The Petitioner has submitted that COD of the transmission asset was 1.9.2013 and cut-off date was 31.3.2016. The break-up of ACE claimed by the Petitioner is as follows:

Particulars	Regulation	ACE claimed		
	J	2014-15	2016-17	
Balance and retention payments for liabilities other than IDC	14(1)(i)	170.99	0.00	
Balance and retention payments	14(3)(v)	0.00	43.43	
Total ACE	170.99	43.43		

- 21. BSPHCL has submitted that the Petitioner has submitted its claim for ACE of ₹43.43 lakh. BSPHCL has further submitted that the Petitioner has failed to submit the desired information as per query raised in technical validation letter. Thus, the claim of the Petitioner for ACE of ₹43.43 lakh in 2016-17 cannot be allowed.
- 22. In response, the Petitioner has submitted that ACE claimed is on account of undischarged liability towards final payment/ withheld payment due to contractual exigencies for works executed within the cut-off date. ACE, after the cut-off date of ₹43.43 lakh for 2016-17 has been claimed under Regulation 14(3)(v) of the 2014 Tariff Regulations. The Petitioner has further submitted that ACE approved by the Commission was based on projections and while projecting the estimated ACE, contracts were not closed and liabilities had not been finalized. However, in the instant true up petition, ACE is claimed on the basis of actual payments made to the contractor after receipt of final invoices from the contractor and incorporating the amendments. The Petitioner has further submitted that the payments were made after submission of invoice and after reconciliation in accordance with contractual clause(s) as per provisions of contract(s) though the works were executed upto COD/ cut-off date. Further, the Petitioner has submitted the following ACE claimed for year 2016-17 and has prayed to allow the same in the present petition:

Year	ACE (₹ in lakh)	Party Name	Package
2016-17	43.43	CGL	Sub-station

23. We have considered the submission of the Petitioner and BSPHCL. ACE of ₹170.99 lakh claimed for 2014-15 was approved vide order dated 29.1.2020 in Petition No. 322/TT/2019 under Regulation 14(1)(i) of the 2014 Tariff Regulations. ACE of ₹43.43 lakh during 2016-17 pertains to balance and retention payments for works executed within the cut-off date. Accordingly, it is allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations. The details of the approved capital cost of the transmission asset are as follows:

(₹ in lakh)

Capital cost		ACE	Capital cost	
as on 1.4.2014	2014-15	2015-16	2016-17	as on 31.3.2019
408.14	170.99	0.00	43.43	622.56

Debt-Equity ratio

24. As per Regulation 19(3) of the 2014 Tariff Regulations, debt-equity ratio allowed by the Commission for determination of tariff for the period ending on 31.3.2014 shall be considered. Accordingly, debt-equity ratio for the period ending on 31.3.2014, considered for the purpose of determination of tariff of 2014-19 period has been considered for the purpose of truing up of tariff of the 2014-19 tariff period of the transmission asset. The details of debt-equity ratio as on 1.4.2014 and 31.3.2019 in respect of the transmission asset are as follows:

Particulars	Capital Cost as on 1.4.2014 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	285.70	70.00	435.79	70.00
Equity	122.44	30.00	186.77	30.00
Total	408.14	100.00	622.56	100.00

Depreciation

25. Depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during 2014-19 tariff period. As the

transmission asset is comprised of only one asset, the Gross Block during 2014-19 tariff period has been depreciated at 5.28% after taking into account the depreciation rate as prescribed in the 2014 Tariff Regulations. The trued-up depreciation in respect of the transmission asset for 2014-19 tariff period is as follows:

(₹ in lakh)

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Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	408.14	579.13	579.13	622.56	622.56
ACE	170.99	0.00	43.43	0.00	0.00
Closing Gross Block	579.13	579.13	622.56	622.56	622.56
Average Gross Block	493.64	579.13	600.85	622.56	622.56
Weighted Average Rate of Depreciation (in %)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year (Year)	25	24	23	22	21
Lapsed life at the beginning of the year (Year)	0	1	2	3	4
Depreciable Value at the beginning of the year	444.27	521.22	540.76	560.30	560.30
Depreciation during the year	26.06	30.58	31.72	32.87	32.87
Cumulative depreciation at the end of the year	36.85	67.43	99.16	132.03	164.90
Remaining Depreciable Value at the end of the year	407.42	453.79	441.60	428.28	395.41

26. The details of depreciation approved *vide* order dated 29.1.2020 in Petition No. 322/TT/2019, claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 29.1.2020 in Petition No. 322/TT/2019	26.06	32.80	35.02	35.02	35.02
Claimed by the Petitioner in the instant petition	26.06	30.58	31.72	32.87	32.87
Allowed after true-up in this order	26.06	30.58	31.72	32.87	32.87

Interest on Loan ("loL")

- 27. The Petitioner has claimed the Weighted Average Rate of IoL (WAROI), based on its actual loan portfolio and rate of interest. BSPHCL has submitted that the 2014 Tariff Regulations do not permit change in interest rate due to floating rate of interest. In response, the Petitioner has submitted that IoL has been calculated on the basis of actual rate of interest of various loans deployed for each year.
- 28. We have considered the submissions of the Petitioner and BSPHCL. IoL has been calculated based on actual interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed in respect of the transmission asset for 2014-19 tariff period is as follows:

(₹ in lakh)

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Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	285.70	405.39	405.39	435.79	435.79
Cumulative Repayments up to Previous Year	10.79	36.85	67.43	99.16	132.03
Net Loan-Opening	274.91	368.54	337.96	336.64	303.76
Additions due to ACE	119.69	0.00	30.40	0.00	0.00
Repayment during the year	26.06	30.58	31.72	32.87	32.87
Net Loan-Closing	368.54	337.96	336.64	303.76	270.89
Average Loan	321.72	353.25	337.30	320.20	287.33
Weighted Average Rate of Interest on Loan (in %)	9.0872	9.0583	9.0677	9.0028	8.9741
Interest on Loan	29.24	32.00	30.59	28.83	25.79

29. The details of loL approved *vide* order dated 29.1.2020 in Petition No. 322/TT/2019, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated					
29.1.2020 in Petition No.	29.24	34.56	34.15	30.97	27.77
322/TT/2019.					
Claimed by the Petitioner in the	29.24	32.00	30.59	28.83	25.79

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
instant petition					
Allowed after true-up in this order.	29.24	32.00	30.59	28.83	25.79

Return on Equity ("RoE")

30. The Petitioner has claimed RoE in respect of 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 following effective tax rates for 2014-19 tariff period:

Year	Claimed effective tax rate (in %)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
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

31. 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 given as follows:

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

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

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

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

33. The Petitioner has claimed RoE for 2014-19 period after grossing up RoE of 15.50% with effective tax rates (based on MAT rates) of each year as per the above said Regulation. The RoE is trued up on the basis of MAT rates applicable in the respective years and is allowed in respect of the transmission asset as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	122.44	173.74	173.74	186.77	186.77
Additions due to ACE	51.30	0.00	13.03	0.00	0.00
Closing Equity	173.74	173.74	186.77	186.77	186.77
Average Equity	148.09	173.74	180.25	186.77	186.77
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (in %)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (In %)	19.610	19.705	19.705	19.705	19.758
Return on Equity	29.04	34.24	35.52	36.80	36.90

34. The details of RoE approved *vide* order dated 29.1.2020 in Petition No. 322/TT/2019, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 29.1.2020 in Petition No. 322/TT/2019.	29.04	36.54	39.01	39.01	39.01
Claimed by the Petitioner in the instant petition	29.04	34.24	35.52	36.80	36.90
Allowed after true-up in this order	29.04	34.24	35.52	36.80	36.90

Operation & Maintenance Expenses ("O&M Expenses")

35. The Petitioner has not claimed any O&M Expenses in respect of the transmission asset.

Interest on Working Capital ("IWC")

36. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and trued-up IWC has been allowed in respect of the transmission asset is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Working Capital for O&M					
Expenses (O&M Expenses for	0.00	0.00	0.00	0.00	0.00
one Month)					
Working Capital for					
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
(15% of O&M Expenses)					
Working Capital for					
Receivables (Equivalent of two	14.38	16.51	16.68	16.79	16.29
months of annual fixed cost)					
Total Working Capital	14.38	16.51	16.68	16.79	16.29
Rate of Interest on working	13.50%	13.50%	13.50%	13.50%	13.50%
capital (in %)	13.30%	13.30%	13.50%	13.50%	13.30%
Interest on Working Capital	1.94	2.23	2.25	2.27	2.20

37. The details of IWC approved *vide* order dated 29.1.2020 in Petition No. 322/TT/2019 in respect of the transmission asset, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 29.1.2020 in Petition No. 322/TT/2019	1.94	2.39	2.49	2.42	2.34
Claimed by the Petitioner in the instant petition	1.94	2.23	2.25	2.27	2.20
Allowed after true-up in this order	1.94	2.23	2.25	2.27	2.20

APPROVED ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

38. The trued up Annual Fixed Charges (AFC) approved in respect of the transmission asset for 2014-19 tariff period are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	26.06	30.58	31.72	32.87	32.87
Interest on Loan	29.24	32.00	30.59	28.83	25.79
Return on Equity	29.04	34.24	35.52	36.80	36.90
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	1.94	2.23	2.25	2.27	2.20
Total	86.28	99.04	100.08	100.77	97.76

39. Accordingly, Annual Transmission Charges approved *vide* order dated 29.1.2020 in Petition No. 322/TT/2019, claimed by the Petitioner in the instant petition and approved after truing up in this order are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 29.1.2020 in Petition No. 322/TT/2019	86.28	106.29	110.67	107.41	104.14
Claimed by the Petitioner in the instant petition	86.28	99.05	100.08	100.77	97.76
Allowed after true-up in this order	86.28	99.04	100.08	100.77	97.76

Determination of Annual Fixed Charges for 2019-24 Tariff Period

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	32.87	32.87	32.87	32.87	32.87
Interest on Loan	22.86	19.89	16.95	14.08	11.22
Return on Equity	35.08	35.08	35.08	35.08	35.08
O&M Expenses	39.20	40.64	42.08	43.52	45.12
Interest on Working Capital	3.07	3.10	3.12	3.14	3.16
Total	133.08	131.58	130.10	128.69	127.45

41. The details of IWC claimed by the Petitioner in respect of the transmission asset for 2019-24 period are as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	3.27	3.39	3.51	3.63	3.76
Maintenance Spares	5.88	6.10	6.31	6.53	6.77
Receivables	16.36	16.22	16.04	15.86	15.67
Total Working Capital	25.51	25.71	25.86	26.02	26.20
Rate of Interest on working capital (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	3.07	3.10	3.12	3.14	3.16

Capital Cost

- 42. 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;
 - (I) 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 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 decapitalised only after its redeployment;

Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.

(c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;



- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."
- 43. The Petitioner has claimed capital cost of ₹622.56 lakh as on 31.3.2019 in respect of the transmission asset. The capital cost of ₹622.56 lakh has been worked out by the Commission as on 31.3.2019 and considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure ("ACE")

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

"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 23of these regulations;
 - (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
 - (e) Change in law or compliance of any existing law; and
 - (f) Force Majeure events:

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

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

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

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



- (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
- (b) Change in law or compliance of any existing law;
- (c) Deferred works relating to ash pond or ash handling system in the original scope of work;
- (d) Liability for works executed prior to the cut-off date;
- (e) Force Majeure events;
- (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
- (g) Raising of ash dyke as a part of ash disposal system.
- (2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
 - (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations.
 - (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
 - (c) The replacement of such asset or equipment is necessary on account of
 - (d) The replacement of such asset or equipment has otherwise been allowed by the Commission."
- 45. The Petitioner has not claimed any ACE for 2019-24 period. Accordingly, the capital cost considered in respect of the transmission asset for 2019-24 tariff period is as follows:

Capital cost as on 1.4.2019	ACE claimed for 2019-24	Capital cost as on 31.3.2024
622.56	0.00	622.56

Debt-Equity ratio

- 46. Regulation 18 of the 2019 Tariff Regulations provide 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."

47. Debt-equity ratio considered in respect of the transmission asset for the purpose of computation of tariff for 2019-24 tariff period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations and the same is as follows:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	435.79	70.00	435.79	70.00
Equity	186.77	30.00	186.77	30.00
Total	622.56	100.00	622.56	100.00

Depreciation

- 48. Regulation 33 of the 2019 Tariff Regulations provide 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 there of including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

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

- (2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.
- (3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

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

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

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

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

- (4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-I** to these regulations for the assets of the generating station and transmission system:

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

- 6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.
- (7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.
- (8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services.
- 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."
- 49. As the transmission asset is comprised of only one asset, the gross block during 2019-20 has been depreciated at 5.28% after taking into account depreciation rates of assets as specified in the 2019 Tariff Regulations. Depreciation has been worked out considering ACE as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Depreciation allowed in respect of the transmission asset for 2019-24 tariff period is as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	622.56	622.56	622.56	622.56	622.56
Addition during the year 2019-24 due to projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	622.56	622.56	622.56	622.56	622.56
Average Gross Block	622.56	622.56	622.56	622.56	622.56
Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
Balance useful life at the beginning of the year (Year)	20	19	18	17	16
Lapsed life of the asset (Year)	5	6	7	8	9
Depreciable Value at the beginning of the year	560.30	560.30	560.30	560.30	560.30
Depreciation during the year	32.87	32.87	32.87	32.87	32.87
Cumulative Depreciation at the end of the year	164.90	197.77	230.64	263.51	296.38
Remaining Depreciable Value at the end of the year	197.77	230.64	263.51	296.38	329.25

Interest on Loan ("IoL")

- 50. 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."
- 51. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, floating rate of interest, if any, shall be considered at the time of truing up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the transmission asset for 2019-24 tariff period is as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	435.79	435.79	435.79	435.79	435.79
Cumulative Repayments up to Previous Year	164.90	197.77	230.64	263.51	296.38
Net Loan-Opening	270.89	238.02	205.15	172.28	139.41
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	32.87	32.87	32.87	32.87	32.87
Net Loan-Closing	238.02	205.15	172.28	139.41	106.54
Average Loan	254.46	221.59	188.72	155.84	122.97
Weighted Average Rate of Interest on Loan (in %)	8.9816	8.9778	8.9808	9.0337	9.1190
Interest on Loan	22.85	19.89	16.95	14.08	11.21

Return on Equity ("RoE")

- 52. 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:

Rate of pre-tax return on equity = 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:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	186.77	186.77	186.77	186.77	186.77
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	186.77	186.77	186.77	186.77	186.77
Average Equity	186.77	186.77	186.77	186.77	186.77
Return on Equity (Base Rate) (in %)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
Return on Equity	35.08	35.08	35.08	35.08	35.08

Operation & Maintenance Expenses ("O&M Expenses")

54. O&M Expenses claimed by the Petitioner in respect of the transmission asset for various elements included in the transmission asset for 2019-24 tariff period are as follows:

O&M Expenses							
2019-20 2020-21 2021-22 2022-23 2023-24							
Transformers							
220 kV	39.20	40.64	42.08	43.52	45.12		
Total O&M Expenses (₹ in lakh)	39.20	40.64	42.08	43.52	45.12		

The norms specified under Regulation 35(3)(a) and Regulation 33(4) of the 55. 2019 Tariff Regulations are as follows:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lak	⊥ (h per bav)				
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 p	er MVA)	J	l .	JI	1
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 (₹ L	akh 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 year
- (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."
- 56. We have considered the submissions of the Petitioner. The Petitioner has claimed O&M Expenses in respect for the transmission asset for the 2019-24 tariff period. As the instant spare 160 MVA ICT has been put to regular use with effect from 1.10.2014, O&M Expenses are allowed. The O&M Expenses allowed for the transmission asset are as follows:

(₹ in lakh)

O&M Expenses	2019-20	2020-21	2021-22	2022-23	2023-24
220 kV 160 MVA ICT	39.20	40.64	42.08	43.52	45.12

Interest on Working Capital ("IWC")

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

"34. Interest on Working Capital

(1)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 fixed cost;
- ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- iii. Operation and maintenance expenses, including security expenses for one month"
- (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:



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

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

"3.Definitions ...

- (7) 'Bank Rate' means the one-year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;"
- 58. The Petitioner has submitted that it has computed IWC for 2019-24 period considering SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-2021 and from 2021-22 onwards as 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest allowed thereon are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M	3.27	3.39	3.51	3.63	3.76
Expenses					
(O&M Expenses for one Month)					
Working Capital for					
Maintenance Spares	5.88	6.10	6.31	6.53	6.77
(15% of O&M Expenses)					
Working Capital for					
Receivables					
(Equivalent to 45 days of	16.36	16.20	15.99	15.81	15.62
annual fixed cost/ annual					
transmission charges)					
Total Working Capital	25.51	25.68	25.81	25.97	26.15
Rate of Interest on working	12.05	11.25	10.50	10.50	10.50
capital (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	3.07	2.89	2.71	2.73	2.75

Annual Fixed Charges for 2019-24 Tariff Period

59. The transmission charges allowed in respect of 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	32.87	32.87	32.87	32.87	32.87
Interest on Loan	22.85	19.89	16.95	14.08	11.21
Return on Equity	35.08	35.08	35.08	35.08	35.08
O&M Expenses	39.20	40.64	42.08	43.52	45.12
Interest on Working Capital	3.07	2.89	2.71	2.73	2.75
Total	133.08	131.37	129.69	128.28	127.03

Filing Fee and Publication Expenses

60. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. 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 & RLDC Fees and Charges

61. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 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 2019-24 tariff period.

Goods and Services Tax

62. The Petitioner has submitted that if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to

be paid by the Petitioner on account of demand from Government / Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

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

Security Expenses

- 64. The Petitioner has submitted that security expenses in respect of the transmission asset are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and consequential IWC.
- 65. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses 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 and has approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No.260/MP/2020. 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

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

Sharing of Transmission Charges

- 67. BSPHCL has submitted that it has been held on different occasions that the present consumers cannot and should not be burdened for the past charges. In response, the Petitioner has submitted that the transmission asset achieved COD during 2009-14 tariff period and the Commission may take a view considering that there are no past charges that may lead to burdening on present consumers.
- 68. We have considered the submissions of the Petitioner and BSPHCL and conclude that the Petitioner has not claimed any past charges.
- 69. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. However, with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (in short "the 2020 Sharing Regulations"). Accordingly, the liabilities of the DICs for arrears of the transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of transmission charges for subsequent period shall be recovered in terms of the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

70. To summarise:

(a) The trued-up AFC allowed in respect of the transmission asset for 2014-19 tariff period are as follows:

					(
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	86.28	99.04	100.08	100.77	97.76

(b) AFC approved in respect of the transmission asset for 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	133.08	131.37	129.69	128.28	127.03

71. This order disposes of Petition No. 689/TT/2020 in terms of the above discussion and findings.

sd/- sd/- sd/-

(P. K. Singh) (Arun Goyal) (I. S. Jha) (P. K. Pujari)
Member Member Chairperson