

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 476/TT/2019

Coram:

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

Date of Order: 28.05.2021

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of Transmission System associated with Farakka-III in Eastern Region.

And in the matter of:

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

....Petitioner

Vs.

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

...Respondents

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

For Respondents : 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-up of the 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 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 Transmission System associated with Farkka-III (hereinafter referred to as “the transmission asset” or “the transmission system”) in Eastern Region.

2. The Petitioner has made the following prayers in this 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 9.0 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 9.0 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 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.
- 8) Allow the Petitioner to claim the capital spares at the end of tariff block as per actual.
- 9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the 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) of the transmission system was accorded by the Board of Directors of the Petitioner vide Memorandum No. C/CP/Farakka-III dated 10.12.2008 at an estimated cost of ₹20407 lakh including IDC of ₹1270 lakh based on 2nd quarter, 2008 price level.



b) The scope of work covered under the transmission system is as follows:

Transmission lines:

- 400 kV Farakka-Kahalgaon D/C Line Ckt-I & II with Kahalgaon-Biharsharif Line CKT-III and IV and associated bays

Sub-station:

- 400 kV Kahalgaon Sub-station

c) The entire scope of work under the transmission system has been completed and is covered under the instant petition. The COD of the transmission asset is 1.9.2011.

d) As per IA dated 10.12.2008, the transmission system was to be executed within 30 months from the date of IA i.e. by 1.7.2011 (SCOD on first day of the next month). The transmission asset was put under commercial operation on 1.9.2011 with a time over-run of 2 months. The time over-run of 2 months was condoned by the Commission vide order dated 15.10.2012 in Petition No. 86/2011.

e) The tariff for the transmission asset from its COD to 31.3.2014 was determined by the Commission vide order dated 15.10.2012 in Petition No. 86/2011 as per the 2009 Tariff Regulations. The tariff approved vide order dated 15.10.2012 was trued up and tariff for the 2014-19 tariff period was determined vide order dated 21.4.2016 in Petition No. 506/TT/2014 as per the 2014 Tariff Regulations. The AFC allowed for the 2014-19 tariff period vide order dated 21.4.2016 and claimed in the instant petition are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
AFC approved vide order dated 21.4.2016 in Petition No. 506/TT/2014	2243.31	2190.27	2137.00	2083.98	2031.19
AFC Claimed by the Petitioner based on true-up in the instant Petition	2243.58	2193.72	2140.07	2087.07	2036.32

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



5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition was also published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid Notices published in the newspapers by the Petitioner. Bihar State Power (Holding) Company Limited (BSPHCL) i.e. Respondent No. 1 has filed its reply vide affidavit dated 27.3.2021 and has raised issues such as annual truing up of tariff, depreciation and O&M Expenses, MAT rate and RoE, GST, IoL, filing fee and publication expenses and sharing of transmission charges. In response, the Petitioner has filed rejoinder vide affidavit dated 8.4.2021. The issues raised by BSPHCL and the clarifications given by the Petitioner are dealt in the relevant paragraphs of this order.

6. The hearing in this matter was held on 24.3.2021 through video conference and the Commission reserved the order in the matter.

7. Having heard the Petitioner and the Respondent and perused the materials on record, we proceed to dispose of the petition.

8. BSPHCL has submitted that the details provided for truing up annual transmission tariff of 2014-19 period in the petition includes depreciation and O&M Expenses. However, for calculating final revised AFC based on truing up, these two components are not given in the petition.

9. In response, the Petitioner has submitted that the details of depreciation and O&M Expenses are given in the tariff forms provided in the petition, i.e. details of depreciation in Form 10 & 10A and O&M Expenses in Form 2.



10. We have considered the submissions of the Petitioner and BSPHCL. No merit is observed in the submissions of BSPHCL as the Petitioner has submitted necessary documents in support of its claim.

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

11. The details of the trued-up transmission charges claimed by the Petitioner in respect of the transmission asset for 2014-19 tariff period is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	663.05	663.05	663.05	663.05	663.05
Interest on Loan	598.25	539.63	480.95	422.26	363.58
Return on Equity	737.94	741.33	740.95	740.95	742.94
Interest on working capital	56.40	55.48	54.47	53.49	52.56
O & M Expenses	187.94	194.23	200.65	207.32	214.19
Total	2243.58	2193.72	2140.07	2087.07	2036.32

12. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission asset for 2014-19 tariff period is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	15.66	16.19	16.72	17.28	17.85
Maintenance Spares	28.19	29.13	30.10	31.10	32.13
Receivables	373.93	365.62	356.68	347.85	339.39
Total	417.78	410.94	403.50	396.23	389.37
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Pro-rata Interest on Working Capital	56.40	55.48	54.47	53.49	52.56

Capital Cost

13. The capital cost approved by the Commission vide order dated 21.4.2016 in Petition No. 506/TT/2014 in respect of the transmission asset is as follows:

(₹ in lakh)				
FR approved cost	Expenditure up to 31.3.2014	ACE 2014-2019		Estimated completion cost
		2014-15	2015-19	
20407.00	12534.05	3.46	0.00	12537.51



14. The Petitioner vide Management Certificate dated 22.7.2019 has submitted the capital cost incurred up to COD and has not claimed ACE during 2014-19 tariff period. Accordingly, the details are as follows:

(₹ in lakh)		
Approved cost as per FR	Expenditure up to COD/ 31.3.2014	Estimated Completion Cost as on 31.3.2019
20407.00	12534.05	12534.05

15. The completion cost is within FR approved cost. Therefore, there is no cost over-run in respect of the transmission asset.

Time Over-run

16. As per IA, the scheduled COD of the transmission asset was 1.7.2011 and it was put into commercial operation on 1.9.2011 with a time over-run of 2 months. The time over-run of 2 months was condoned by the Commission vide order dated 15.10.2012 in Petition No. 86/2011.

Additional Capital Expenditure (ACE)

17. The Petitioner has not claimed any ACE in respect of the transmission asset for 2014-19 period.

Capital cost for 2014-19 tariff period

18. Accordingly, the capital cost considered as on 31.3.2019 in respect of the transmission asset for 2014-19 tariff period is as follows:

(₹ in lakh)		
Capital Cost as on COD	ACE 2014-19	Total Capital Cost as on 31.3.2019
12534.05	0.00	12534.05

Debt-Equity Ratio

19. The Petitioner has considered a debt-equity ratio of 70:30 as on COD and for ACE post-COD. The debt-equity ratio of 70:30 has been considered for capital cost

as on COD and 31.3.2019. The details of debt-equity ratio in respect of the transmission asset as on the date of COD and as on 31.3.2019 is as follows:

Particulars	As on 1.4.2014		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	8773.84	70.00	8773.84	70.00
Equity	3760.21	30.00	3760.21	30.00
Total	12534.05	100.00	12534.05	100.00

Depreciation

20. The 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 the 2014-19 tariff period. The Gross Block during the 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is given in Annexure-1. The depreciation for 2014-19 tariff period is trued-up as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations and the same is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	12534.05	12534.05	12534.05	12534.05	12534.05
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	12534.05	12534.05	12534.05	12534.05	12534.05
Average Gross Block	12534.05	12534.05	12534.05	12534.05	12534.05
Weighted Average Rate of Depreciation (WAROD) (%)	5.29	5.29	5.29	5.29	5.29
Balance useful life at the beginning of the year (Year)	33.00	32.00	31.00	30.00	29.00
Aggregated Depreciable Value	11280.65	11280.65	11280.65	11280.65	11280.65
Remaining Aggregated Depreciable Value	8934.31	8271.26	7608.21	6945.16	6282.11
Combined Depreciation during the year	663.05	663.05	663.05	663.05	663.05

21. Accordingly, depreciation allowed for the transmission asset vide order dated 21.4.2016 in Petition No. 506/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 21.4.2016 in Petition No. 506/TT/2014	663.14	663.23	663.23	663.23	663.23
Claimed by the Petitioner in the instant petition	663.05	663.05	663.05	663.05	663.05
Allowed after true up in this order	663.05	663.05	663.05	663.05	663.05

Interest on Loan (IoL)

22. The Petitioner has claimed IoL based on actual interest rates for each year during 2014-19 period. We have considered the submissions of the Petitioner and accordingly calculated IoL based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as follows:

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

23. The details of trued up IoL approved for the transmission asset for 2014-19 tariff period is as follows:

(₹ in lakh)					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	8773.84	8773.84	8773.84	8773.84	8773.84
Cumulative Repayments up to Previous Year	1683.28	2346.33	3009.38	3672.44	4335.49
Net Loan-Opening	7090.56	6427.51	5764.46	5101.40	4438.35
Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	663.05	663.05	663.05	663.05	663.05
Net Loan-Closing	6427.51	5764.46	5101.40	4438.35	3775.30
Average Loan	6759.03	6095.98	5432.93	4769.88	4106.83
Weighted Average Rate of Interest on Loan (%)	8.851	8.852	8.852	8.853	8.853
Interest on Loan	598.25	539.63	480.95	422.26	363.58

24. Accordingly, IoL approved vide order dated 21.4.2016 in Petition No. 506/TT/2014, claimed by the Petitioner in the instant petition and trued up in this order is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 21.4.2016 in Petition No. 506/TT/2014	598.35	539.83	481.13	422.43	367.73
Claimed by the Petitioner in the instant petition	598.25	539.63	480.95	422.26	363.58
Allowed after true-up in this order	598.25	539.63	480.95	422.26	363.58

Return on Equity (RoE)

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

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

26. BSPHCL has submitted that as per Regulation 25(3) of the 2014 Tariff Regulations, the Petitioner is obliged to true up the grossed-up rate of RoE at the end of every financial year based on the actual tax paid together with any additional tax demand including interest, duly adjusted for refund of tax including interest received from the income tax authorities pertaining to the tariff period 2014-19 on actual gross income of any financial year. BSPHCL has further submitted that the penalties should

not be claimed by the transmission licensee and any under-recovery or over-recovery of grossed up rate of RoE after truing up shall be recorded or refunded to the beneficiaries or the LTTCs on year to year basis. It is a statutory duty of the Petitioner, being a transmission licensee, to carry out the true up exercise on yearly basis as per Regulation 25(3) of the 2014 Tariff Regulations and to provide all the details during the filing of the petition. However, neither proper exercise has been done by the Petitioner nor proper documents and profit and loss account duly certified by the Chartered Accountant have been placed on record. BSPHCL has submitted that there is no specific averment in the petition to the effect that actual tax has been paid only on the income from all business/ sources and hence, it is clear that tariff for each year of 2014-19 tariff period has not been trued-up in accordance with the Regulation 25(3) of the 2014 Tariff Regulations.

27. In response, the Petitioner has submitted that the effective rate of tax considered for 2014-15 and 2015-16 are based on Assessment Orders issued by the Income Tax Authorities for the purpose of grossing up of RoE. The Petitioner has further submitted that the effective rate of tax considered for grossing up of RoE for 2016-17 and 2017-18 are based upon the Income Tax returns filed and for 2018-19 pending filing of ITR. The effective tax rate is calculated based on the applicable MAT rate (i.e. MAT 18.50% + Surcharge 12.00% + Cess 4%), for the purpose of grossing up of RoE rate. The Petitioner has submitted that the Auditor's Certificate for MAT rate was submitted in Petition No. 247/TT/2019 and the Commission has granted trued up tariff to the Petitioner based on notified MAT rates are considered for grossing-up of rate of RoE in various petitions such as Petition No.247/TT/2019, Petition No. 245/TT/2019, Petition No. 274/TT/2019, Petition No. 307/TT/2019, etc.



The Petitioner has submitted that grossed up RoE (in %) and effective tax rate for 2014-19 tariff period has already been determined by the Commission. The Petitioner has submitted to allow it to claim the differential tariff on account of the trued up RoE based on effective tax rate as calculated above and Income Tax assessment/ re-assessment for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of assessment orders, directly from the beneficiaries on year to year basis as per the Regulations. The Income Tax assessment for the year 2017-18 and 2018-19 has not yet been completed. The deferred tax liability before 1.4.2009 shall be recoverable from the beneficiaries or long-term customers/ DIC as the case may be, as and when the same is materialized as per Regulation 49 of the 2014 Tariff Regulations and Regulation 67 of the 2019 Tariff Regulations and prayed for being allowed to recover deferred tax liability directly from the beneficiaries without making any application before the Commission.

28. We have considered the submissions of the Petitioner and BSPHCL. As regards BSPHCL's contention that the grossed up rate of RoE for the period 2016-17 to 2018-19 is not based on the MAT rates approved by the Income Tax Authorities, it is observed that the effective rate of tax considered by the Petitioner for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by Income Tax authorities and the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed for the purpose of grossing up the RoE rate of respective years. Thus, the submissions of BSPHCL are devoid of any merit as the Petitioner has submitted necessary documents in support of its claim. As regards the claims of the Petitioner and counter claims of BSPHCL regarding the truing of the grossed up RoE, the same is dealt as per Regulation 25(3) of the 2014 Tariff Regulations.

29. 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 in the table below. The relevant portion of the order dated 27.4.2020 is as follows:

“26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/ DICs as the case may be on year to year basis.

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

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

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

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

2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

31. The Petitioner also requested the Commission to allow it to claim the differential tariff on account of the trued-up RoE based on effective rate calculated on completion of Income tax assessment/ reassessment for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of the respective assessment orders, directly from the beneficiaries, on year to year basis as provided in the regulation.

32. Accordingly, the trued-up RoE allowed for the transmission asset is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	3760.21	3760.21	3760.21	3760.21	3760.21
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	3760.21	3760.21	3760.21	3760.21	3760.21
Average Equity	3760.21	3760.21	3760.21	3760.21	3760.21
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax)	737.38	740.95	740.95	740.95	742.94

33. RoE allowed vide order dated 21.4.2016 in Petition No. 506/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 21.4.2016 in Petition No. 506/TT/2014	737.48	737.58	737.58	737.58	737.58
As claimed by the Petitioner in the instant petition	737.94	741.33	740.95	740.95	742.94
Allowed after true up in this order	737.38	740.95	740.95	740.95	742.94

Operation & Maintenance Expenses (O&M Expenses)

34. The details of the O&M Expenses in respect of the transmission asset allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations for the purpose of tariff are as follows:



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station bays					
400 kV Kahalgaon-Farakka IV Line Bay (Number)	One				
400 kV Kahalgaon-Farakka III Line Bay (Number)	One				
Norm (₹ lakh/bay)					
400 kV (AIS)	60.30	62.30	64.37	66.51	68.71
Total Sub-station O&M Expenses	120.60	124.60	128.74	133.02	137.42
AC Lines(₹ lakh/ km)					
400 kV Farakka Kahalgaon D/C Line Ckt-I & II with Kahalgaon-Biharsharif Line CKT-III and IV	95.250 km				
Norm (₹ lakh/km)					
DC Twin / Triple Conductor	0.71	0.73	0.76	0.78	0.81
Total AC Lines O&M Expenses	67.43	69.63	71.91	74.30	76.77
Total O&M Expenses	187.94	194.23	200.65	207.32	214.19

35. Accordingly, O&M Expenses approved vide order dated 21.4.2016 in Petition No. 506/TT/2014, O&M Expenses claimed by the Petitioner in the instant petition and true up O&M Expenses allowed in the instant order are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 21.4.2016 in Petition No. 506/TT/2014	187.94	194.23	200.65	207.32	214.19
Claimed by the Petitioner in the instant petition	187.94	194.23	200.65	207.32	214.19
Allowed after true up in this order	187.94	194.23	200.65	207.32	214.19

Interest on Working Capital (IWC)

36. The Petitioner is entitled to claim IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations. The components of the working capital and the Petitioner's entitlement to interest thereon are discussed as follows:



i. Maintenance spares:

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

ii. O & M Expenses:

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

iii. Receivables:

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

iv. Rate of interest on working capital:

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

37. The trued up IWC allowed in respect of the transmission asset for 2014-19 tariff period is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses (O&M Expenses for one month)	15.66	16.19	16.72	17.28	17.85
Maintenance Spares (15% of O&M)	28.19	29.13	30.10	31.10	32.13
Receivables (Equivalent to two months of annual transmission charges)	373.83	365.55	356.68	347.84	339.39
Total	417.69	410.87	403.50	396.22	389.37
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50
IWC	56.39	55.47	54.47	53.49	52.56

38. Accordingly, IWC approved vide order dated 21.4.2016 in Petition No. 506/TT/2014, trued up IWC claimed by the Petitioner and trued up IWC allowed in the instant order is as follows:



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 21.4.2016 in Petition No. 506/TT/2014	56.39	55.40	54.40	53.42	52.46
Claimed by the Petitioner in the instant petition	56.40	55.48	54.47	53.49	52.56
Allowed after true up in this order	56.39	55.47	54.47	53.49	52.56

Annual Fixed Charges for the 2014-19 Tariff Period

39. Accordingly, the trued up annual fixed charges approved for the transmission asset for the 2014-19 tariff period is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	663.05	663.05	663.05	663.05	663.05
Interest on Loan	598.25	539.63	480.95	422.26	363.58
Return on Equity	737.38	740.95	740.95	740.95	742.94
Interest on Working Capital	56.39	55.47	54.47	53.49	52.56
O & M Expenses	187.94	194.23	200.65	207.32	214.19
Total	2243.00	2193.33	2140.07	2087.07	2036.33

40. AFC in respect of the transmission asset approved vide order dated 21.4.2016 in Petition No. 506/TT/2014, claimed by the Petitioner and trued up in respect of the transmission asset is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 21.4.2016 in Petition No. 506/TT/2014	2243.30	2190.27	2136.99	2083.98	2035.19
Claimed by the Petitioner in the instant Petition	2243.58	2193.72	2140.07	2087.07	2036.32
Allowed after true up in this order	2243.00	2193.33	2140.07	2087.07	2036.33

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

41. 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	663.05	663.05	663.05	663.05	663.05
Interest on Loan	304.90	246.21	187.52	128.84	70.14
Return on Equity	742.94	742.94	742.94	742.94	742.94
Interest on Working Capital	32.29	31.71	31.06	30.42	29.72
Operation and Maintenance	150.61	155.82	161.21	166.77	172.51
Total	1893.79	1839.73	1785.78	1732.02	1678.36

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	12.55	12.99	13.43	13.90	14.38
Maintenance Spares	22.59	23.37	24.18	25.02	25.88
Receivables	232.84	226.82	220.16	213.54	206.36
Total	267.98	263.18	257.77	252.46	246.62
Rate of IWC	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	32.29	31.71	31.06	30.42	29.72

Capital Cost

43. Regulations 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 asset before the date of commercial operation;
- (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

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

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

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

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

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



- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be de-capitalised only after its redeployment;

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

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”

44. The trued-up capital cost of ₹12534.05 lakh in respect of the transmission asset has been considered as admitted capital cost as on 1.4.2019 for working out tariff for the 2019-24 tariff period.

45. The Petitioner has not claimed any ACE for 2019-24 tariff period.

Capital cost for the 2019-24 tariff period

46. Accordingly, the capital cost of the transmission asset considered for 2019-24 tariff period, subject to truing-up, is as follows:

(₹ in lakh)		
Capital Cost allowed as on 1.4.2019	ACE allowed for the year 2019-24	Total Estimated Completion Cost up to 31.3.2024
12534.05	0.00	12534.05

47. The completion cost of the transmission asset is within the FR cost. Therefore, there is no cost over-run.



Debt-Equity Ratio

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

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

Provided that:

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

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

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

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

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

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

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



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

49. The details of the debt-equity considered for the purpose of computation of tariff for 2019-24 tariff period in respect of the transmission asset is as follows:

Particulars	(₹ in lakh)			
	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	8773.84	70.00	8773.84	70.00
Equity	3760.21	30.00	3760.21	30.00
Total	12534.05	100.00	12534.05	100.00

Depreciation

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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

51. We have considered the submissions of the Petitioner. WAROD has been worked out (as given in Annexure-2) after taking into account the depreciation rates specified in the 2019 Tariff Regulations. The transmission asset has already completed 12 years of life as on 31.3.2023, the remaining depreciable value has been spread across the balance useful life of 22 years in accordance with Regulation 33(5)



of the 2019 Tariff Regulations. The depreciation allowed in respect of the transmission asset for 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	12534.05	12534.05	12534.05	12534.05	12534.05
Addition during 2019-24 due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	12534.05	12534.05	12534.05	12534.05	12534.05
Average Gross Block	12534.05	12534.05	12534.05	12534.05	12534.05
Weighted Average Rate of Depreciation (WAROD) (%)	5.29	5.29	5.29	5.29	5.29
Balance Useful life at the beginning of the year (Year)	28.00	27.00	26.00	25.00	24.00
Elapsed life at the beginning of the year (Year)	7.00	8.00	9.00	10.00	11.00
Aggregate Depreciable Value	11280.65	11280.65	11280.65	11280.65	11280.65
Depreciation during the year	663.05	663.05	663.05	663.05	663.05
Aggregate Cumulative Depreciation	5661.59	6324.64	6987.70	7650.75	8313.80
Remaining Aggregated Depreciable Value Total	5619.05	4956.00	4292.95	3629.90	2966.85

Interest on Loan (IoL)

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

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

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

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

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

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

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

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

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

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

53. The weighted average rate of IoL has been considered on the basis of the rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up.

54. BSPHCL has submitted that the 2019 Tariff Regulations do not permit change in interest rate due to floating rate of interest. In response, the Petitioner has submitted that IoL for 2019-24 tariff period has been calculated on the basis of interest rate prevailing as on 1.4.2019 and change in interest rates due to floating rate of interest applicable, if any, needs to be adjusted over the tariff period, directly from the beneficiaries.

55. We have considered the submissions of the Petitioner and BSPHCL. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. IoL has been allowed in accordance with Regulation 32 of the

2019 Tariff Regulations. IoL allowed for the transmission asset for 2019-24 tariff period is as follows:

(₹ in lakh)					
Particular	2019-20	2020-21	201-22	2022-23	2023-24
Gross Normative Loan	8773.84	8773.84	8773.84	8773.84	8773.84
Cumulative Repayments upto Previous Year	4998.54	5661.59	6324.64	6987.70	7650.75
Net Loan-Opening	3775.30	3112.25	2449.20	1786.14	1123.09
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	663.05	663.05	663.05	663.05	663.05
Net Loan-Closing	3112.25	2449.20	1786.14	1123.09	460.04
Average Loan	3443.77	2780.72	2117.67	1454.62	791.57
Weighted Average Rate of Interest on Loan (%)	8.853	8.854	8.855	8.857	8.860
Interest on Loan	304.89	246.21	187.52	128.83	70.13

Return on Equity (RoE)

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

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

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

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

Provided further that:

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

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

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



- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

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

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

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

Illustration-

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

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

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

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

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial

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

57. BSPHCL submitted that proper exercise has not been carried out by the Petitioner to calculate the MAT rate or RoE as per the 2019 Tariff Regulation and there is no rationale to consider the MAT rate @21.54887% and RoE @19.758% (being rate of 2018-19) for proposing the tariff for 2019-24 period. BSPHCL has further submitted that the Petitioner should be directed to provide complete details, calculations and documents as per the provisions of 2019 Tariff Regulations.

58. In response, the Petitioner has submitted that it is liable to pay income tax at MAT rate and at the time of filing of the petition, RoE was calculated on the basis of MAT rates existing at that time. However, there was a change in the MAT rate. Therefore, RoE may be 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 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 2019-24 tariff period on actual gross income. However, if any penalty 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 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 2019-24 tariff period on yearly basis on receipt of Income Tax assessment order.

59. We have considered the submissions of the Petitioner and BSPHCL. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE for 2019-24 tariff period, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed in respect of the transmission asset under Regulation 31 of the 2019 Tariff Regulation is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	3760.21	3760.21	3760.21	3760.21	3760.21
Additions due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	3760.21	3760.21	3760.21	3760.21	3760.21
Average Equity	3760.21	3760.21	3760.21	3760.21	3760.21
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	706.24	706.24	706.24	706.24	706.24

Operation & Maintenance Expenses (O&M Expenses)

60. Regulations 35(3) and 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
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
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
<i>Norms for HVDC stations</i>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except	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.”*

61. O&M Expenses claimed by the Petitioner 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
Sub-station bays (Number)					
400 kV Kahalgaon:Farakka IV Line Bay (Number)	One	One	One	One	One
400 kV Kahalgaon:Farakka III	One	One	One	One	One



Line Bay (Number)					
Norm (₹ lakh/bay)					
400 kV (AIS)	32.15	33.28	34.45	35.66	36.91
Total Sub-station O&M Expenses	64.30	66.56	68.90	71.32	73.82
AC Lines(₹ lakh/ km)					
400 kV Farakka-Kahalgaon D/C Line Ckt-I & II with Kahalgaon-Biharsharif Line CKT-III and IV	95.250	95.250	95.250	95.250	95.250
Norm (₹ lakh/km)					
DC Twin / Triple Conductor	0.88	0.91	0.94	0.98	1.01
Total AC Lines O&M Expenses	83.92	86.87	89.92	93.06	96.30
Communication System					
PLCC (₹ in lakh)	119.44	119.44	119.44	119.44	119.44
Norms (%)					
Communication System (%)	2	2	2	2	2
Total O&M Expenses for Communication System	2.39	2.39	2.39	2.39	2.39
Total O&M Expenses	150.61	155.82	161.21	166.77	172.51

62. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station have been specified accordingly. It was placed before us that the Commission vide order dated 24.1.2021 in Petition No.126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed. The relevant portions of the order dated 24.1.2021 in Petition No.126/TT/2020 is extracted as follows:

“103. Thus, although PLCC equipment is a communication system, it has been considered as a part of sub-station, as it is used both for protection and

communication. Therefore, we are of the considered view that rightly, it was not considered for separate O&M Expenses while framing norms of O&M for 2019-24 tariff period. While specifying norms for bays and transformers, O&M Expenses for PLCC have been included within norms for O&M Expenses for sub-station. Norms of O&M Expenses @2% of the capital cost in terms of Regulation 35(4) of the 2019 Tariff Regulations have been specified for communication system such as PMU, RMU, OPGW etc. and not for PLCC equipment.”

105. In our view, granting of O&M Expenses for PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations under the communication system head would tantamount to granting O&M Expenses twice for PLCC equipment as PLCC equipment has already been considered as part of the sub-station. Therefore, the Petitioner’s prayer for grant of O&M Expenses for the PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations is rejected.

106. The principle adopted in this petition that PLCC is part of sub-station and accordingly no separate O&M Expenses is admissible for PLCC equipment in the 2019-24 tariff period under Regulation 35(4) of the 2019 Tariff Regulations shall be applicable in case of all petitions where similar claim is made by the Petitioner. As already mentioned, the Commission, however, on the basis of the claim made by the Petitioner has inadvertently allowed O&M Expenses for PLCC equipment @2% of its original project cost, which is applicable for other “communication system”, for 2019-24 period in 31 petitions given in Annexure-3 of this order. Therefore, the decision in this order shall also be applicable to all the petitions given in Annexure-3. Therefore, PGCIL is directed to bring this decision to the notice of all the stakeholders in the 31 petitions given in Annexure-3 and also make revised claim of O&M Expenses for PLCC as part of the sub-station at the time of truing up of the tariff allowed for 2019-24 period in respective petitions.”

63. O&M Expenses allowed as per the norms specified in the 2019 Tariff Regulations in respect of the transmission asset for 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station bays (Number)					
400 kV Kahalgaon:Farakka IV Line Bay (Number)	One	One	One	One	One
400 kV Kahalgaon:Farakka III Line Bay (Number)	One	One	One	One	One
Norm (₹ lakh/bay)					
400 kV (AIS)	32.15	33.28	34.45	35.66	36.91
Total Sub-station O&M Expenses	64.30	66.56	68.90	71.32	73.82
AC & HVDC Lines(₹ lakh/ km)					
400 kV FarakkaKahalgaon D/C Line Ckt-I & II with Kahalgaon-Biharsharif Line CKT-III and IV (km)	95.250				



Norm (₹ lakh/km)					
DC Twin / Triple Conductor	0.88	0.91	0.94	0.98	1.01
Total AC Lines O&M Expenses	83.92	86.87	89.92	93.06	96.30
Total O&M Expenses allowed	148.22	153.43	158.82	164.38	170.12

Interest on Working Capital (IWC)

64. Regulations 34(1)(c), 34(3) and 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;”*

65. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the bank rate as on 1.4.2019.



66. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, the rate of interest for 2020-21 onwards has been considered as 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of the working capital and interest allowed thereon allowed for the transmission asset is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses (O&M Expenses for one month)	12.35	12.79	13.23	13.70	14.18
Maintenance Spares (20% of O&M Expenses)	22.23	23.01	23.82	24.66	25.52
Receivables (Equivalent to 45 days of annual transmission charges)	227.96	221.66	215.01	208.39	201.23
Total	262.54	257.46	252.07	246.74	240.92
Rate of IWC (%)	12.05	11.25	11.25	11.25	11.25
Interest of Working Capital	31.64	28.96	28.36	27.76	27.10

Annual Fixed Charges for the 2019-24 Tariff Period

67. The annual fixed charges approved for the transmission asset for 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	663.05	663.05	663.05	663.05	663.05
Interest on Loan	304.89	246.21	187.52	128.83	70.13
Return on Equity	706.24	706.24	706.24	706.24	706.24
Interest on Working Capital	31.64	28.96	28.36	27.76	27.10
Operation and Maintenance	148.22	153.43	158.82	164.38	170.12
Total	1854.04	1797.90	1743.99	1690.26	1636.65

Filing Fee and Publication Expenses

68. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BSPHCL has submitted that grant of filing fee and expenses incurred are upon the discretion of the Commission and need not

necessarily be allowed in all cases. Further, nothing beyond what is contemplated by the 2019 Tariff Regulations may be granted. In response, the Petitioner has submitted that it has prayed for reimbursement of expenditure by the beneficiaries towards petition filing fee and publication expense, in terms of Regulation 70(1) of the 2019 Tariff Regulations. The Petitioner further submitted that the Commission vide order dated 28.3.2016 in Petition No. 137/TT/2015 has allowed the recovery of petition filing fee and publication of notices from the beneficiaries on pro rata basis.

69. We have considered the submissions of the Petitioner and BSPHCL. 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

70. 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

71. 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 Respondents 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. BSPHCL has objected

to the prayer of GST contending that the same is premature. In response, the Petitioner reiterated its submission.

72. We have considered the submission of the Petitioner and BSPHCL. GST is not levied on transmission service at present. Therefore, we are of the view that Petitioner's prayer is premature.

Security Expenses

73. The Petitioner has submitted that security expenses for the transmission asset 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 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on yearly basis.

74. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission asset owned by the Petitioner in one petition. It is observed that the Petitioner has already filed the Petition No. 260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-

19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

Capital Spares

75. 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

76. The billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

77. To summarise,

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

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	2243.00	2193.33	2140.07	2087.07	2036.33

(b) The Annual Fixed Charges allowed in respect of the transmission asset for 2019-24 tariff period are:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	1854.04	1797.90	1743.99	1690.26	1636.65

78. Annexure-1 and Annexure-2 given hereinafter form part of the order.



79. This order disposes of Petition No. 476/TT/2019 in terms of the above discussion and findings.

**sd/-
(Pravas Kumar Singh)
Member**

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

**sd/-
(I. S. Jha)
Member**

**sd/-
(P. K. Pujari)
Chairperson**



Petition No.:	476-TT-2020
Period	2014-19 True-up

Annexure - 1

Asset-I

2014-19 Capital Expenditure as on 1.4.2014	Admitted Capital Cost as on 31.3.2014 or COD whichever is later (₹ in lakh)	ACE (₹ in lakh) 2014-19	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (%)	Annual Depreciation (₹ in lakh)				
					2014-15	2015-16	2016-17	2017-18	2018-19
Transmission Line	11858.75	0.00	11858.75	5.28	626.14	626.14	626.14	626.14	626.14
Sub-station	555.86	0.00	555.86	5.28	29.35	29.35	29.35	29.35	29.35
PLCC	119.44	0.00	119.44	6.33	7.56	7.56	7.56	7.56	7.56
TOTAL	12534.05	0.00	12534.05		663.05	663.05	663.05	663.05	663.05
Average Gross Block (₹ in lakh)					12534.05	12534.05	12534.05	12534.05	12534.05
Weighted Average Rate of Depreciation %					5.29	5.29	5.29	5.29	5.29



Petition No.:	476-TT-2020
Period	2019-24 Tariff

Annexure – 2

2019-24 Capital Expenditure as on 1.4.2019	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Additional Capitalization (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciati on (%)	Annual Depreciation (₹ in lakh)				
		2019-24			2019-20	2020-21	2021-22	2022-23	2023-24
Transmission Line	11858.75	0.00	11858.75	5.28	626.14	626.14	626.14	626.14	626.14
Sub-station	555.86	0.00	555.86	5.28	29.35	29.35	29.35	29.35	29.35
PLCC	119.44	0.00	119.44	6.33	7.56	7.56	7.56	7.56	7.56
TOTAL	12534.05	0.00	12534.05		663.05	663.05	663.05	663.05	663.05
			Average Gross Block (₹ in lakh)		12534.05	12534.05	12534.05	12534.05	12534.05
			Weighted Average Rate of Depreciation (%)		5.29	5.29	5.29	5.29	5.29

