

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.271/TT/2018

Coram :

Shri P.K. Pujari, Chairperson

Dr. M. K. Iyer, Member

Shri I.S. Jha, Member

Date of Order: 4th October, 2019

In the matter of

Approval under Regulation-86 of CERC (Conduct of Business) Regulations, 1999 and CERC (Terms and Conditions of Tariff) Regulations,2014 for determination of Transmission tariff from DOCO to 31.3.2019 for Assets (07 Nos) under "Eastern Region Strengthening Scheme XIV in Eastern Region".

And in the matter of

Power Grid Corporation of India Limited

"Saudamini", Plot No.2,

Sector-29, Gurgaon -122 001

....Petitioner

Versus

1. Bihar State Power (Holding) Company Ltd.
(Formerly Bihar State Electricity Board -BSEB)
Vidyut Bhavan, Bailey Road, Patna – 800 001
2. West Bengal State Electricity Distribution Company Ltd.
Bidyut Bhawan, Bidhan Nagar
Block Dj, Sector-Ii, Salt Lake City
Kolkata - 700 091
3. Grid Corporation of Orissa Ltd.
Shahid Nagar, Bhubaneswar - 751 007
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 - 700 054
6. Power Department
Govt. of Sikkim, Gangtok - 737 101

...Respondents

Parties present:

- For Petitioner:** Shri S.K.Niranjan, PGCIL
Shri S.K.Venkatesan, PGCIL
Shri S. S Raju, PGCIL
Shri V.P Rastogi, PGCIL
Shri Amit Yadav, PGCIL
- For Respondent:** Shri R.B. Sharma, Advocate, BSP(H)CL
Shri Mohit Mudgal, Advocate, BSP(H)CL

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("the Petitioner") seeking approval of transmission tariff for the Assets (07 Nos) under "Eastern Region Strengthening Scheme XIV" in Eastern Region(hereinafter referred as "transmission asset") for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the asset.

2. The Petitioner has made the following prayers:
 - (i) *Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition;*
 - (ii) *Allow tariff upto 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 CERC (Terms and Conditions of tariff) Regulations,2014 for purpose of inclusion in the POC charges;*
 - (iii) *Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred;*
 - (iv) *Tariff may be allowed on the estimated completion cost.*
 - (v) *Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act,*



1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff regulations 2014;

- (vi) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition;
- (vii) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014;
- (viii) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents;
- (ix) Allow the initial spare as procured in the current petition in full as given in para-5 under Regulation 54 of the CERC (Terms and Condition of Tariff) Regulation,2014, "Power to Relax";
- (x) Allow the petitioner to bill and recover GST on Transmission charges separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further any taxes and duties including cess, etc. imposed by any Statutory/Govt./Municipal Authorities shall be allowed to be recovered from the beneficiaries.

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

Background

3. The Investment Approval(hereinafter referred to as "IA") for implementation of "Eastern Region Strengthening Scheme XIV" in Eastern Region was accorded by Board of Directors of the Petitioner in 328th meeting held on May 05, 2016 for ₹16701 lakh including an IDC of ₹1009 lakh based on October, 2015 price level (communicated vide Memorandum No.C/CP/ERSS-XIV dated 9.5.2016). The Revised Cost Estimate (RCE) of the said transmission project was accorded by Board of Directors on 11.4.2019 for ₹16913 lakh including an IDC of ₹206 lakh



based on September, 2018 price level(communicated vide Memorandum No.C/CP/PA19-20-01-0B-RCE-001 dated 22.4.2019).

4. The Eastern Region Grid had been experiencing high voltage. After review of the existing, under implementation and planned bus reactors in Eastern Region, it was observed that some of the 400kV substations require additional reactive compensation to contain the high voltages. Accordingly, it was proposed to install additional 125 KVAR bus reactor each at Banka, Bolangir, Baripada, Keonjhar, Durgapur, Chaibasa and Lakhisarai sub-stations of the Petitioner. Further, in view of limited space availability at Baripada sub-station, 125 MVAR bus reactor needed to be provided in GIS bays.

5. The scope of the scheme was discussed and agreed in the meeting of the Standing Committee on Power System Planning in Eastern Region held on 2.5.2014 at NRPC, Delhi. Subsequently, the Scheme was discussed and agreed for implementation in the 27th TCC & ERPC meeting held on 30th & 31st May, 2014 at Gangtok (Sikkim). The Petitioner has been entrusted with the implementation of the said scheme.

6. The scope of work covered under the project "Provision of Series Reactors in Northern Region" are as follows:-

Substation

(i) Reactive Compensation at 400 kV Substations

- (1) Installation of 1X125 MVAR Bus Reactor at Banka
- (2) Installation of 1X125 MVAR Bus Reactor at Bolangir
- (3) Installation of 1X125 MVAR Bus Reactor at Lakhisarai
- (4) Installation of 1X125 MVAR Bus Reactor at Chaibasa
- (5) Installation of 1X125 MVAR Bus Reactor at Keonjhar
- (6) Installation of 1X125 MVAR Bus Reactor at Durgapur
- (7) Installation of 1X125 MVAR Bus Reactor at Baripada with GIS Bay.

(ii) Modification of 132 kV bus arrangement including switchgear to Double Main (DM) Scheme with GIS at 220/132 kV Birpara Substation.

7. The status and scope of work of the subject project covered under various petitions is as follows:-



S.N.	Name of Asset	Remarks
1	<i>Modification of 132 kV bus arrangement including switchgear to Double Main (DM) Scheme with GIS at 220/132 kV Birpara Substation</i>	<i>Covered under Petition No 163/TT/2018</i>
2	Asset-I: 01 No. 125 MVAR Bus Reactor at Banka Substation along with associated bays.	Covered under Instant Petition
3	Asset-II: 01 No. 125 MVAR Bus Reactor at Chaibasa Substation along with associated bays.	
4	Asset-III: 01 No. 125 MVAR Bus Reactor at Lakhisarai Substation along with associated bays.	
5	Asset-IV: 01 No. 125 MVAR Bus Reactor at Durgapur Substation along with associated bays.	
6	Asset-V: 01 No. 125 MVAR Bus Reactor at Baripada Substation along with associated GIS bays.	
7	Asset-VI: 01 No. 125 MVAR Bus Reactor at Bolangir Substation along with associated bays.	
8	Asset-VII: 01 No. 125 MVAR Bus Reactor at Keonjhar Substation along with associated bays.	

8. The Petitioner had filed the instant petition with the Anticipated COD. However, vide affidavit dated 11.3.2019 the Petitioner has claimed the actual COD for the assets claimed in the petition. The same has been summarized as under:-

S.N.	Name of Asset	COD claimed at the time of filing instant petition	COD (actual) claimed vide affidavit dated 11.3.2019
1	Asset-I: 01 No. 125 MVAR Bus Reactor at Banka Substation along with associated bays.	1.9.2018 (Anticipated)	29.09.2018
2	Asset-II: 01 No. 125 MVAR Bus Reactor at Chaibasa Substation along with associated bays.	27.7.2018 (Anticipated)	28.07.2018
3	Asset-III: 01 No. 125 MVAR Bus Reactor at Lakhisarai Substation along with associated bays.	30.9.2018 (Anticipated)	05.11.2018
4	Asset-IV: 01 No. 125 MVAR Bus Reactor at Durgapur Substation along with associated bays.	2.8.2018 (Anticipated)	02.08.2018
5	Asset-V: 01 No. 125 MVAR Bus Reactor at Baripada Substation along with associated GIS bays.	30.6.2018 (Anticipated)	30.06.2018
6	Asset-VI: 01 No. 125 MVAR Bus Reactor at Bolangir Substation along with associated bays.	30.8.2018 (Anticipated)	30.09.2018
7	Asset-VII: 01 No. 125 MVAR Bus Reactor at Keonjhar Substation along with associated bays.	30.9.2018 (Anticipated)	01.11.2018

9. Vide order dated 25.4.2019 Annual Transmission Charges were allowed under the Provisio (i) to Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC charges in respect of the instant Assets.



10. The details of the Annual Transmission Charges claimed by the Petitioner are as under:-

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19 (Pro rata)	2018-19 (Pro rata)	2018-19 (Pro rata)	2018-19 (Pro rata)
Depreciation	28.35	41.52	33.06	42.77
Interest on Loan	29.15	42.39	34.17	43.93
Return on Equity	31.59	46.26	36.84	47.65
Interest on Working Capital	3.58	5.02	3.55	5.06
O & M Expenses	34.74	46.55	27.87	45.62
Total	127.41	181.74	135.49	185.03

Particulars	Asset-V	Asset-VI	Asset-VII
	2018-19 (Pro rata)	2018-19 (Pro rata)	2018-19 (Pro rata)
Depreciation	119.26	38.69	26.51
Interest on Loan	122.15	40.85	27.87
Return on Equity	132.88	43.11	29.54
Interest on Working Capital	9.97	4.27	3.17
O & M Expenses	44.21	34.55	28.63
Total	428.47	161.47	115.72

11. The details of the interest on working capital claimed by the Petitioner are as under:-

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19 (Pro rata)	2018-19 (Pro rata)	2018-19 (Pro rata)	2018-19 (Pro rata)
Maintenance Spares	10.31	10.31	10.31	10.31
O&M expenses	5.73	5.73	5.73	5.73
Receivables	42.00	44.71	55.68	46.44
Total	58.04	60.75	71.72	62.48
Rate of Interest	12.20%	12.20%	12.20%	12.20%
Interest	3.58	7.41	3.55	5.06

Particulars	Asset-V	Asset-VI	Asset-VII
	2018-19 (Pro rata)	2018-19 (Pro rata)	2018-19 (Pro rata)
Maintenance Spares	8.81	10.31	10.31
O&M expenses	4.89	5.73	5.73
Receivables	94.86	53.53	46.29
Total	108.56	69.57	62.33
Rate of Interest	12.20%	12.20%	12.20%
Interest	9.97	4.27	3.17

12. The Petitioner has served the copy of the petition upon the respondents and notice of this tariff application has been published in the newspapers in accordance



with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the notices published by the Petitioner under Section 64 of the Electricity Act, 2003. Reply to the petition has been filed by BSP(H)CL (Respondent no 1) vide their affidavit dated 14.1.2019 and the Petitioner vide its affidavit dated 8.3.2019 filed its rejoinder.

13. The Petition was last heard on 11.7.2019 and the Commission reserved the order in the Petition.

14. This order has been issued after considering the main petition dated 14.8.2018 and Petitioner's affidavits dated 30.8.2018, 7.3.2019, 11.3.2019, 26.4.2019, 8.3.2019, 13.5.2019, 20.5.2019, 22.7.2019 and reply dated 14.1.2019 of the respondent, BSP(H)CL.

15. Having heard the representatives of the Petitioner present at the hearing and perused the material on record, we proceed to dispose of the petition.

Analysis and Decision

Date of Commercial Operation (COD)

16. The Petitioner has claimed the actual COD in respect of the assets covered under the instant petition as per the following details:

Name of Asset	COD (Actual)
Asset-I: 01 No. 125 MVAR Bus Reactor at Banka Substation along with associated bays.	29.09.2018
Asset-II: : 01 No. 125 MVAR Bus Reactor at Chaibasa Substation along with associated bays.	28.07.2018
Asset-III: 01 No. 125 MVAR Bus Reactor at Lakhisarai Substation along with associated bays.	5.11.2018
Asset-IV: 01 No. 125 MVAR Bus Reactor at Durgapur Substation along with associated bays.	2.08.2018
Asset-V: 01 No. 125 MVAR Bus Reactor at Baripada Substation along with associated GIS bays.	30.06.2018
Asset-VI: 01 No. 125 MVAR Bus Reactor at Bolangir Substation along with associated bays.	30.09.2018
Asset-VII: 01 No. 125 MVAR Bus Reactor at Keonjhar Substation along with associated bays.	1.11.2018



17. In support of the actual COD of the assets covered in the instant petition, the Petitioner has submitted CEA Energisation Certificates dated 24.9.2018, 24.7.2018, 1.11.2018, 30.7.2018, 25.6.2018, 28.9.2018 & 26.10.2018 in respect of Asset-I to Asset-VII, respectively, under Regulation 43 of CEA (Measures Related to Safety & Electricity Supply) Regulations, 2010. The Petitioner has also submitted RLDC Charging Certificates dated 11.10.2018, 4.9.2018, 10.1.2019, 11.9.2018, 10.7.2018, 16.10.2018 & 26.12.2018 in respect of Asset-I to Asset-VII, respectively. Further, the Petitioner has also submitted self-declaration COD letters and CMD certificates as required under grid code for Assets-I to VII, respectively.

18. Taking into consideration the CEA Energisation certificate, RLDC charging certificate and CMD certificate submitted by the Petitioner, the COD for Asset-I to Asset VII is approved as 29.9.2018, 28.7.2018, 5.11.2018, 2.8.2018, 30.6.2018, 30.9.2018 & 1.11.2018 respectively.

Capital Cost

19. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provide as follows:-

“(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects”

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

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



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

(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations; 39

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

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

20. The Petitioner has submitted the apportioned approved cost as per Investment Approvals as well as per RCE. The Petitioner vide affidavit dated 11.3.2019 submitted the Auditor certificates along with revised tariff forms for instant assets. The details of claimed apportioned cost, capital cost as on COD and estimated additional capital expenditure incurred or projected to be incurred during 2018-19, 2019-20 and 2020-21 along with estimated completion cost for the assets covered in the petition are as under:-

(₹ in lakh)

Asset	Apportioned Approved Cost (FR)	Apportioned Approved Cost (RCE)	Cost up to COD	Projected Expenditure			Estimated completion Cost
				2018-19	2019-20	2020-21	
Asset- I	1478.72	1427.84	976.50	191.01	128.66	128.66	1424.84
Asset- II	1510.77	1467.73	1113.95	107.96	125.95	107.16	1455.02
Asset-III	2376.67	2336.52	1424.03	272.72	454.54	181.82	2333.11
Asset-IV	1829.44	1844.00	1137.19	165.99	535.51	0	1838.69
Asset- V	3103.31	3579.49	2693.54	630.95	250.00	0	3574.49
Asset-VI	1848.45	1814.69	1265.67	389.94	150.00	0	1805.61
Asset-VII	1878.45	1805.74	712.51	985.21	100.00	0	1797.72

Cost Over-run

21. The respondent, BSP(H)CL, has submitted that proper justification for cost variation should be provided by the Petitioner failing which the increase in cost may not be allowed. In response, the Petitioner has submitted the following:-



- (a) The reasons for item wise cost variation between approved cost (FR) and estimated completion cost are explained in detail in Form-5 in the petition and major reason is on account of price received through open competitive bidding and inflationary trends prevalent during execution of the project.
- (b) With regard to the variation of FR cost vis-à-vis the actual cost, as per policy of the Petitioner, the procurement is carried out under open competitive bidding route by providing equal opportunity to all the eligible firms.
- (c) The bid prices are invited for the complete scope of work on overall basis and the contracts are awarded to the qualified bidder, whose bid is determined as the lowest evaluated, techno-commercially responsive and, who is considered to have the capacity and capability to perform the contract based on the assessment, if carried out.
- (d) Thus the variation of awarded/actual cost may be because of various market forces and the pricing strategies followed by bidder(s).
- (e) The estimated completion cost of all the asset is well within RCE apportioned cost.

22. We have considered the submissions of the Petitioner and Respondents and noted that against the total apportioned cost of assets covered in the instant petition as mentioned in table of para 20 above, the estimated completion cost including additional capitalization is within the apportioned approved costas per RCE. Therefore, there is no cost overrun.

Time over-run

23. As per the IA, the assets covered under the instant petition were scheduled to be commissioned within 30 months from the date of IA. The date of IA is 5.5.2016. Hence, the Commissioning Schedule comes to 5.11.2018 against which the Assets-I to VII have been commissioned on 29.9.2018, 28.7.2018, 5.11.2018, 2.8.2018, 30.6.2018, 30.9.2018 & 1.11.2018 respectively. Thus, there is no time overrun in commissioning of these assets.



Interest During Construction (IDC)

24. The Petitioner has claimed Interest During Construction (IDC) for the instant assets and has submitted the Auditor Certificate in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged which is summarized as under:

(₹ in lakh)

Asset	IDC as per Auditor Certificate	IDC discharged upto COD	IDC discharged in 2018-19	IDC discharged in 2019-20*
Asset- I	28.58	9.41	18.74	0.43
Asset- II	31.61	17.64	13.76	0.20
Asset-III	46.99	16.77	27.76	2.46
Asset-IV	11.96	11.52	0.44	0.00
Asset- V	27.03	10.14	16.88	0.00
Asset-VI	21.09	14.84	6.25	0.00
Asset-VII	6.27	6.27	0.00	0.00

(* Beyond the tariff period 2014-19-- will be dealt in tariff period 2019-24)

25. IDC, up to the allowable date, has been worked out based on the loans deployed for the assets as per Form-9C of the petition and statement showing IDC (on cash basis) submitted vide affidavit dated 11.03.2019. The Petitioner has submitted that the Petitioner has not made any default in the payment of interest.

26. The statement showing IDC consist of the name of the loan, drawl date, loan amount, interest rate and Interest claimed. While going through these documents certain discrepancies have been observed such as the Petitioner has not specified the interest rate for SBI loan, HDFC loan and ICICI loan, perhaps, the Petitioner has claimed floating rate. The Petitioner has not furnished the computation of floating interest rate and documentary proofs submitted in this regard are not reconcilable. Therefore, for the purpose of determination of allowable IDC, the interest rates as mentioned in Form 9C against these loans have been considered. Further the loan portfolio as mentioned in IDC statements and as mentioned in Form 9C are not matching. Hence, for the purpose of determination of allowable IDC, the loan amount as mentioned in Form 9C has been considered, which shall be reviewed at the time of true up exercise. Accordingly, the petitioner is directed to submit the detailed IDC statement by rectifying the above mentioned deviation, at the time of true up exercise.



27. Accordingly, the IDC claimed and considered as on COD and summary of discharge of IDC liability upto COD and thereafter, for the purpose of tariff determination, subject to revision at the time of trueing up is as below:

(₹ in lakh)

Assets	IDC claimed as per Auditor certificates	IDC Disallowed due to computational difference	IDC Allowed on accrual basis	IDC Allowed on cash basis as on COD	Un-discharged IDC liability as on COD	IDC liability allowable as Add. Cap. during 2018-19
	1	2	3=(1-2)	4	5=(3-4)	6
Asset-I	28.58	0.41	28.17	9.41	18.76	18.74
Asset- II	31.61	0.22	31.39	17.64	13.75	13.75
Asset-III	46.99	0.07	46.92	16.77	30.15	27.76
Asset-IV	11.96	0.15	11.81	11.52	0.29	0.29
Asset-V	27.03	0.38	26.65	10.14	16.51	16.51
Asset-VI	21.09	0.00	21.09	14.84	6.25	6.25
Asset-VII	6.27	0.10	6.17	2.87	3.30	3.30

Incidental Expenditure During Construction (IEDC)

28. The Petitioner has claimed IEDC of the Assets covered in the petition as per the tabulation given below. The Petitioner has claimed IEDC as on COD, which is within the percentage of hard cost as indicated in the abstract cost estimate. Further, the Petitioner submitted that entire IEDC claimed in Auditor Certificates is on cash basis and is paid up to COD of the assets. Hence, the entire amount of IEDC has been allowed. Accordingly, the IEDC details considered for the purpose of tariff calculation are as follows:-

(₹ in lakh)

Assets	IEDC claimed as per Auditor Certificate	IEDC considered as on COD	IEDC discharged Up to COD
Asset-I	20.28	20.28	20.28
Asset- II	15.98	15.98	15.98
Asset-III	56.50	56.50	56.50
Asset-IV	45.41	45.41	45.41
Asset-V	62.51	62.51	62.51
Asset-VI	39.72	39.72	39.72
Asset-VII	20.48	20.48	20.48

Initial Spares

29. This has been dealt in line with Regulation 13 of the 2014 Tariff Regulations. The Petitioner has claimed initial spares for instant assets and also submitted discharge details. We have considered the submissions of the Petitioner. The



Petitioner has claimed initial spares as per Auditor's Certificate. However, as the tariff in the instant petition is being allowed only upto 31.3.2019, accordingly, initial spares has been worked out considering admissible plant and machinery cost (excluding IDC, IEDC, land cost and cost of civil works), upto 31.3.2019 subject to review at the time of true up.

30. The Petitioner vide affidavit dated 22.7.2019 has submitted the following year wise discharge of initial spares:-

(₹ in lakh)

Asset	Discharged as on COD	Discharged from COD to 31.03.2019	Discharged beyond 31.03.2019
Asset-I	55.65	17.22	0.00
Asset- II	44.84	13.79	16.13
Asset-III	43.45	61.68	0.00
Asset-IV	94.61	3.05	6.00
Asset-V	197.91	0.00	0.00
Asset-VI	56.47	43.38	0.00
Asset-VII	56.47	43.38	0.00

31. The Initial Spare is subject to the submission of actual "Plant & Machinery Cost up to cut off date" at the time of true up. Accordingly, the Petitioner is directed to furnish this information at the time of true up. Considering the ceiling limits as specified under the 2014 Tariff Regulations, the admissible initial spares has been worked out for the purpose of tariff. Accordingly, Initial Spares allowed for the instant assets is as under:-

(₹ in lakh)

Asset	Initial Spare claimed as per Auditor certificates	Excess Initial Spare Disallowed as on COD	Initial Spare allowed as on COD	Initial Spare Discharge d as on COD	Un-discharged Initial Spare liability as on COD	Initial Spare liability allowable as Add. Cap. during 2018-19
	1	2	3=(1-2)	4	5=(3-4)	6
Asset-I	72.87	6.12	66.75	55.65	11.10	11.10
Asset- II	74.76	4.58	70.18	44.84	25.34	13.79
Asset-III	105.13	10.14	94.99	43.45	51.54	51.54
Asset-IV	103.66	30.76	72.90	72.90	0.00	0.00
Asset-V	197.91	38.07	159.84	159.84	0.00	0.00
Asset-VI	99.85	4.43	95.42	56.47	38.95	38.95
Asset-VII	99.85	0.00	99.85	56.47	43.38	43.38

Capital cost as on COD

32. Accordingly, the capital cost allowed as on COD under Regulation 9(2) of the 2014 Tariff Regulations is summarized as under:-

(₹ in lakh)

Assets	Capital Cost claimed as on COD	IDC Disallowed as on COD due to computational difference	Un-discharged IDC liability as on COD	Initial Spares Disallowed as on COD	Initial Spares Un-discharged as on COD	Capital Cost as on COD considered for tariff calculation
	A	B	C	D	E	F=A-(B+C+D+E)
Asset-I	976.50	0.41	18.76	6.12	11.10	940.11
Asset- II	1113.95	0.22	13.75	4.58	25.34	1070.06
Asset-III	1424.03	0.07	30.15	10.14	51.54	1332.13
Asset-IV	1137.19	0.15	0.29	30.76	0.00	1105.99
Asset-V	2693.54	0.38	16.51	38.07	0.00	2638.58
Asset-VI	1265.67	0.00	6.25	4.43	38.95	1216.04
Asset-VII	712.51	0.10	3.30	0.00	43.38	665.73

Additional Capital Expenditure (ACE)

33. As per Clause (13) of Regulation 3 of the 2014 Tariff Regulations, the cut off date for instant assets is 31.3.2021. The Petitioner has claimed the following ACE on estimation basis in respect of the instant assets and submitted the Auditor's Certificates in support of the same:

(₹ in lakh)

Asset	Estimated Expenditure in the FY			Total Estimated ACE claimed by Petitioner
	2018-19	2019-20	2020-21	
Asset-I	191.01	128.66	128.66	448.33
Asset- II	107.96	125.95	107.16	341.07
Asset-III	272.72	454.54	181.82	909.08
Asset-IV	165.99	535.51	0.00	701.5
Asset-V	630.95	250.00	0.00	880.95
Asset-VI	389.94	150.00	0.00	539.94
Asset-VII	985.21	100.00	0.00	1085.21

34. Since, FY 2019-20 & 2020-21 falls beyond tariff period 2014-19 and is not covered under the 2014 Tariff Regulations, the projected ACE claimed by the Petitioner for FY 2019-20 & 2020-21 has not been considered for the purpose of tariff



and the same will be dealt during the next tariff period as per the extant Tariff Regulations and corresponding claim by the Petitioner.

35. The Petitioner has claimed additional capital expenditure towards Balance and Retention payments. The entitled un-discharged IDC liability as on COD has been allowed as ACE during the year of its discharge. The allowed Additional Capital expenditure are summarized below which is subject to true up:-

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19	2018-19	2018-19	2018-19
ACE to the extent of Balance & Retention Payments and work deferred for execution	191.01	107.96	272.72	165.99
Add: IDC Discharged	18.74	13.75	27.76	0.29
Add: Initial Spares Discharged	11.10	13.79	51.54	0.00
Total Add Cap allowed	220.85	135.50	352.02	166.28

Particulars	Asset-V	Asset-VI	Asset-VII
	2018-19	2018-19	2018-19
ACE to the extent of Balance & Retention Payments and work deferred for execution	630.95	389.94	985.21
Add: IDC Discharged	16.51	6.25	3.30
Add: Initial Spares Discharged	0.00	38.95	43.38
Total Add Cap allowed	647.46	435.14	1031.89

Capital cost for the tariff period 2014-19

36. Accordingly, the capital cost considered for the tariff period 2014-19, subject to truing up, is as follows:-

(₹ in lakh)

Asset	Capital Cost allowed as on COD	Add Cap for 2018-19	Total Estimated Completion Cost up to 31.3.2019
Asset-I	940.11	220.85	1160.96
Asset- II	1070.06	135.50	1205.56
Asset-III	1332.13	352.02	1684.15
Asset-IV	1105.99	166.28	1272.27
Asset-V	2638.58	647.46	3286.04
Asset-VI	1216.04	435.14	1651.18
Asset-VII	665.73	1031.89	1697.62

Debt-Equity Ratio

37. Debt-Equity Ratio is considered as per Regulation 19 of the 2014 tariff Regulations. The financial package up to COD as submitted in form 6 has been considered to determine the Debt-Equity Ratio. The capital cost allowed as on the date of commercial operation arrived at as above and additional capitalization



allowed have been considered in the debt-equity ratio of 70:30. The debt-equity as on dates of commercial operation and 31.3.2019 considered on normative basis are as under:-

(₹ in lakh)

Asset-I				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	658.08	70.00%	812.67	70.00%
Equity	282.03	30.00%	348.29	30.00%
Total	940.11	100.00%	1160.96	100.00%

Asset-II				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	749.05	70.00%	843.90	70.00%
Equity	321.01	30.00%	361.66	30.00%
Total	1070.06	100.00%	1205.56	100.00%

Asset-III				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	932.49	70.00%	1178.91	70.00%
Equity	399.64	30.00%	505.24	30.00%
Total	1332.13	100.00%	1684.15	100.00%

Asset-IV				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	774.20	70.00%	890.60	70.00%
Equity	331.79	30.00%	381.68	30.00%
Total	1105.99	100.00%	1272.27	100.00%

Asset-V				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	1,847.01	70.00%	2300.23	70.00%
Equity	791.57	30.00%	985.81	30.00%
Total	2638.58	100.00%	3286.04	100.00%

Asset-VI				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	851.23	70.00%	1155.83	70.00%
Equity	364.81	30.00%	495.35	30.00%
Total	1216.04	100.00%	1651.18	100.00%



(₹ in lakh)

Asset-VII				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	466.01	70.00%	1188.34	70.00%
Equity	199.72	30.00%	509.28	30.00%
Total	665.73	100.00%	1697.62	100.00%

Return on Equity (ROE)

38. The Petitioner has submitted that ROE has been calculated at the rate of 19.61% after grossing up the ROE with MAT rate of 20.961% as per the above Regulations. The Petitioner has further submitted that the grossed up RoE is subject to truing up based on the effective tax rate of respective financial year applicable to the Petitioner Company.

39. We have considered the submissions made by the Petitioner and Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations.

40. Accordingly, the ROE allowed is as follows:-

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Opening Equity	282.03	321.01	399.64	331.79
Addition due to Additional Capitalization	66.26	40.65	105.61	49.88
Closing Equity	348.29	361.66	505.24	381.68
Average Equity	315.16	341.34	452.44	356.73
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
MAT rate for the Financial year 2013-14	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre-tax)	31.16	45.30	35.73	46.38



(₹ in lakh)

Particulars	Asset-V	Asset-VI	Asset-VII
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Opening Equity	791.57	364.81	199.72
Addition due to Additional Capitalization	194.24	130.54	309.57
Closing Equity	985.81	495.35	509.28
Average Equity	888.69	430.08	354.50
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
MAT rate for the Financial year 2013-14	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%
Return on Equity (Pre-tax)	131.30	42.29	28.76

Interest on Loan (IOL)

41. The IOL has been calculated as per the provisions of Regulation 26 of the 2014 Tariff Regulations as detailed below:-

- a) The Gross Normative loan has been considered as per the Loan amount determined based on the debt equity ratio applied on the allowed capital cost.
- b) The depreciation of every year has been considered as Normative repayment of loan of concerned year;
- c) The weighted average rate of interest on actual loan portfolio has been worked out by considering the Gross amount of loan, repayment & rate of interest as mentioned in the petition, which has been applied on the normative average loan during the year to arrive at the interest on loan.

42. The Petitioner has submitted that the IOL has been claimed on the basis of rate prevailing as on COD and the change in interest due to floating rate of interest applicable, if any, needs to be claimed/ adjusted over the tariff block 2014-19. We have calculated IOL on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up. The IOL is allowed considering all the loans submitted in Form-9C. The Petitioner is directed to reconcile the total Gross Loan for the calculation of weighted average Rate of Interest and for the calculation of IDC, which would be reviewed at the time of true up exercise.



43. The details of IOL calculated are as follows:-

Particulars	(₹ in lakh)			
	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Gross Normative Loan	658.08	749.05	932.49	774.20
Cumulative Repayment upto previous Year	0.00	0.00	0.00	0.00
Net Loan-Opening	658.08	749.05	932.49	774.20
Addition due to Additional Capitalization	154.60	94.85	246.41	116.40
Repayment during the year	27.96	40.65	32.07	41.63
Net Loan-Closing	784.71	803.24	1146.84	848.97
Average Loan	721.39	776.14	1039.66	811.58
Weighted Average Rate of Interest on Loan	7.9063%	7.9028%	7.9174%	7.9467%
Interest on Loan	28.75	41.51	33.15	42.76

Particulars	Asset-V	Asset-VI	Asset-VII
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Gross Normative Loan	1847.01	851.23	466.01
Cumulative Repayment upto previous Year	0.00	0.00	0.00
Net Loan-Opening	1847.01	851.23	466.01
Addition due to Additional Capitalization	453.22	304.60	722.32
Repayment during the year	117.84	37.95	25.81
Net Loan-Closing	2182.39	1117.88	1162.53
Average Loan	2014.70	984.55	814.27
Weighted Average Rate of Interest on Loan	7.9514%	8.1178%	8.0550%
Interest on Loan	120.70	40.07	27.13

Depreciation

44. Depreciation has been dealt with in line of Regulation 27 of 2014 Tariff Regulations. The instant assets were put under commercial operation during 2018-19. Accordingly, it will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations. Details of the depreciation allowed are as under:-

Particulars	(₹ in lakh)			
	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Opening Gross Block	940.11	1070.06	1332.13	1105.99
Additional Capital expenditure	220.85	135.50	352.02	166.28
Closing Gross Block	1160.96	1205.56	1684.15	1272.27
Average Gross Block	1050.54	1137.81	1508.14	1189.13
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	945.48	1024.03	1357.32	1070.22
Remaining Depreciable Value	945.48	1024.03	1357.32	1070.22
Depreciation	27.96	40.65	32.07	41.63



(₹ in lakh)

Particulars	Asset-V	Asset-VI	Asset-VII
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Opening Gross Block	2638.58	1216.04	665.73
Additional Capital expenditure	647.46	435.14	1031.89
Closing Gross Block	3286.04	1651.18	1697.62
Average Gross Block	2962.31	1433.61	1181.68
Rate of Depreciation	5.2800%	5.2800%	5.2800%
Depreciable Value	2666.08	1290.25	1063.51
Remaining Depreciable Value	2666.08	1290.25	1063.51
Depreciation	117.84	37.95	25.81

Operation and Maintenance Expenses (O&M Expenses)

45. The Petitioner has claimed the following O&M expenses for the assets covered in the instant petition:-

(₹ in lakh)

Asset	Particulars	2018-19 (Pro-rata)
Asset-I	O&M Expenses	34.74
Asset- II		46.55
Asset-III		27.87
Asset-IV		45.62
Asset-V		44.21
Asset-VI		34.55
Asset-VII		28.63

46. The Petitioner has submitted that norms for O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O & M Expenses during the period 2008-13. The Petitioner has further submitted that the wage revision of the employees of the Petitioner is due during the 2014-19 tariff period and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The Petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.

47. The Respondent no 1, BSP(H)CLvide affidavit dated 14.1.2019has submittedthat the increase in the employee cost, if any, due to wage revision must be taken care by improvement in their productivity levels by the Petitioner company so that the beneficiaries are not unduly burdened over and above the provisions made in the Tariff Regulations, 2014.



48. Norms for O&M expenditure for Transmission System have been specified under section 29 (4) of Tariff Regulation are as follows:-

Details	(₹ in lakh)
	2018-19
400kV AIS substation Bay	68.71
400kV GIS substation Bay	58.73

49. We have considered the submissions made by the Petitioner and Respondent. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. Accordingly, the allowed O&M Expenses for the year 2018-19 is given below:-

Details	(₹ in lakh)
	2018-19 (Pro-rata)
Asset-I (COD:29.9.2018)	
1 No 400 kV bus Reactor Bay	34.74
Asset-II (COD:28.7.2018)	
1 No 400 kV bus Reactor Bay	46.55
Asset-III (COD:5.11.2018)	
1 No 400 kV bus Reactor Bay	27.87
Asset-IV (COD:28.7.2018)	
1 No 400 kV bus Reactor Bay	45.62
Asset-V (COD:30.6.2018)	
1 No 400 kV GIS Bus Reactor Bay	44.21
Asset-VII (COD: 30.9.2018)	
1 No 400 kV Bus Reactor Bay	34.55
Asset-VII (COD: 1.11.2018)	
1 No 400 kV Bus Reactor Bay	28.63

Interest on Working Capital (IWC)

50. As per the 2014 Tariff Regulations the components of the working capital and the interest thereon are discussed hereinafter:-

a) Maintenance spares:

Maintenance spares @ 15% Operation and maintenance expenses specified in Regulation 28.



b) O&M expenses:

Operation and maintenance expenses have been considered for one month of the O&M expenses.

c) Receivables:

The receivables have been worked out on the basis of 2 months' of annual fixed cost as worked out above.

d) Rate of interest on working capital:

As per Clause 28 (3) of the 2014 Tariff Regulations, SBI Base Rate (8.70%) as on 01.04.2018 Plus 350 Bps i.e. 12.20% have been considered as the rate of interest on working capital for the Assets.

51. Accordingly, the interest on working capital is summarized as under:-

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19 (Pro rata)	2018-19 (Pro rata)	2018-19 (Pro rata)	2018-19 (Pro rata)
Maintenance Spares	10.34	10.32	10.38	10.32
O&M expenses	5.74	5.73	5.77	5.73
Receivables	41.71	44.08	54.75	45.59
Total	57.79	60.13	70.90	61.65
Rate of Interest	12.20%	12.20%	12.20%	12.20%
Interest	3.55	4.96	3.48	4.99

Particulars	Asset-V	Asset-VI	Asset-VII
	2018-19 (Pro rata)	2018-19 (Pro rata)	2018-19 (Pro rata)
Maintenance Spares	8.80	10.34	10.38
O&M expenses	4.89	5.74	5.77
Receivables	93.78	52.88	45.71
Total	107.47	68.96	61.86
Rate of Interest	12.20%	12.20%	12.20%
Interest	9.88	4.22	3.12

Annual Transmission charges

52. Accordingly, the annual transmission charges being allowed for the instant assets are as under:-



(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2018-19 (Pro rata)	2018-19 (Pro rata)	2018-19 (Pro rata)	2018-19 (Pro rata)
Depreciation	27.96	40.65	32.07	41.63
Interest on Loan	28.75	41.51	33.15	42.76
Return on Equity	31.16	45.30	35.73	46.38
Interest on Working Capital	3.55	4.96	3.48	4.99
O & M Expenses	34.74	46.55	27.87	45.62
Total	126.16	178.97	132.31	181.38

Particulars	Asset-V	Asset-VI	Asset-VII
	2018-19 (Pro rata)	2018-19 (Pro rata)	2018-19 (Pro rata)
Depreciation	117.84	37.95	25.81
Interest on Loan	120.70	40.07	27.13
Return on Equity	131.30	42.29	28.76
Interest on Working Capital	9.88	4.22	3.12
O & M Expenses	44.21	34.55	28.63
Total	423.93	159.08	113.46

Filing fee and the publication expenses

53. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. 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 clause (1) of Regulation 52 of the 2014 Tariff Regulations.

License fee and RLDC Fees and Charges

54. The Petitioner has prayed to allow the Petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. We are of the view that the Petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a) of Regulation 52 in the 2014 Tariff Regulations.

Goods and Services Tax

55. The Petitioner has prayed for reimbursement of tax, if any, on account of implementation of GST. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature.



Sharing of Transmission Charges

56. Respondent, BSP(H)CL, vide affidavit dated 14.1.2019 has submitted that the petitioner has not furnished the Transmission Service Agreement (TSA) and as per Regulation 3(63) of the 2014 Tariff Regulations, the petitioner is required to submit the TSA. In response, the Petitioner has submitted its clarification vide affidavit dated 8.3.2019.

57. The Commission has already dealt with the issue of TSA at Para 17 & 18 of its order dated 19.9.2018 in Petition No.206/TT/2017, wherein it has been held that the petitioner has entered into a TSA and has complied with the requirement of TSA under the provisions of 2010 Sharing Regulations. The relevant portion of Para 18 of the order dated 19.9.2018 is produced below:-

“18.....

The petitioner has submitted that the DICs are intimated about the COD of the new ISTS and are included in the Schedule II of the TSA. The petitioner has submitted that the TSA is posted on the petitioner's website and has also submitted a copy of the same. It is observed that the petitioner has entered into a TSA as required under the provisions of 2010 Sharing Regulations and has complied with the requirement of the TSA by including the new ISTS in Schedule-II of the TSA.”

58. We have considered the submissions of the Petitioner and Respondent. The Transmission Charges for all the assets allowed in this order shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.

59. This order disposes of Petition No.271/TT/2018.

Sd/-
(I. S. Jha)
Member

Sd/-
(Dr. M. K. Iyer)
Member

Sd/-
(P. K. Pujari)
Chairperson

