#### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

# Petition No. 238/TT/2018

Coram: Shri P. K. Pujari, Chairperson Dr. M. K. Iyer, Member Shri I. S. Jha, Member Date of Order: 12.12.2019

## In the matter of:

Approval under Regulation-86 of CERC (Conduct of Business) Regulations, 1999 and Regulation-6 of CERC (Terms and Conditions of Tariff) Regulations, 2009 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of

- (i) Truing up Transmission tariff for 2009-14 tariff block and
- (ii) Transmission tariff for 2014-19 tariff block

For **Asset I:** Balance portion of 400 kV D/C Baripada - Jamshedpur (DVC) Transmission Line along with bay at Jamshedpur (COD: 1.10.2013), **Asset II:** Reconductoring of circuit-II of 400 kV Siliguri-Purnea D/C line (COD: 1.6.2013) under Eastern Region Strengthening Scheme-I for Eastern Region.

# And in the matter of

Power Grid Corporation of India Limited,

"Saudamini", Plot No. 2,

Sector 29, Gurgaon-122001 Haryana

.....Petitioner

# Vs

- Bihar State Power (Holding) Company Ltd. (Formerly Bihar State Electricity Board) Vidyut Bhavan, Bailey Road, Patna 800 001
- West Bengal State Electricity Distribution Company Limited, Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II, Salt Lake City, Kolkata-700 091



- 3. Grid Corporation of Orissa Limited, Shahid Nagar, Bhubaneswar-751 007
- 4. Damodar Valley Corporation, DVC Tower, Maniktala Civil Centre, VIP Road, Kolkata-700054
- 5. Power Department, Government of Sikkim, Gangtok-737 101
- 6. Jharkhand Urja Vikash Nigam Limited (JUVNL) HEC Building, Dhurwa, Ranchi: 834002 ...... Respondents

# Parties present:For Petitioner:Shri S. K. Venkatesan, PGCILShri S. S. Raju, PGCILShri Amit Yadav, PGCIL

For Respondent: Shri R.B. Sharma, Advocate, BRPL, BYPL and BSP(H)CL Shri Mohit Mudgal, Advocate, BRPL, BYPL and BSP(H)CL Ms. Sanya Sud, Advocate, BRPL, BYPL and BSP(H)CL

# <u>ORDER</u>

The present petition has been filed by the Petitioner, Power Grid Corporation of India Ltd. ("PGCIL") for truing up of capital expenditure under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "The 2009 Tariff Regulations") based on actual capital expenditure for the period from COD of respective asset to 31.3.2014 and for determination of 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") for **Asset I** : Balance portion of 400 kV D/C Baripada - Jamshedpur (DVC) Transmission Line along with bay at Jamshedpur (COD: 1.10.2013),



Asset II: Reconductoring of circuit-II of 400 kV Siliguri-Purnea D/C line (COD:

1.6.2013) under Eastern Region Strengthening Scheme-I for Eastern Region

- 2. The Petitioner has made the following prayers:
  - i. Approve the Trued up Transmission Tariff for the tariff block 2009-14 block for the assets covered under this petition. The adjustment billing shall be raised.
  - ii. Admit the capital cost as on 31.3.2014 as claimed in the Petition and approve the Additional Capitalization incurred during 2009-14 period and projected to be incurred during the tariff block 2014-19 as claimed in the petition.
  - iii. Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition.
  - iv. Approve the initial spares for the project as a whole.
  - 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. 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.
  - vii. Allow the Petitioner to recover FERV on the foreign loans deployed as provided under clause 50 of tariff regulation 2014
  - viii. Allow the Petitioner to approach the Commission for suitable revision in the norms for O & M expenditure for claiming the impact of wage hike, if any, during period 2014-19.
  - ix. 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.
  - x. 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.



- 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.
- xii. Allow the Petitioner to bill and recover Service tax on Transmission Charges separately from the respondents, if at any time service tax on transmission is withdrawn from 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 the Commission deems fit and appropriate under the circumstances of the case and in the interest of justice

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

a) The investment approval for the implementation of Eastern Region Strengthening Scheme-I (ERSS-I) in Eastern Region was accorded by Ministry of Power, Govt. of India vide its letter No. 12/4/2005- PG dated 4.10.2006 at an estimated cost of ₹ 97596 lakh. The Petitioner has built the transmission asset in the Eastern Region as a part of ERSS-I. During the 116th EREB meeting held on 15.11.2005, it was discussed and agreed to make it a part of main Bulk Power Transmission Agreement (BPTA) of Eastern Region.

 b) Details of the assets covered in the project scope under various petitions is summarized below:

S.N.	Name of the Asset	Actual COD	Tariff Allowed
1	LILO connectivity to DVC's Andal TPS (portion of 400 kV Durgapur-Jamshedpur TL)	1.2.2011	
2	400 KV D/C Bripada-Mendhasal T/L and associated bays at Baripada and Mendhasal S/S.	1.9.2011	Truing up for 2009-14 already approved vide
3	400 KV D/C Andal(DVC)-Jamshedpur section of Durgapur-Jamshedpur TL and associated bays at Jamshedpur	1.5.2012	order No. 145/TT/2015 dated 25.4.2016
4	400 kV D/C Baripada-DVC (Jamshedpur) TL (part of 400 kV D/C Jamshedpur-Baripada TL) and associated bays at Baripada S/S	1.6.2012	



5	Re-Conductoring Ckt- I of 400 KV D/C Siliguri – Purnea (HTLS Cond.) Transmission Line	1.4.2014	Petition No 164/TT/2015 for 2014-19 block. Tariff order issued
6	Re-Conductoring Ckt- II of 400 KV D/C Siliguri – Purnea (HTLS Cond.) Transmission Line {herein referred to as Asset-II}	1.6.2013	Final tariff order in pet. No. 104/TT/2013 True up Covered under instant petition
7	Balance portion of 400 kV D/C Baripada - Jamshedpur (DVC) Transmission Line along with bay at Jamshedpur {herein referred to as Asset-I}	1.10.2013	Final tariff order in pet. No. 34/TT/2014 True up Covered under instant petition
8	2 Nos. of 400 kV bays at Durgapur S/s	1. 2.2014	Earlier covered under petition No. 34/TT/2014 (COD of line bays not approved by CERC, due to non-utilization)

c) The details of assets covered under the instant petition is as follows:-

Asset	Name of the Asset	COD Approved in the respective Order	Tariff allowed
Asset-I	Balance portion of 400 kV D/C Baripada - Jamshedpur (DVC) Transmission Line along with bay at Jamshedpur	1.10.2013	Final tariff order in petition No. 34/TT/2014
Asset-II	Re-Conductoring Ckt- II of 400 KV D/C Siliguri – Purnea (HTLS Cond.) Transmission Line	1.6.2013	Final tariff order in petition No. 104/TT/2013

d) Earlier, there was a cost over-run in respect of Asset-I for which the Petitioner had submitted that the Revised Cost Estimate (RCE) of the project is under advanced stage of preparation/approval and the same shall be submitted upon the approval of the competent authority. The Commission vide order dated 31.12.2015 while disposing of Petition No. 34/TT/2014 took a note of the above fact and restricted the Capital cost of Asset-I to FR approved cost and granted the liberty to the Petitioner to come up with the RCE at the time of truing up for the Commission's consideration.

e) The Commission vide order dated 12.4.2016 in Petition No.
 104/TT/2013 had observed the following:

i. The Petitioner vide affidavit dated 14.12.2015 has submitted the amount of original Gross Block of the de-capitalised asset to be ₹2376.03 lakh and the corresponding cumulative depreciation of the same de-capitalised asset as ₹761.63 lakh. Taking into account the fact that the decapitalized conductors have been replaced by new conductors, the Gross Block of the old de-capitalised conductors has been deducted from the Gross Block of the instant asset (Asset-II of the instant Petition). ii. The Petitioner submitted that the dismantled old equipment were installed and the tariff is being claimed in Petition No. 34/TT/2014. The Petitioner has not explicitly indicated the Gross Block and cumulative depreciation of these dismantled equipment. Therefore, an amount of ₹1.94 lakh, as submitted by the Petitioner vide affidavit dated 14.12.2015, being Gross Block of the de-capitalised equipment like Isolators, CTs, and Wave Traps has also been reduced from the Gross Block of the instant asset.

Accordingly, an amount ₹2377.97 lakh on account of the decapitalised assets, was deducted from the Gross Block of the instant asset viz. Asset-II of the instant Petition.

f) As per the investment approval dated 4.10.2006, the instant assetswere scheduled to be commissioned within 36 months i.e. by 1.11.2009.The details of the period of time over-run condoned by the Commission in

case of the instant assets, covered in different petitions, are summarized

below:-.

Asset No.	Details of time Overrun already dealt in Respective Orders of the Commission				
Asset-I	There was a time over-run of 47 months and the same was				
(34/TT/2014)	condoned.				
	There was a time over-run of 43 month in commissioning				
Asset-II	of the instant asset. Out of total time over-run of 43				
(104/TT/2013)	,				
	14.5 months was not condoned.				

g) The capital cost allowed for the instant assets in aforesaid orders is summarized below:-

(₹ in lakh)

Petition No.	Asset	Admitted Cost as on COD	Capital during	
34/TT/2014	Asset I	4607.19		4607.19
104/TT/2013	Asset II	5765.77	306.70	6072.47

h) The details of the transmission charges allowed in aforesaid orders

for the instant assets are summarized hereunder:-

		(₹ in lakh)
	34/TT/2014	104/TT/2013
Particulars	Asset I	Asset II
	2013-14	2013-14
Depreciation	121.34	260.61
Interest on Loan	26.43	60.40
Return on Equity	120.48	258.12
Interest on Working Capital	10.25	13.03
O & M Expenses	78.05	-
Total	356.55	592.16

i) The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be adjusted as per the actual MAT rate applicable for the respective year at the time of truing up of tariff for 2009-14 tariff period.

4. 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 ("the Act"). The respondent, BSP(H)CL has filed their reply vide affidavit 8.10.2018. The Petitioner vide affidavit dated 22.1.2019 filed its rejoinder to the reply of BSP(H)CL.

5. The hearing in the matter was held on 24.5.2019. Having heard the representatives of the Petitioner, respondents and perused the material on record, we proceed to dispose of the petition.

6. The Petitioner has claimed the following trued up transmission charges in the instant petition for the period from COD to 31.3.2014: -

		(₹ in lakh)
Derticulara	Asset I	Asset II
Particulars	2013-14	2013-14
Depreciation	157.64	273.87
Interest on Loan	34.12	64.44
Return on Equity	173.76	261.31
Interest on Working Capital	12.45	13.49
O & M Expenses	78.26	
Total	456.23	613.11

7. The Petitioner has claimed the following trued up interest on working capital in the instant petition for the period from COD to 31.3.2014: -

		( <b>₹</b> in lakh
Dortiouloro	Asset I	Asset II
Particulars	2013-14	2013-14
Maintenance Spares	23.48	
O & M expenses	13.04	
Receivables	152.08	122.62
Total	188.60	122.62
Interest	12.45	13.49

# Truing-up of Annual Fixed Charges of 2009-14 tariff period

8. Clause (3) of the Regulation 6 of the 2009 Tariff Regulations provides as

under:-

"(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital



expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors".

9. The Petitioner has submitted the information as required under the 2009

Tariff Regulations for truing up of annual fixed charges for 2009-14 tariff period.

The tariff for 2009-14 tariff period has been trued up in the subsequent

paragraphs.

## **Capital Cost**

10. Regulation 6 of the 2009 Tariff Regulations provides as under:-

#### "6. Truing up of Capital Expenditure and Tariff.

(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.

Provided that the generating company or the transmission licensee, as the case may be, may in its discretion make an application before the Commission one more time prior to 2013- 14 for revision of tariff.

(2) The generating company or the transmission licensee, as the case may be, shall make an application, as per Appendix I to these regulations, for carrying out truing up exercise in respect of the generating station a unit or block thereof or the

transmission system or the transmission lines or sub-stations thereof by 31.10.2014;

(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors;

(4) Where after the truing up, the tariff recovered exceeds the tariff approved by the Commission under these regulations, the generating company or the transmission licensee, as the case may be, shall refund to the beneficiaries or the transmission customers, as the case may be, the excess amount so recovered along with simple interest at the rates specified in the proviso to this regulation.

(5) Where after the truing up, the tariff recovered is less than the tariff approved by the Commission under these regulations, the generating company or the transmission licensee, as the case may be, shall recover from the beneficiaries or the transmission customers, as the case may be, the under-recovered amount along with simple interest at the rates specified in the proviso to this regulation.

(6) The amount under-recovered or over-recovered, along with simple interest at the rates specified in the proviso to this regulation, shall be recovered or refunded by the generating company or the transmission licensee, as the case may be, in six equal monthly instalments starting within three months from Page



3 of 6 the date of the tariff order issued by the Commission after the truing up exercise.

Provided that the rate of interest, for clauses (4), (5) and (6) of this regulation, for Calculation of simple interest shall be considered as under:

- (i) SBI short-term Prime Lending Rate as on 1.4.2009 for the year 2009-10.
- (ii) SBI Base Rate as on 1.7.2010 plus 350 basis points for the year 2010-11.
- (iii) Monthly average SBI Base Rate from 1.7.2010 to 31.3.2011 plus 350 basis points for the year 2011-12.
- (iv) Monthly average SBI Base Rate during previous year plus 350 basis points for the year 2012-13 & 2013-14."

11. The details of apportioned approved cost and actual additional capitalization up to 31.3.2014 along with projected expenditure during 2014-19 period as claimed by the Petitioner in respect of the assets covered in the instant petition are summarized as under:-

								(र	in lakh)
	Capital	Capital	Capital	Additional Capital Expenditure				Comple	
Asset	Capital Cost as per FR RCE	Cost as on COD	2013-14	2014-15	2015-16	2016-17	2017-18	tion Cost	
Asset-I	4607.19	6283.73	5909.05	123.85	126.40	54.67		59.68	6273.65
Asset-II	9694.81	8992.55	8447.41**	306.70	5.21			20.10	8779.42

\*\*After deducting IEDC of Rs 32.22 Lakhs, was disallowed due to time overrun.

#### Cost Over Run

12. The Commission vide order dated 31.12.2015 in petition no. 34/TT/2014

held as under:

"14. The Petitioner has claimed capital cost of ₹5909.05 lakh for Asset-I as on COD vide Auditor's Certificate, which exceeds the apportioned approved cost by ₹1301.86 lakh. As discussed above, the revised cost estimate for the project is yet to be approved by the Board of the Company, and therefore the Commission at this stage has limited the capital cost as on COD of the Asset-I as ₹4607.19 lakh on the basis of investment approval. However, liberty is granted to the Petitioner to come up with the RCE with appropriate justification for cost over-run at the time of truing up for the Commission's consideration. The Commission will carry out the prudence check of cost over-run at the time of truing up."

13. The Petitioner has now submitted the Revised Cost Estimate (RCE) of

'Eastern Region Strengthening Scheme-I' duly approved by the board of directors



(**\*** !.. |\_|...)

of Petitioner in its 326<sup>th</sup> meeting held on 9.3.2016 (communicated vide O.M. no C/CP/RCE- ERS S-I dated 11.3.2016) in respect of Asset-I.

14. The respondent, BSP(H)CL has submitted that in respect of Asset I, it is noted that the Commission in order dated 31.12.2015 in Petition No. 34/TT/2014 sought clarification whether the Board of the Company has agreed for cost overrun. The respondent further submitted that the Petitioner has only filed the Revised Cost Estimates (RCE) and no justification for cost overrun has been filed. The Commission has given liberty to the Petitioner to file the RCE along with the justification for the cost overrun. As the Petitioner has failed to file the justification, the capital cost of the asset may be limited to ₹ 4607.19 lakh.

15. The Petitioner vide affidavit dated 22.1.2019 filed its rejoinder to the reply to BSP(H)CL and submitted the following:

(a) The detailed reasons of cost variation is detailed below:-

i. Variation in Quantities and unit rate (Net increase approx. ₹ 3.5 Cr):-

a. Tower Steel: The cost of tower steel has increased due to increase in line length from 135 km to 141 km & also due to increase in number of tension tower from 90 to 152 numbers for the complete Jamshedpur Baripada line. Accordingly, the quantity of tower steel has been proportionally increased in the instant asset. There is an increase in the Unit rate considered in FR as ₹ 0.6487 lakh/MT whereas the actual rate received in the bids is ₹ 0.6631 lakh/MT.

b. Earth wire: The cost of Earth wire is increased due to increase in line length from 135 km to 141 km & also due to increase in award cost from ₹ 0.3057 lakh/km to ₹ 0.52448 lakh/km



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c. Insulators: The cost of insulator is increased due to increase in quantity of insulators. The quantity of insulator requirement increased due to increase in line length from 135 km to 141 km and increase in number of tension tower from 90 to 152 numbers.

ii. Foreign Exchange Rate Variation (Net Increase approx. ₹ 3.00
 Crore): The project involves World-bank funding and also involves payment in foreign currency viz. USD, JPY for various contracts awarded in the project. The detail of exchange rates considered is as follows:

Foreign currency (in INR)						
Approved DPR (2Q'06 PL) Remarks						
1 ЈРҮ	0.4025	Varied from 0.3308 to 0.7142 (Q2, 2006 to October, 2018)				
1 USD 46.07		Varied from 39.30 to 64.73(Q2, 2006 to October, 2018)				

iii. Increase in IDC (Approx. ₹ 3.8 Cr): The reasons for increase in IDC is change in the deployment of funds vis-à-vis envisaged in DPR as well as increase in the implementation period of subject asset from the approved schedule.

- iv. Civil Works (Increase approx. ₹ 2.5 Cr): Due to space constraint to accommodate the bays at Jamshedpur S/S the existing 220 kv line connecting between Jamshedpur S/S (PG) & Ramchandra S/S (JSEB) was required to be diverted through gantry. The civil & structure works associated with this diversion was not considered at FR stage. Hence there is increase in foundation of structure & Misc civil works.
- v. Preliminary investigation, ROW, forest clearance & PTCC and general civil work: (Increase approx. ₹ 2.5 Cr): The Compensation towards crop, PTCC has been increased due to acute ROW problems in around 60 locations where work was stopped by villagers/ local people. The matter

was resolved with the help of DM/DC, local administrative and Police force. Accordingly, the variation is due to actual compensation as per rates decided by the District authorities.

16. We have considered the submission of the Petitioner and respondents. With regard to Asset-I, it is noted from the submission of the Petitioner that there is a variation in the Capital cost by an amount of ₹ 350 Lakh due to variation in Quantities and unit rate of items like tower steel, earth wire, insulators, around ₹ 300 Lakh due to Foreign Exchange Rate Variation, around ₹ 380 Lakh due to IDC, around ₹ 250 Lakh due to civil works and around ₹ 250 Lakh due to Preliminary investigation, ROW, forest clearance & PTCC and general civil work. The total apportioned approved cost as per RCE in respect of assets covered under the instant petition as mentioned in the Table of Para. 11 above, the completion cost including additional capitalization is within the apportioned approved cost as per RCE. Therefore, there is no cost over-run in respect of the instant assets. Accordingly, components earlier disallowed in respect of Asset-I is now allowed and dealt in the succeeding paragraph of the Order.

# Treatment of IDC & IEDC

17. The Petitioner has claimed the following IDC for instant assets and has submitted the Auditor's Certificates dated 20.11.2017 and 21.02.2018 in support of the same:

(₹ in lakh)

Asset	IDC As per Auditor Certificate	IDC Discharged Up to COD	IDC Discharged 2013-14	IDC Allowed in respective Order
Asset-I	611.67	608.17	3.50	0.00**
Asset-II	399.99	391.51	8.48	103.21

\*\*The capital cost as on COD was limited on the basis of investment approval.



18. In respect of Asset-II, the Commission vide order dated 12.4.2016 in Petition no. 104/TT/2013 directed the Petitioner as under:

"22. Further, while working out the IDC on cash basis, the exchange rates as on COD of the respective foreign loans have been considered. The Petitioner has not submitted the date of drawl of any loan and proofs of exchange rates as on COD for any loan. Hence, it would be subject to review at the time of truing-up upon the submission of the relevant details of the same by the Petitioner.

24. The Petitioner has also submitted that the balance amount of ₹24.02 lakh for IDC is not included in the amount of additional capitalisation of the instant asset Therefore, the balance IDC would be added up in the additional capitalisation of 2013-14 after prudence check upon submission of all relevant information by the Petitioner at the time of truing-up."

19. In respect of Asset-II, the respondent, BSP(H)CL has submitted that the Commission in its order dated 12.4.2016 in Petition No. 104/TT/2013 directed the Petitioner to provide the reasons for changing the 'Invar Moose Conductor' to 'Gap Type Conductor' and also the approval of the competent Authority for the change. In addition, the Commission also noted that the information provided by the Petitioner to calculate the IDC was inadequate and sought complete details which have not been provided by the Petitioner and thus, the petition for truing up is incomplete. The respondent submitted that that the Petitioner has only partially discharged IDC up to DOCO and the balance amount of IDC has been claimed as accrued IDC and the accrued IDC in respect of Asset-I is ₹ 3.5 lakh and ₹ 8.48 lakh for Asset-II. Thus, the total amount of ₹ 11.98 lakh has been claimed as Accrual IDC under the Balance and retention payment. The respondent further submitted as the IDC is neither covered under the category of works nor there is any stipulation under Regulation 9(1) of the Tariff Regulations, 2009 for accrued IDC and therefore the claim of the Petitioner is unjustified and accordingly the alleged claim of the Petitioner is liable to be rejected by the Commission.



20. In response, the Petitioner submitted that that out of the total IDC incurred as on COD, partly is paid and balance is incurred but paid subsequent to COD and the accrued IDC as on COD was not considered while calculating the tariff as the same was undischarged up to COD. The accrued IDC has been taken out of COD expenditure and added in the add cap, when it has been discharged and is covered under Clause 9(1)(i) of Tariff Regulation,2009 and under Clause 14(1)(i) of Tariff Regulation, 2014.

21. We have considered the submission of the Petitioner and the respondent. The Petitioner has submitted the Form-13 and Form-13 in respect of the Asset-I and Asset-II assets wherein the amount of foreign loan allocated to the respective asset is indicated. However, the Petitioner in the instant Petition has not submitted the detailed break-up for IDC claimed against foreign loans for both the assets. Accordingly, based on the information furnished by the Petitioner and earlier treatment of time over-run for respective assets, IDC already allowed in earlier Order in respect of Asset-II is being considered. With regard to Asset-I, as the Petitioner has now submitted the RCE, accordingly the IDC allowed is as under:

				(₹ in lakh)
Asset	IDC allowed as on COD in the respective Order	IDC allowed	IDC Discharged up to COD	IDC Discharged in 2013-14
Asset-I		611.67	608.17	3.50
Asset-II	103.21	103.21	103.21	

# Treatment of initial spares

22. The initial spares claimed by Petitioner are as follows:-



			(₹ in lakh)
Asset	Particulars	Total Capital Cost	Initial spares claimed
A ( )	Transmission Line	4424.59	40.00
Asset I	Sub-Station	1849.06	28.80
Assatl	Transmission Line	8166.03	68.21
Asset II	Sub-Station	645.61	14.87

23. The initial spares allowed are computed based on the ceiling limit specified in the 2009 Tariff Regulations and the same are summarized as under:-

						(₹	f in lakh)
Asset	Particulars	Completi on Cost	Initial Spares Claimed	Ceiling Limit	Initial Spares Worked out	Excess Initial spares	Initial spares allowed
Asset I	Transmission Line	4424.59	40.00	0.75%	33.13	6.87	33.13
	Sub-Station	1849.06	28.80	2.50%	46.67	-	28.80
Asset II	Transmission Line	8166.03	68.21	0.75%	61.19	7.02	61.19
	Sub-Station	645.61	14.87	2.50%	16.17	-	14.87

# **De-capitalisation**

24. With regard to De-capitalisation in respect of Asset-II, the Commission in its Order dated 12.4.2016 in petition no. 104/TT/2013 had observed the following:-

#### "28.....

The Petitioner has further submitted that in Petition Nos. 380/TT/2014, 200/TT/2014 and 508/TT/2014, tariff for these de-capitalised conductors has been claimed without any mention of the replacement of the conductor. We have noted that the above said petitions were filed for truing-up for the tariff block 2009-14 along with 2014-19 tariff petitions and the Commission has already issued orders in these petitions. The Petitioner should have disclosed the correct information with regard to the replacement of conductor in these petitions. The Commission is of the view that such lapses are not expected of the Petitioner. However, taking into account the fact that the decapitalized conductors have been replaced by new conductors, the Gross Block of the old de-capitalised conductors has been deducted from the Gross Block of the instant asset. The cumulative depreciation on account of

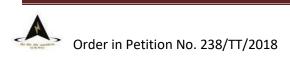


decapitalized conductor would be adjusted in the above three petitions at the time of truing-up of 2014-19 period."

25. In the instant petition, initially, the Petitioner had not deducted the amount of ₹ 2377.98 on account of de-capitalisation in respect of Asset-II, which was earlier reduced by the Commission from the capital cost of Asset-II. The Petitioner has submitted that the scope of Asset-II involved the re-conductoring of existing 400 kV *DIC* Siliguri-Purnea Transmission line for which the Commission vide their Order dated 12.4.2016 in *104/TT/2013*, de-capitalized the removed conductor (original conductor which was in use before re-conductoring was carried out on 1.6.2013) and deducted the gross block of the original conductor from the gross block of the re-conductoring asset i.e. Subject Asset-II. For de-capitalization treatment carried out in the aforesaid Order, the Petitioner has submitted the following:-

a) The cited transmission line i.e. 400 kV *D/C* Siliguri - Purnea T/L has been originally claimed as a consolidated asset constituting full / partial combination of 03 nos. assets viz. 400 kV *D/C* Bongaigaon-Malda under Kathalguri Project (*380ITT/2014*); LILO of 400 kV *D/C* Bongaigaon-Malda at Pumea (*200ITT/2014*) & LILO of 400 kV *D/C* Bongaigaon -Maida at Siliguri (*508ITT/2014*).

b) Since the tariff for 400 kV D/C Bongaigaon-Malda under Kathalguri Project; LILO of 400 kV D/C Bongaigaon-Malda at Pumea & LILO of 400kV D/C Bongaigaon -Maida at Siliguri are being continued in petition no 380/TT/2014, 200/TT/2014 & 508/TT/2014 respectively and the impact of tariff for decapitalization of corresponding replaced Asset is considered in the instant petition.



c) The pro-rata tariff calculation corresponding to Decapitalization amount based on allowed tariff and approved is submitted.

d) The adjustment of tariff claimed (True-up tariff for 2009-14 & Tariff for 2014-19) on account of the removed conductor has been done in the instant petition, however, with regard to adjustment of cost (i.e. in original gross blocks of original petitions 380/TT/2014, 200/TT/2014 & 508/TT/2014), which could not be done here as of now since the true-up order of original petitions for period 2009-14 have already been issued, and it is prayed that the Commission may allow the same to be taken up for adjustment of capital cost as on 1.4.2014 at the time of truing up of 2014-19 block for these original petitions.

e) The removal/ replacement of conductor was done before the recovery of the entire cost i.e. only partial recovery of capital cost could be made. Further, this replacement scheme was implemented by the POWERGRID in the large interest of the Power System/ Grid enhancement as requested and agreed by the beneficiaries. However, the de-capitalization from the original gross block shall lead to negative financial impact on the POWERGRID without any fault/ failure on its part. Therefore, it is prayed that the Commission may allow the Petitioner the liberty to approach the Commission for suitable compensation at an appropriate time/ as and when the removed conductor is put to use or rendered scrap.

26. The respondent, BSP(H)CL has submitted the following:

(a) In respect of Asset II, it is noted that the Commission in the order dated 12.4.2016 in Petition No. 104/TT/2013 dealt with the de-capitalization of the replaced assets like conductor and the terminal equipment for which complete information has not been provided.

(b) It may thus be noted that the Petitioner in case his contention related to tariff of this asset 400 kV D/C Siliguri-Purnia T/L has been originally claimed as a consolidated asset constituting full or partial combination of 3 nos. assets viz. 400 kV Bongaigaon-Malda under Kathalguri Project (380/TT/2014), LILO of 400 kV Bongaigaon-Malda at Purnia (200/TT/2014) & LILO of 400 kV Bongaigaon-Malda at Siliguri (508/TT/2014). The perusal of the orders filed by the Petitioner does not show any connection with Petition Nos. 380/TT/2014, 200/TT/2014 and 508/TT/2014. Further, the Petitioner has also not filed the single line diagram to check inter-connection, if any. However, the implication of the statement of the Petitioner is that the tariff of this single asset viz. Siliguri-Purnia 400 kV D/C (conductor portion) is being claimed in three different petitions.

(c) In so far as the de-capitalization of the replaced conductor is concerned, the Petitioner vide affidavit dated 14.12.2015 has submitted that the amount of gross Block of de-capitalized assets to be ₹ 2376.03 lakh and the corresponding cumulative depreciation of the same de-capitalized is ₹ 761.63 lakh. It is further submitted that in Petition Nos. 380/TT/2014, 200/TT/2014 and 508/TT/2014, tariff of these de-capitalized conductor has been claimed without any mention of the replacement of the conductor. The implication of this statement of the Petitioner is that the tariff of this single asset viz. Siliguri-Purnia 400 kV D/C (conductor portion) is being claimed in three different petitions.

27. During hearing dated 24.1.2019, the Petitioner was directed to reduce decap amount of ₹ 2377.98 directly from the capital cost as on COD for asset II. Accordingly, the Petitioner vide affidavit dated 7.3.2019, reduced the capital cost by an amount of ₹ 2377.98 lakh and submitted the revised tariff forms.

# Additional Capitalisation

28. Additional capitalization during 2013-14 claimed by the Petitioner in the previous petitions and in the instant petitions have been summarised as follows:

	(₹ in lakh)
Asset	Instant Petition
Asset I	123.85
Asset II	306.70

29. The Petitioner has submitted RCE in the instant petition, additional capitalization of ₹ 123.85 lakh has now been considered. In respect of Asset II, additional capitalization of ₹306.70 lakh was allowed by the Commission in the previous petition which is claimed as it is in the instant petition also. Accordingly, Additional Capitalisation allowed is summarized as under:

			(₹ in lakh)
Asset	Additional Capitalisation Claimed	Un-discharged IDC allowed in 2013-14	Total Add. Cap approved
Asset I	123.85	3.50	127.35
Asset II	306.70	-	306.70

# Capital Cost for tariff purpose

30. Asset-wise capital cost for tariff purpose and total completion cost allowed as on 31.3.2014 is as under:-

									(₹ in lakh)
Asset	Capital Cost as on COD claimed by the Petitioner	Disallowed	Un- discharged IDC as on COD	IEDC Disallowed on COD	Excess Initial Spares	Gross block of decapitalised assets as on COD	Capital Cost on COD allowed	Add-cap for 2013-14 allowed	Capital cost allowed as on 31.3.2014
1	2	3	4	5	6	7	8=(2-3-4- 5-6-7)	9	10=8+9
Asset-I	5909.05	-	3.50	-	6.87	-	5898.68	127.35	6026.03
Asset-II	8479.63	296.78		32.22	7.02	2377.98	5765.64	306.70	6072.34



# Debt:Equity

31. Clauses 1 and 3 of Regulation 12 of the 2009 Tariff Regulations provide

as under:-

"(1) For a project declared under commercial operation on or after 1.4.2009, 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 where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each invest.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 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."

32. The Petitioner has claimed true up of Annual Fixed Charge based on

Debt:Equity ratio as on COD of 70:30 and 73.64:26.36 in respect of Asset-I and

Asset-II respectively. With regard to Additional Capital expenditure during the

year 2013-14, the Petitioner vide Form-10 has claimed the financing of additional

capitalization which reveals the Debt:Equity ratio of 99.18:00.82 and 99.19:00.81

in respect of Asset-I and Asset-II respectively. Accordingly, the details of debt

and equity considered are as under:-

							(₹ ir	n lakh)
		As	set-l			Ass	et-II	
Particulars	Amount As on COD	%	Amount As on 31.3.2014	%	Amount As on COD	%	Amount As on 31.3.2014	%
Debt	4129.11	70.00	4255.41	70.62	4245.71	73.64	4549.94	74.93
Equity	1769.57	30.00	1770.62	29.38	1519.93	26.36	1522.40	25.07
Total	5898.68	100.00	6026.03	100.00	5765.64	100.00	6072.34	100.00

# Return on Equity ("ROE")

33. Clause (3), (4) and (5) of Regulation 15 of the 2009 Tariff Regulations provide as under:



"(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

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

Rate of pre-tax return on equity = Base rate / (1-t)

Where "t" is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed Charge 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:

Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations."

34. Return on Equity is allowed for the instant asset in terms of Regulation 15

of the 2009 Tariff Regulations. Accordingly, the ROE as trued up in accordance

with the 2009 Tariff Regulations is shown in the table below:-

	(*	₹ in lakh)
Particulars	Asset I	Asset II
Opening Equity	1769.57	1519.93
Add: Addition due to ACE	1.05	2.47
Closing Equity	1770.62	1522.40
Average Equity	1770.10	1521.17
Pre-tax rate of Return on Equity	19.610%	19.610%
Return on Equity (pro-rated)	173.08	248.45

#### Interest on Loan ("IOL")

35. Regulation 16 of the 2009 Tariff regulations provides as under:-

"16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:



(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 annual depreciation allowed,.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

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 generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

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

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory reenactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of refinancing of loan."

36. The Petitioner vide Form-13A has claimed the IOL during the 2009-14

period. We have considered the submissions of the Petitioner and accordingly

calculated the IOL based on actual interest rate, in accordance with Regulation

16 of the 2009 Tariff Regulations.

37. In the calculations, the interest on loan has been worked out as detailed below:-

(i) Gross amount of loan, repayment of instalments and rate of interest

and weighted average rate of interest on actual average loan have been

considered as per the petition;



(ii) The repayment for the tariff period 2009-14 has been considered to be

equal to the depreciation allowed for that period.

38. The IOL allowed under Regulation 16 of the 2009 Tariff Regulations is as follows:-

		(₹ in lakh <u>)</u>
Particulars	Asset-I 2013-14 (Pro-Rata)	Asset-II 2013-14 (Pro-Rata)
Gross Normative Loan	4129.11	4245.71
Cumulative Repayment upto Previous Year		
Net Loan-Opening	4129.11	4245.71
Addition due to Additional Capitalisation	126.30	304.23
Repayment during the year	157.03	260.54
Net Loan-Closing	4098.38	4289.39
Average Loan	4113.75	4267.55
Weighted Average Rate of Interest on Loan	1.6564%	1.7229%
Interest	33.98	61.24

# Depreciation

39. Clause (42) of Regulation 3 of the 2009 Tariff Regulations defines useful

life as follows:-

...

"Useful life" in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:- ......

- (c) AC and DC sub-station 25years
- (d) Hydro generating station 35 years
- (e) Transmission line 35 years"

40. Clause (4) of Regulation 17 of the 2009 Tariff Regulations provide as follows:-

"17. Depreciation:

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the asset 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 date of commercial operation shall be spread over the balance useful life of the asset."

41. The depreciation for the tariff period 2009-14 has been trued up in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure as under:-

		(₹ in lakh)
Particulars	Asset-I 2013-14 (Pro-Rata)	Asset-II 2013-14 (Pro-Rata)
Opening Gross Block	5898.68	5765.64
Addition during 2009-14 due to Projected Additional Capitalisation	127.35	
Closing Gross Block	6026.03	306.70
Average Gross Block	5962.36	6072.34
Rate of Depreciation	5.2819%	5.2851%
Depreciable Value	5366.12	5327.09
Remaining Depreciable Value	5366.12	5327.09
Depreciation	157.03	260.54

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

42. Clause (g) of Regulation 19 of 2009 Tariff Regulations specifies the norms for O & M Expenses for the transmission system. O & M Expenses were allowed in order dated 29.3.2016 as per Regulation 19 of the 2009 Tariff Regulations. The Petitioner has claimed the same amount of O & M Expenses for the 2013-14 period and the same has been allowed. The normative O & M Expenses are not required to be trued up. Accordingly, the allowable O & M Expenses for the instant assets have been considered and allowed based on norms of O & M Expenses as follows:

	(₹ in lakh				
Asset	2013-14				
Asset I	78.05				
Asset II*					

\* Petitioner has not claimed O & M expenses for asset-II



## Interest on Working Capital ("IWC")

43. Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations provides the components of the working capital for the transmission system and clause (3) of Regulation 18 of the 2009 Tariff Regulations provides for the rate of IWC.

44. The components of the working capital and interest thereon have been worked out as per methodology provided in the Regulation 18 of the 2009 Tariff Regulations). Accordingly, the interest on working capital allowed is as under:-

#### (i) Maintenance spares:

Maintenance spares have been worked out based on 15% of O&M Expenses specified in Regulation 19.

#### (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 in working capital is considered on normative basis in accordance with Clause (3) of Regulation 18 of the 2009 Tariff Regulations.

#### 45. The Interest on working capital trued up is as under:-

		(₹ in lakh)
Particulars	Asset I	Asset II
Maintenance Spares	23.48	
O & M Expenses	13.04	
Receivables	151.93	116.68
Total	188.45	116.68
Rate of interest	13.20%	13.20%
IWC (pro-rated)	12.40	12.83



# **Annual Transmission Charges**

46. The detailed computation of the various components of the trued up annual fixed charges for the instant transmission assets for the tariff period 2009-14 is summarized below:-

		(₹ in lakh)
Particulars	Asset-I 2013-14 (Pro-Rata)	Asset-II 2013-14 (Pro-Rata)
Depreciation	157.03	260.54
Interest on Loan	33.98	61.24
Return on Equity	173.08	248.45
Interest on Working Capital	12.40	12.83
O & M expenses	78.05	
Total	454.54	583.06

# **Determination of Annual Transmission Charges for 2014-19**

47. The Petitioner has claimed the following transmission charges for the 2014-19 tariff period :-

Asset I							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Depreciation	321.99	326.78	328.22	329.80	331.38		
Interest on Loan	68.02	68.25	64.11	58.68	53.01		
Return on Equity	351.34	356.67	358.27	360.03	361.78		
Interest on Working Capital	25.00	25.51	25.75	25.99	26.22		
O & M Expenses	143.72	148.51	153.43	158.53	163.78		
Total	910.07	925.72	929.78	933.03	936.17		

	(*	₹ in lakh)			
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	337.11	337.25	337.25	337.78	338.31
Interest on Loan	74.71	69.04	63.17	57.68	52.14
Return on Equity	313.98	314.13	314.13	314.72	315.31
Interest on Working Capital	16.71	16.58	16.45	16.35	16.25
O & M Expenses					
Total	742.51	737.00	731.00	726.53	722.01

48. The Petitioner has claimed the following 'Interest on Working Capital' for the 2014-19 tariff period:-



		Asset	(	(₹ in lakh)		
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Maintenance Spares	21.56	22.28	23.01	23.78	24.57	
O & M Expenses	11.98	12.38	12.79	13.21	13.65	
Receivables	151.68	154.29	154.96	155.51	156.03	
Total	185.22	188.95	190.76	192.50	194.25	
Interest	25.00	25.51	25.75	25.99	26.22	
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%	

	As	set II	(₹ in lakh)		
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares					
O & M Expenses					
Receivables	123.75	122.83	123.83	121.09	120.34
Total	123.75	122.83	123.83	121.09	120.34
Interest	16.71	16.58	16.45	16.35	16.25
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%

#### **Capital Cost**

49. Clause (1) and (3) of Regulation 9 of the 2014 Tariff Regulations provides

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."

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

(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;
(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and
(c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15."

50. The capital cost is dealt in line with Regulation 9 of 2014 Tariff Regulations. The following trued up capital cost as on 31.3.2014 is considered for determination of tariff for 2014-19 period in respect of instant assets:

	(₹ in lakh)
	Capital cost
Asset	as on
	31.3.2014
Asset-I	6026.03
Asset-II	6072.34

# Additional Capital Expenditure

51. The Petitioner has submitted that the Additional Capital Expenditure incurred up to 2014-15 & 2015-16 for assets covered under the instant petition are with-in cut-off date and is covered under clause 9(1) (i) of Tariff Regulation, 2009 and 14(1)(i) of Tariff Regulation, 2014 and submitted Auditor's Certificate in support of the same. The Additional Capital expenditure claimed by the Petitioner is as under:

			(₹ in lakh)
Name of the Asset	2014-15	2015-16	2016-17
Asset I	126.40	54.67	
Asset II	5.21		

52. The Petitioner has further claimed the Additional capitalisation incurred beyond the cut-off date under clause 14(3) (v) of Tariff Regulation, 2014 in respect of instant assets and submitted that the same is on account of balance and retention payment and balance work and prayed to allow the same. The Petitioner has claimed the following additional capitalization for the FY 2017-18 :-

S.N.	Asset Name	Party Name	2017-18 (Estimated) Balance & Retention payment
		M/S Engineers word	18.00
		Parikshit Singh	8.48
1	Asset I	M/S VsnInfratech (P) Ltd	33.19
		Total	59.67
		M/S JP power & KEC Ltd	6.90
2	Asset II	LD amount (For Asset II)	13.20
		Total	20.10

53. It is observed that the cut-off date for the Assets covered in the instant petition is 31.3.2016 as per Tariff Regulations, 2009. The Petitioner has claimed additional capital expenditure for FY 2017-18 which is beyond cutoff date and



claimed under Regulation 14(3) (v) of the Tariff Regulations, 2014. The additional

capital expenditure claimed by the Petitioner is being allowed as under:

					(₹ in lakh)					
Name		Add. Cap allowed								
of the Asset	2014-15	2015-16	2016-17	2017-18	2018-19					
Asset I	126.40	54.67		59.67						
Asset II	5.21			20.10						

54. The capital cost approved for 2014-19 tariff period is as follows:

							(₹ in lakh)
Name of the	Capital cost		Total Completion				
Asset 31.3.2014	2014-15	2015-16	2016-17	2017-18	2018-19	Cost	
Asset I	6026.03	126.40	54.67		59.67		6266.77
Asset II	6072.34	5.21			20.10		6097.65

# Debt:Equity Ratio

55. Clause 3 of Regulation 19 of the 2014 Tariff Regulations provides as under :-

"(3) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2014, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered."

56. The Petitioner has not mentioned Debt:Equity Ratio as on 1.4.2014 in respective Form-6 of the instant assets. Based on the Form-8, Form-9E and Form-10A submitted by the Petitioner, the Debt:Equity ratio as on 1.4.2014 works out to be 70.62:29.38 and 74.90:25.10 for Asset-I and Asset-II respectively. It has been observed that in respect of Asset-II, there is a variation between the Debt:Equity ratio of 74.90:25.10 (as on 1.4.2014) as worked out above and Debt:Equity ratio of 74.93:25.07 (as on 31.3.2014) as worked out in Para. 33 above. Accordingly, Debt:Equity ratio of 74.93:25.07 (as on 31.3.2014) has been considered as Debt:Equity ratio as on 1.4.2014 for the 2014-19 tariff purpose. With regard to Additional Capitalization, the Petitioners has claimed the



Debt:Equity ratio of 70:30 in respect of the instant assets and the same has been considered. The details of debt and equity considered are as under:

								<u>(</u> ₹ in lakh
Asset-I			Asset-II					
Particulars	Amount as on 1.4.2014	%	Amount as on 31.3.2019	%	Amount as on 1.4.2014	%	Amount as on 31.3.2019	%
Debt	4255.41	70.62	4423.86	70.59	4549.94	74.93	4567.65	74.91
Equity	1770.62	29.38	1842.91	29.41	1522.40	25.07	1529.99	25.09
Total	6026.03	100.00	6266.77	100.00	6072.34	100.00	6097.65	100.00

# Return on Equity ("RoE")

57. Clause (1) and (2) of Regulation 24 and Clause (2) and (3) of Regulation

25 of the 2014 Tariff Regulations provides as under:-

#### "24. Return on Equity:

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

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

#### "25. Tax on Return on Equity:

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

Rate of pre-tax return on equity = Base rate / (1-t)

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

(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 2014-15 to 2018-19 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 transmission customers/DICs as the case may be on year to year basis."

58. The Petitioner has submitted that it is liable to pay income tax at MAT rate, the ROE has been calculated @ 19.610 % after grossing up the ROE with MAT rate of 20.961% based on the rate prescribed under Regulation 25(2)(i) of the 2014 Tariff Regulations. Further, as per Regulation 25(3), the grossed up rate of ROE at the end of every financial year shall be trued up based on the actual paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up rate on ROE after truing up shall be recovered or refunded to beneficiaries on year to year basis. The Petitioner has further submitted that adjustment due to any additional tax demand including interest received from any refund of the tax including interest duly adjusted for any refund of the tax including interest duly adjusted for any refund of the tax including interest duly adjusted for any refund of the tax including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/ adjustable after completion of income tax assessment of the financial year.

59. The Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations, provides the grossing up of ROE with the effective tax rate for the purpose of RoE. Accordingly, the MAT rate of 20.961% applicable during the 2013-14 has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with clause 25 (3) of the 2014 Tariff Regulations.

60. Accordingly, the following ROE is allowed for the 2014-19 tariff period:-



	As	Asset I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Opening Equity	1770.62	1808.54	1824.94	1824.94	1842.84		
Additional Capitalization	37.92	16.40	0.00	17.90	0.00		
Closing Equity	1808.54	1824.94	1824.94	1842.84	1842.84		
Average Equity	1789.58	1816.74	1824.94	1833.89	1842.84		
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%		
MAT rate	20.961%	20.961%	20.961%	20.961%	20.961%		
Rate of Return on Equity (Pre Tax)	19.610%	19.610%	19.610%	19.610%	19.610%		
Return on Equity (PreTax)	350.94	356.26	357.87	359.63	361.38		

	Asset II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Opening Equity	1522.40	1523.96	1523.96	1523.96	1529.99	
Additional Capitalization	1.56			6.03		
Closing Equity	1523.96	1523.96	1523.96	1529.99	1529.99	
Average Equity	1523.18	1523.96	1523.96	1526.98	1529.99	
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%	
MAT rate	20.961%	20.961%	20.961%	20.961%	20.961%	
Rate of Return on Equity (Pre Tax)	19.610%	19.610%	19.610%	19.610%	19.610%	
Return on Equity (PreTax)	298.70	298.85	298.85	299.44	300.03	

# Interest on Loan ("IOL")

61. Clause (5) and (6) of Regulation 26 of the 2014 Tariff Regulations

provides as under:-

"(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."

62. The IOL has been allowed and worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The IOL has been worked out and allowed as follows:-

	Asset I			(₹	<sup>r</sup> in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross loan opening	4255.41	4343.89	4382.16	4382.16	4423.93
Cumulative Repayment up to	157.03	478.65	805.06	1132.91	1462.35
previous year					
Net Loan-Opening	4098.38	3865.24	3577.11	3249.25	2961.59
Additions during the year	88.48	38.27	0.00	41.77	0.00
Repayment during the year	321.62	326.40	327.85	329.44	331.01
Net Loan-Closing	3865.24	3577.11	3249.25	2961.59	2630.58
Average Loan	3981.81	3721.17	3413.18	3105.42	2796.08
Rate of Interest	1.7066%	1.8323%	1.8765%	1.8878%	1.8940%
Interest on Loan	67.96	68.18	64.05	58.63	52.96

Asset II					₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross loan opening	4549.94	4553.58	4553.58	4553.58	4567.65
Cumulative Repayment up to previous year	260.54	581.59	902.78	1223.97	1545.69
Net Loan-Opening	4289.39	3971.99	3650.80	3329.61	3021.96
Additions during the year	3.65	0.00	0.00	14.07	0.00
Repayment during the year	321.05	321.19	321.19	321.72	322.25
Net Loan-Closing	3971.99	3650.80	3329.61	3021.96	2699.71
Average Loan	4130.69	3811.39	3490.21	3175.79	2860.84
Rate of Interest	1.7239%	1.7264%	1.7252%	1.7313%	1.7376%
Interest on Loan	71.21	65.80	60.21	54.98	49.71

#### Depreciation

63. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations

provide as follows:-

#### "27. Depreciation:

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

"(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** to these regulations for the assets of the generating station and transmission system: Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2014 from the gross depreciable value of the assets."



64. Depreciation is allowed for the instant asset in terms of Regulation 27 of the 2014 Tariff Regulations. Depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-III to the 2014 Tariff Regulations.

65. Accordingly, the details of the depreciation allowed are given hereunder:-

Asset I				(₹ in lakh)			
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Opening Gross Block	6026.03	6152.43	6207.10	6207.10	6266.77		
Addition during 2014-19 due to							
Projected Additional	126.40	54.67	0.00	59.67	0.00		
Capitalisation							
Closing Gross Block	6152.43	6207.10	6207.10	6266.77	6266.77		
Average Gross Block	6089.23	6179.77	6207.10	6236.94	6266.77		
Rate of Depreciation	5.2818%	5.2818%	5.2819%	5.2820%	5.2820%		
Depreciable Value	5450.28	5477.13	162.04	3036.71	5856.85		
Remaining Depreciable Value	5293.25	4998.48	0.00	1903.80	4394.51		
Depreciation	321.62	326.40	327.85	329.44	331.01		

Asset II					in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	6072.34	6077.55	6077.55	6077.55	6097.65
Addition during 2014-19 due to					
Projected Additional	5.21			20.10	
Capitalisation					
Closing Gross Block	6077.55	6077.55	6077.55	6097.65	6097.65
Average Gross Block	6074.94	6077.55	6077.55	6087.60	6097.65
Rate of Depreciation	5.2848%	5.2848%	5.2848%	5.2848%	5.2849%
Depreciable Value	5467.45	5465.10	5474.48	5483.53	5492.57
Remaining Depreciable Value	5206.90	4883.51	4571.70	4259.56	3946.88
Depreciation	321.05	321.19	321.19	321.72	322.25

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

- 66. The Petitioner has claimed the following O & M charges for the period
- 2014-19 for the combined asset covered in the petition:-

				(	₹ in lakh)
Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Asset I	143.72	148.51	153.43	158.53	163.78
Asset II*					
			<u></u>	<i>c</i> , ,	

\*Petitioner has not claimed O & M expenses for Asset II.



67. The allowable O & M Expenses in respect of Asset I for the 2014-19 tariff period as per Regulation 29(4) of the 2014 Tariff Regulations for the assets covered in the instant petition are as follows:-

				(*	₹ in lakh)
Element	2014-15	2015-16	2016-17	2017-18	2018-19
Double Circuit (Twin & Triple conductor)	0.707	0.731	0.755	0.780	0.806
400 kV bay	60.30	62.30	64.37	66.51	68.71

68. The respondent, BSP(H)CL has submitted that the wage revision of Petitioner Company is due during 2014-19 and the actual impact of wage hike is not factored in the O & M expenses prescribed by the Commission. 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 so that the beneficiaries are not unduly burdened over and above the provisions made in the Tariff Regulations, 2004.

69. In response, the Petitioner has submitted that the wage revision of the employees of the Petitioner company w.e.f. 1.1.2017 and actual impact of wage hike which will be effective from 1.1.2017 has also not been factored in fixation of the normative O & M rates prescribed for the tariff block 2014-19. The scheme of wage revision applicable to CPSUs being binding on the Petitioner, the Petitioner reserves the right to approach the Commission for suitable revision in the norms for O & M expenditure for claiming the impact of wage hike from 1.1.2017 onwards.

70. 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. As regards impact of wage revision, we would like to clarify that any application filed by the Petitioner



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in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The O & M expenses have been calculated as given below:

					( <i>₹</i> in lakh)	
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
Asset I						
Balance portion Jamshedpur- Baripada T/L ( 32.706 KM)	23.12	23.90	24.69	25.51	26.36	
2 Nos. 400 kV GIS bays	120.6	124.60	128.74	133.02	137.42	
Total	143.72	148.51	153.43	158.53	163.78	

# Interest on Working Capital ("IWC")

71. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014

Tariff Regulations specify as follows:-

#### "28. Interest on Working Capital

(c) (i) Receivables equivalent to two months of fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and

(iii) Operation and maintenance expenses for one month"

"(5) Bank Rate" means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;"

72. The Petitioner has submitted that it has computed IWC for the tariff period

2014-19 considering the SBI Base Rate as on 1.4.2014 plus 350 basis points.

Accordingly, the rate of IWC considered is 13.50%.

73. The IWC is worked out in accordance with Regulation 28 of the 2014 Tariff

Regulations. The rate of IWC is considered as 13.50% (SBI Base Rate of 10%

plus 350 basis points). The IWC worked out is shown in the table below:-



		Asset I	(₹	₹in lakh)	
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance	21.56	22.28	23.01	23.78	24.57
O & M expenses	11.98	12.38	12.79	13.21	13.65
Receivables	151.54	154.14	154.82	155.36	155.89
Total	185.07	188.79	190.62	192.35	194.10
Interest	24.98	25.49	25.73	25.97	26.20

		Asset II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19		
Maintenance Spares							
O & M expenses							
Receivables	117.81	116.94	115.98	115.28	114.58		
Total	117.81	116.94	115.98	115.28	114.58		
Interest	15.90	15.79	15.66	15.56	15.47		

# Annual Transmission Charges

74. The details of Annual Transmission Charges allowed for the 2014-19 tariff period in respect of assets covered under the instant petition is summarized below:-

	Ass		(₹ in lakh)		
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	321.62	326.40	327.85	329.44	331.01
Interest on Loan	67.96	68.18	64.05	58.63	52.96
Return on Equity	350.94	356.26	357.87	359.63	361.38
Interest on Working	24.98	25.49	25.73	25.97	26.20
O & M Expenses	143.72	148.51	153.43	158.53	163.78
Total	909.22	924.85	928.94	932.19	935.33

	Asset II				(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	321.05	321.19	321.19	321.72	322.25
Interest on Loan	71.21	65.80	60.21	54.98	49.71
Return on Equity	298.70	298.85	298.85	299.44	300.03
Interest on Working Capital	15.90	15.79	15.66	15.56	15.47
O & M Expenses					
Total	706.86	701.62	695.91	691.71	687.46



# Filing Fee and Publication Expenses

75. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

# Licence Fee and RLDC Fees and Charges

76. The Petitioner has requested to allow the Petitioner to recover license fee and RLDC fees and charges from the respondents. The Petitioner shall be entitled for reimbursement of license fee and RLDC fees and charges in accordance with Clause (2) (b) and (2) (a) respectively of Regulation 52 of the 2014 Tariff Regulations.

# Sharing of Transmission Charges

77. 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.

78. This order disposes of Petition No. 238/TT/2018.

Sd/-	Sd/-
(I. S. Jha)	(Dr. M. K. Iyer)
Member	Member

Sd/-(P. K. Pujari) Chairperson

