# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No.277/TT/2018

Coram:

Shri P.K. Pujari, Chairperson

Dr. M. K. Iyer, Member

Shri I.S. Jha, Member

Date of Order: 30.12.2019

#### 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 actual / anticipated DOCOs to 31.3.2019 for **Assets (06 nos)** under "Eastern Region Strengthening Scheme XII (ERSS-XII)" 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

- Bihar State Power (Holding) Company Ltd.
   Vidyut Bhavan, Bailey Road,
   Patna 800 001
- West Bengal State Electricity Distribution Company Limited Bidyut Bhawan, Bidhan Nagar Block DJ, Sector-II, Salt Lakecity Kolkatta - 700 091
- Grid Corporation of Orissa Ltd.
   Shahid Nagar, Bhubaneswar 751 007
- Jharkhand State Electricity Board In front of Main Secretariat, Doranda, Ranchi - 834002

- Damodar Valley Corporation
   DVC Tower, Maniktala Civic Centre,
   VIP Road, Kolkatta 700 054
- Power Department,
   Government of Sikkim, Gangtok 737 101

...Respondents

# **Parties present:**

For Petitioner: Shri S. S. Raju, PGCIL

Shri, A.K.Verma, 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 the Petitioner, Power Grid Corporation of India Ltd. ("PGCIL") seeking approval of transmission tariff for 6 nos. of transmission assets of "Eastern Region Strengthening Scheme-XII (ERSS-XII)" 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").

- 2. The Petitioner has made the following prayers:
- (i) Approve the Transmission Tariff for the tariff block 2014-19 for the assets covered under this petition.
- (ii) Allow tariff up to 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the PoC charges.
- (iii) Admit the capital cost as claimed in the petition and approve the additional capitalization incurred / projected to be incurred.
- (iv) Tariff may be allowed on the estimated completion cost of the subject assets.
- (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.
- Approve the reimbursement of expenditure by the beneficiaries towards (vi) 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 GST on Transmission charges (vii) separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further any imposed and duties including cess. etc. taxes by Statutory/Govt./Municipal Authorities shall be allowed to be recovered from the beneficiaries.
- Allow the Petitioner to approach Commission for suitable revision in the (viii) norms for O&M expenditure for claiming the impact of wage hike, if any, during tariff period 2014-19.
- (ix) 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.
- (x) 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. and pass such other relief as 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 the project "Eastern Region Strengthening Scheme-XII (ERSS-III)" in Eastern Region was accorded by Board of Directors of the Petitioner in its 301st meeting held on 13.5.2014 for ₹52229 lakh including an IDC of ₹3324 lakh based on February, 2014 price level (communicated vide Memorandum No. C/CP/ERSS-XII dated 19.5.2014).

- 4. The administrative approval and expenditure sanction of Revised Cost Estimate (RCE) of the transmission project was accorded on 24.3.2017 for ₹55018 lakh including an IDC of ₹1700 lakh based on December, 2016 price level (communicated vide Memorandum No. C/CP/PA1617-03-0AE-RCE019 dated 30.3.2017).
- 5. The administrative approval and expenditure sanction of Revised Cost Estimate-II (RCE-II) of the transmission project was accorded on 8.3.2019 for ₹54636 lakh including an IDC of ₹2403 lakh based on October, 2018 price level (communicated vide Memorandum No. C/CP/PA1819-12-0AT-RTE018 dated 14.3.2019).
- 6. The scope of the scheme was discussed and agreed upon in Standing Committee (SCM) on Power System Planning of Eastern Region meeting held on 27.8.2013 at NRPC, New Delhi. The scheme was also discussed and approved in the 25<sup>th</sup> TCC & ERPC meeting held on 20.9.2013 and 21.9.2013 at Bhubaneshwar. Subsequently, the requirement of an additional 500 MVA ICT-III at Purnea Substation was discussed and agreed in 19<sup>th</sup> SCM held on 1.9.2017 at Kolkata and the same was discussed and approved in 36<sup>th</sup> TCC & ERPC meeting held on 13/14.9.2017 at Bhubaneshwar.
- 7. The scope of work covered under the project "Eastern Region Strengthening Scheme-XII (ERSS-XII)" in Eastern Region is as follows:-
  - (i) Reactive Compensation at 400 kV Substations
    - (a) Installation of 1X125 MVAR Bus Reactor at Baripada with GIS bay.
    - (b) Installation of 1X125 MVAR Bus Reactor at Maithon with GIS bay.
    - (c) Conversion of 50 MVAR Line Reactor presently installed at Jeerat end of Baharampur – Jeerat 400 kV line as Bus Reactor in parallel with existing Bus Reactor at Jeerat.

- (ii) Augmentation of Transformation Capacity
  - (a) Addition of 1x500 MVA, 400/220 kV ICT with GIS bays at Baripada 400/220/132kV sub-station of POWERGRID
  - (b) Replacement of 2X315 MVA, 400/220 kV ICTs with 2X500 MVA, 400/220 kV ICTs at Purnea
  - (c) Replacement of 2X315 MVA, 400/220 kV ICTs with 2X500 MVA, 400/220 kV ICTs at Patna
  - (d) Replacement of 2X315 MVA, 400/220 kV ICTs with 2X500 MVA, 400/220 kV ICTs at Pusauli
  - (e) Shifting of 1X315 MVA, 400/220 kV ICT from any suitable location (after replacement by 1x500MVA ICT) and install it at Jamshedpur 400/220 kV Substation as 3rd ICT alongwith associated bays.
  - (f) Shifting of 1X315 MVA, 400/220 kV ICT from any suitable location (after replacement by 1x500MVA ICT) and install it at Farakka 400/220 kV Substation as 2nd ICT alongwith associated bays.
  - (g) Out of the 6 nos. 315 MVA ICTs released from Purnea, Patna & Pusauli substations, one each would be kept as spare at Patna and Pusauli substation, one each would be diverted to Jamshedpur and Farakka substation and remaining 2x315 MVA, 400/220kV ICTs would be utilized as Regional Spare.
  - (h) Replacement of 1X100 MVA (3rd ICT), 220/132kV ICTs with 1X160 MVA, 220/132 kV ICT at Purnea 220/132 kV sub-station of POWERGRID, along with necessary bay equipment /protection system.
  - (i) Replacement of existing 100 MVA, 220/132kV ICTs with 1X160 MVA, 220/132 kV ICT at Siliguri 220/132 kV sub-station of POWERGRID, along with necessary bay equipment /protection system
  - (j) Replacement of existing 100 MVA, 220/132kV ICTs with 1X160 MVA, 220/132 kV ICT at Birpara 220/132 kV sub-station of POWERGRID, along with necessary bay equipment /protection system.
  - (k) 100 MVA ICTs thus released from Purnea, Siliguri & Birpara shall be kept in the regional pool of spare ICTs:

- (iii) 2 no. 500 MVA Single Phase Spare Unit of 765/400 kV ICT for Eastern Region Procurement of two 500 MVA, Single Phase unit of 765/400 kV ICT for Eastern Region to be stationed at Angul and Jharsuguda sub-station.
- (iv) 1 no. Spare unit of 765kV, 110 MVAR Single Phase Reactor to be stationed at Sasaram.
- (v) Modification of 132kV bus arrangement including switchgear to Double Main Scheme at 220/132kV Siliguri and Purnea Substation with GIS bays
- (vi) Construction of 4 nos. 220 kV line bays at Kishanganj sub-station of PGCIL
- 8. Details of the assets covered in the project scope under various petitions is summarized below:-

S.N.	Asset	Petition no
1	Asset-I: Replacement of existing 100 MVA, 220 /132 ICT	
	with 160 MVA ICT at 220/132kV Birpara Sub-station	
_	alongwith associated bays	
2	Asset-II: Replacement of existing 100 MVA, 220/132 ICT	
	with 160 MVA, 220/132 kV ICT at 220/132 kV Siliguri S/S	
	along with necessary bay eqpmt./ protection system	69/TT/2016
3	Asset III: Replacement of 315 MVA 400/220Kv ICT I with	(Final order
	500 MVA 400/220 kV ICT at Patna Substation	issued for
4	Asset IV: Replacement of 315 MVA 400/220 kV ICT II with	2014-19
	500 MVA 400/220 kV ICT at Patna Substation	period)
5	Asset V: Replacement of 315 MVA 400/220 kV ICT I with	
	500 MVA 400/220 kV ICT at Pusauli Substation	
6	Asset VI: Replacement of 315 MVA 400/220Kv ICT II with	
	500 MVA 400/220 kV ICT at Pusauli Substation	
7	Asset VII: Replacement of 315 MVA 400/220Kv ICT II with	
	500 MVA 400/220 kV ICT at Purnea substation	
8	Asset VIII: Replacement of 100 MVA (3 <sup>rd</sup> ) ICT with 160	
	MVA220/132 kV ICT at Purnea Substation	
9	Asset-IX: 125 MVAR Bus Reactor at Baripada Substation	
	with GIS bay	
10	Asset-X: 500 MVA , 400/220/132 kV ICT at 400/220/132 kV	
	Baripada S/S alongwith GIS bays	
11	Asset-I Replacement of 315 MVA 400/220 kV ICT I with	232/TT/2015
	500 MVA 400/220 kV ICT at Purnea Substation	(Final order
		issued for 2014-
		19 period)
12	Asset I: Conversion of 50 MVAR Line Reactor (presently	
	installed at Jeerat end of 400kV Baharampur – Jeerat TL) as	233/TT/2016

S.N.	Asset	Petition no
	Bus Reactor in parallel with existing Bus Reactor at Jeerat	(Final order
13	Asset II: Installation of 01 no. 125 MVAR Bus Reactor at	issued for 2014-
	Maithon S/S with GIS bays	19 period)
14	Asset III: 04 nos. 220kV GIS Line Bays at Kishanganj S/S	
15	Asset IV(a): Modification of 132kV Bus arrangement at	
	220/132 kV Siliguri Sub station with GIS bays	
16	<b>Asset I:</b> Shifting of 315 MVA, 400/220kV ICT from any suitable location (after replacement by 1x500 MVA ICT) and install it at Jamshedpur 400/220Kv Substation as 3rd ICT along-with associated bays	Covered under instant petition (Asset-I & II were earlier
17	Asset II: Modification of 132kV Bus arrangement with GIS	Covered in
	bays at 220/132kV Purnea S/S	petition no.
18	Asset-III: Spare 1 no unit of 765Kv,110 MVAR Single Phase Reactor to be stationed at Sasaram	233/TT/2016, now covered under instant petition)
19	<b>Asset-IV</b> : 3rd 500 MVA, 400/220kV ICT at Patna (PGCIL) substation alongwith associated bays	
20	Asset-V: 500 MVA Single phase spare unit of 765/400 kV ICT at Angul S/S	
21	<b>Asset-VI:</b> 500 MVA Single phase spare unit of 765/400 kV ICT at Sundergarh S/S	
22	<b>Asset:</b> Shifting of 315 MVA ICT from Pusauli and install it at Farakka along with associated bays	Earlier covered under petition no. 233/TT/2016 (Fresh petition to be filed after commissioning)

#### 9. Details of the assets covered in the instant petition are summarized below:-

Asset	Asset Name					
	Shifting of 315 MVA, 400/220kV ICT from any suitable location (after					
Asset-I	replacement by 500 MVA ICT) and install it at Jamshedpur 400/220 kV					
	Substation as 3rd ICT along-with associated bays					
Asset-II	Modification of 132 kV Bus arrangement with GIS bays at 220/132 kV					
Purnea substation						
Asset-III	Spare 1 no. unit of 765 kV,110 MVAR Single Phase Reactor to be					
ASSEL-III	stationed at Sasaram substation					
Asset-IV	3rd 500 MVA, 400/220kV ICT at Patna (PGCIL) substation alongwith					
ASSEL-IV	associated bays					
Asset-V	500 MVA Single phase spare unit of 765/400 kV ICT at Angul					
ASSEL-V	substation					
Accet \/I	500 MVA Single phase spare unit of 765/400 kV ICT at Sundergrah					
Asset-VI	substation					

- 10. The Asset-I & Asset-II were earlier filed under petition No. 233/TT/2016. As these 2 assets were not commissioned till the time of issuance of final order dated 19.9.2017 in petition no. 233/TT/2016, the Petitioner was directed to file the fresh petition upon actual commissioning of these assets. Accordingly, the Petitioner has filed the instant petition covering the said assets.
- 11. The Commission vide Order dated 3.5.2019 observed that the Asset-I is about shifting of 315 MVA, 400/220 kV ICT from any suitable location (after replacement by 500 MVA ICT) and installation at Jamshedpur 400/220 kV Substation and directed the Petitioner to submit details of the tariff granted for 315 MVA ICT at Jamshedpur Sub-station. In response, the Petitioner vide affidavit dated 15.5.2019 has submitted that the trued up tariff for 2009-14 tariff block in respect of Jamshedpur ICT has been approved by the Commission vide order dated 7.12.2015 in petition no. 200/TT/2014.
- 12. The Commission vide Order dated 3.5.2019 allowed the interim Annual Transmission Charges under the proviso (i) of Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the POC charges in respect of all the assets claimed in the petition.
- 13. The details of the annual transmission charges claimed by the Petitioner are as under:-

	Asset-I		Asset-II		Asset-III	
Particulars	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19
Depreciation	41.00	158.29	12.85	251.79	0.22	36.13
Interest on Loan	42.79	157.16	14.03	263.86	0.23	36.24
Return on Equity	45.68	176.37	14.31	280.54	0.24	40.25
Interest on Working capital	4.48	16.56	1.53	29.46	0.01	2.42
O & M Expenses	33.13	116.81	12.51	240.52	0.00	0.00
Total	167.08	625.19	55.23	1066.17	0.70	115.04

	Asset-IV		Asset-	Asset-VI	
Particulars	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19	2018-19 (Pro-Rata)
Depreciation	9.52	85.35	39.72	80.18	30.89
Interest on Loan	9.67	83.10	40.04	76.21	32.43
Return on Equity	10.61	95.09	44.26	89.33	34.41
Interest on Working capital	0.95	8.13	2.66	5.27	2.03
O & M Expenses	5.96	48.10	0.00	0.00	0.00
Total	36.71	319.77	126.68	250.99	99.76

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

	Asset-I		Asset-II		Asset-III	
Particulars	2017-18	2018-19	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19
Maintenance Spares	16.96	17.52	34.90	36.08	0.00	0.00
O&M Expenses	9.42	9.73	19.39	20.04	0.00	0.00
Receivables	95.04	104.20	171.20	177.69	14.46	19.17
Total	121.42	131.45	225.49	233.81	14.46	19.17
Rate of Interest	12.60%	12.60%	12.80%	12.80%	12.60%	12.60%
Interest on working Capital	4.48	16.56	1.53	29.46	0.01	2.42

	Asset-IV		Asset-	Asset-VI	
Particulars	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19	2018-19 (Pro-Rata)
Maintenance Spares	6.99	7.22	0.00	0.00	0.00
O&M Expenses	3.88	4.01	0.00	0.00	0.00
Receivables	47.81	53.29	40.87	41.83	33.07
Total	58.68	64.52	40.87	41.83	33.07
Rate of Interest	12.60%	12.60%	12.60%	12.60%	12.20%
Interest on working Capital	0.95	8.13	2.66	5.27	2.03

- 15. 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 9.7.2019 and the Petitioner vide its affidavit dated 30.7.2019 filed its rejoinder.
- 16. The Petition was heard on 11.7.2019 and the Commission reserved the order in the Petition.

#### **Analysis and Decision**

- 17. Having heard the representatives of the Petitioner present at the hearing and perused the material on record, we proceed to dispose of the petition.
- 18. This order has been issued after considering the main petition dated 25.7.2018 and Petitioner's affidavits dated 17.8.2018, 4.9.2018, 4.2.2019, 7.3.2019, 5.4.2019, 15.5.2019, 30.7.2019, 2.8.2019 and reply dated 9.7.2019 of the respondent, BSP(H)CL.

## **Date of Commercial Operation (COD)**

19. The Petitioner had filed the instant petition claiming actual COD for all the assets covered under the instant petition except Asset-VI for which anticipated COD was claimed. However, vide affidavit dated 4.2.2019, the Petitioner has claimed the actual COD for the instant Asset-VI. The same has been summarized as under:-

S. N.	Name of Asset	COD claimed at the time of filing of instant petition	COD claimed (Actual)
1	Asset I: Shifting of 1x315 MVA, 400/220kV ICT from any suitable location (after replacement by 1x500 MVA ICT) and install it at Jamshedpur 400/220Kv Substation as 3rd ICT along-with associated bays	16.12.2017 (Actual)	16.12.2017
2	<b>Asset II:</b> Modification of 132kV Bus arrangement with GIS bays at 220/132kV Purnea S/S	12.3.2018 (Actual)	12.3.2018
3	<b>Asset-III:</b> Spare 1 no unit of 765Kv,110 MVAR Single Phase Reactor to be stationed at Sasaram	28.3.2018 (Actual)	28.3.2018
4	Asset-IV: 3rd 500 MVA, 400/220kV ICT at Patna (PGCIL) substation alongwith associated bays	14.2.2018 (Actual)	14.2.2018
5	Asset-V: 01 Nos 500 MVA Single phase spare unit of 765/400 kV ICT at Angul S/S	25.9.2017 (Actual)	25.9.2017
6	<b>Asset-VI:</b> 01 Nos 500 MVA Single phase spare unit of 765/400 kV ICT at Sundergrah S/S	31.8.2018 (Anticipated)	30.9.2018

- 20. In support of the actual COD of the Assets covered in the instant petition, the petitioner has submitted the self-declaration COD certificate, RLDC charging certificate, CEA energisation certificate and CMD certificate for the subject Assets-I, Asset-II & Asset-IV. As regards Asset-III, Asset-V & Asset-VI the petitioner has submitted that these are cold spare. Hence, CEA energisation certificate and RLDC certificate is not applicable for these assets.
- 21. The Commission vide Order dated 15.5.2019 directed the Petitioner to submit RPC approval for Asset-III, IV, V & VI. In response, the Petitioner vide affidavit dated 15.5.2019 has submitted that the Asset-III, Asset-V and Asset VI were approved in 25<sup>th</sup> ERPC meeting dated 20 & 21<sup>st</sup> September 2013. The Asset-IV was discussed and approved in 36<sup>th</sup> ERPC dated 14.9.2017.
- 22. We have considered the submissions of the Petitioner. Taking into consideration CEA energisation certificate dated 4.12.2017, 17.1.2018 and 9.2.2018, RLDC charging certificate dated 16.1.2018, 9.4.2018 and 2.3.2018 in respect of Asset-I, Asset-II and Asset-IV respectively as well as CMD certificate as required under Grid Code, the COD of the Asset-I, Asset-II and Asset-IV has been approved as 16.12.2017, 12.3.2018, and 14.2.2018 respectively.
- 23. The Asset-III, Asset-V and Asset-VI are 110 MVAR spare Reactor at Sasaram, 500 MVA spare ICT at Angul substation and 500 MVA spare ICT at Sundergarh substation respectively. The Committee on regional spares has recommended the following:
  - 29. As per CEA regulation, there is provision for 1Ø spare transformer/reactor. However, no such norm exists for 3 phase spares. Most of the 400 KV and below class transformers and reactors installed in POWERGRID station are of 3 phase. Considering this and keeping in view the ageing of equipment and lead time for replacement, requirement of 3Ø spares should be met after approval in RPC for the same. Any additional requirement of 1Ø cold spare transformers and reactors should also be met after approval in RPC.

- 30. The Committee is also of the view that the transformer or reactor taken out after its replacement by augmentation/ capacity addition should be considered as the regional spares after approval of the RPC.
- 24. The Spare ICT's and Reactors have been approved in the 2<sup>nd</sup> SCM meeting held on 27.8.2013 at ERPC. Accordingly, the COD of instant Asset-III, Asset-V and Asset-VI has been approved as 29.3.2018, 25.9.2017 and 30.9.2018 respectively. The COD approved is as follows:

SL. No.	Asset	Actual COD
1	Asset-1	16.12.2017
2	Asset-2	12.3.2018
3	Asset-3	29.3.2018
4	Asset-4	14.2.2018
5	Asset- 5	25.9.2017
6	Asset-6	30.9.2018

## **Capital Cost**

- 25. 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;
- (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."
- 26. The Petitioner has submitted the apportioned approved cost as per Investment Approval, Revised Cost Estimate-I (RCE-I) and Revised Cost Estimate-II (RCE-II) in respect of the assets covered under the instant petition. The Petitioner vide affidavit dated 2.8.2019 has submitted revised estimated completion cost of Asset-I and submitted the Management certificate dated 2.8.2019 in support of the same. Accordingly, the details of apportioned approved cost, capital cost as on COD and estimated additional capital expenditure incurred or projected to be incurred during 2017-18, 2018-19, 2019-20 and 2020-2021 along with estimated completion cost as claimed by the Petitioner for the instant assets are as under:

	Apportioned	Revised Apportioned	Cost	Pr	oposed E	xpenditu	'e	Estimated
Asset	Approved Cost (FR)	Cost as per RCE-II	upto COD	2017-18	2018-19	2019-20	2020-21	Completion Cost
Asset-I	2269.94	3261.20	2657.73	132.48	348.99	122.00	-	3261.20
Asset-II	5403.71	5296.70	4546.27	95.12	322.65	193.59	129.06	5286.69
Asset-III	851.12	1023.43	507.15	41.16	283.94	141.97	47.32	1021.54
Asset-IV	NA	1822.76	1308.12	230.07	170.74	85.37	28.46	1822.76
Asset-V	1588.81	1547.79	1436.23	61.54	50.00			1547.77
Asset-VI	1588.91	1578.79	895.74		550.08	133.02		1578.84

#### **Cost Over-run**

- 27. The Respondent, BSP(H)CL vide affidavit dated 9.7.2019 has submitted the following:
  - a) There is huge cost overrun in Asset-I and Asset-III. The Asset-IV is not part of the scope of works and the same is required to be explained by the Petitioner. Asset Nos. III, V and VI are in the category of spares and accordingly not in use and thus the assets which are not in use even though it may form part of the project, is required to be excluded from the capital cost in accordance with Regulation 9(6) (a) of the Tariff Regulations, 2014. It may also be submitted here that the Petitioner is bound by the Normative Annual Transmission System Availability Factor (NATAF) is 98% in respect of AC system under Regulation 38(1) of the Tariff Regulations, 2014 and accordingly keeping spare assets is only beneficial to the Petitioner. It is the submission of Respondent-BSP(H)CL that the tariff of these spare assets may not be loaded on to the beneficiaries and through the beneficiaries the ultimate Electricity Consumer and in the case of this Commission is required to safeguard their interest and accordingly the claim of Petitioner is also in violation of the Section 61(d) of the Electricity Act, 2003. It may further be stated that the Hon'ble Tribunal in its judgment dated 08.05.2014 in Appeal No. 173/2013 (NTPC Ltd. Vs. Central Electricity Regulatory Commission & Ors.) and judgment dated 01.05.2015 in Appeal No. 97/2013 (NTPC Ltd. Vs. Central Electricity Regulatory Commission & Ors.) disallowed capitalization of spare/additional transformers. In judgment dated 1.5.2015, the Tribunal observed that unless there is a specific provision in the Regulations permitting capitalization of the cost of spare assets, such assets cannot be included in the capital base.
- The Petitioner in the petition has also filed the justification of the cost overrun. The justification filed is quite general indicating the price variation due to inflationary trend in the economy without mentioning as to when the items quoted in the table were purchased by the vendor for the manufacture of the assets in question and thereby resulting into cost overrun.
- The Petitioner has also filed the Revised Cost Estimates (RCE) dated 30<sup>th</sup>
   March, 2017 which is approved by the Competent Authority and no mention

has been made as to who is the Competent Authority. Yet another RCE-II dated 14th March, 2019 has also been filed which too is approved by the Competent Authority. This is necessary as the Commission as well as the beneficiaries would like to know who the Competent Authority is and whether this Competent Authority has been empowered to approve the RCE. The perusal of these RCEs would show that it is merely an indication of revision of cost of various assets without furnishing any justification for increase in cost approved. Even the power delegated to the Board of Directors of PGCIL by the Department of Public Enterprise (DPE), Ministry of Heavy Industries and Public Enterprises, Government of India through its OM No. 26(3)/2005-GM-GL-92 dated 1<sup>st</sup> May, 2008 and OM No. DPE/11(2)/97-Fin dated 22<sup>nd</sup> July, 1997 or anybody subordinate to it cannot exercise the power of revision without mentioning the reasons and the justification of time and cost overrun. Any exercise if made without reasons and the justification of time and cost overrun would be arbitrary in nature and the Petitioner cannot claim tariff on the basis of such arbitrary exercise of power. Thus, the cost overrun as well as the time overrun may not be allowed by the Commission in the instant case.

- 28. In reply to the above, the Petitioner vide affidavit dated 31.7.2019 has submitted its rejoinder and stated the following:
  - a) With regard to cost overrun in case of subject Assets-I and III (alongwith other subject assets), the reasons for cost overrun/ cost variation, along with the Revised Cost Estimate (RCE), have been submitted in detail in the instant petition. Further, the cost overrun/ variation for individual heads/ items have also been submitted in the petition in respective Form 5 of the individual assets.
  - b) With regard to approval of scope of works of subject Asset-IV, the execution of same had to be undertaken considering the peak load demand of 650 MW at Patna upon request from BSPTCL and approval from Union Ministry of Power. The same has also been elaborated with justification in the main petition.
  - c) Further, with regard to subject Assets-III, V and VI being under category of spares, these assets have been included in the scope of works after

- necessary deliberations/ ratifications in the ERPC/SCM meetings in the presence of all regional constituents.
- d) With regard to contention of Respondent no. 01 for "Competent Authority" as mentioned in the RCE-II of subject project "ERSS-XII", it is submitted that the competent authority therein refers to Board of Directors of Petitioner who are delegated with such exercise of power.
- 29. During the hearing dated 11.7.2019, the Commission observed that the estimated completion cost of Asset-I increased substantially and the reasons given by the petitioner are not satisfactory. The Commission further observed that the cost of similar 315 MVA ICT alongwith associated bays at 400/220 kV Balipara Substation, covered in Petition No. 22/TT2016 was only ₹1806.16 lakh whereas the petitioner in the instant case has claimed the capital cost of ₹3769.09 lakh in respect of Asset-I. It was also pointed out that the cost of shifting of a 315 MVA ICT, as in the instant case, is more than the cost of new ICT of similar configuration. Accordingly, vide ROP for the hearing dated 11.7.2019, the Petitioner was directed to submit detailed reasoning for such huge variation and high cost of Asset-I.
- 30. In response, the petitioner vide affidavit dated 2.8.2019 has submitted that the estimated completion cost as per Auditor certificate is ₹3769.09 lakhs, however, the same has come down to ₹3261.20 lakhs as per actual and revised estimated expenditure for subject Asset-I. The Petitioner further submitted the following justification:
  - a) Increase in Awarded cost: There is significant increase in the cost from FR to award. The Contracts for various packages under this project were awarded to the lowest evaluated and responsive bidder, on the basis of Open Competitive Bidding.
  - **b) Price Variation (PV):** Price variation has incurred on the basis of provision of respective contracts. There were inflationary trends prevalent

during execution of project from April, 2013 (FR Price level) to December, 2017 (period of major supplies), due to the trend of variation in indices of major raw materials. Thus the price variation observed during execution of the project is attributable to the inflationary trend prevailing during execution of project and also market forces prevailing at the time of bidding process of various packages awarded for execution of project.

- c) Variation in Quantities: The FR calculation was based on normative basis, however during execution the detailed engineering has been carried out as per actual site condition. The line bay identified by JUSNL for termination of its 220 kV transmission line was at remote/far end but original location agreed was nearer to PGCIL boundary wall. Accordingly, about 100-150 m of control cable was considered in the FR, however, the actual distance of bay with control room is approx. 400 m, which is almost 3-4 times as compared to FR. This leads to many fold increment in cost of control cable of about ₹ 396.41 lakh. Also, there is an increase in the cost of switchyard equipment items such as equipment structure, bus bar materials, various equipment and miscellaneous civil works, etc. of about ₹950.80 lakh due to increase in the quantity of substation auxiliaries (switchgear, protection panel, relay test kit etc. Hence, there is cost variation as compared to FR due to quantity variation as per actual site conditions.
- 31. We have considered the submissions of the Petitioner and Respondent. It is observed from the Table of Para 26 that the estimated completion cost of instant assets are within the RCE-II. Therefore, there is no cost overrun with respect to RCE-II. However, there is a significant cost variation in respect of Asset-I and the same is analyzed below:
  - (a) As compared with apportioned approved cost (FR), the estimated completion cost increased by about Rs. 1499.15 Lakhs. The petitioner has submitted that the variation in capital cost is due to increase in award cost and price variation, increase in cost of switchgear due to increase in quantity as per actual. The petitioner has submitted that in FR a lump sum of 100-150 meters of control cable was considered but in actual the length of the control cable increased to 400 meters.

(b) Based on the Form-5 furnished by the Petitioner, the variations is tabulated below:-

Item Name	Variation (In Rs. Lakhs)	Reasons for variation		
Civil works	-258.48	In FR calculation is based on normative basis, however during execution the detailed engineering has been carried out as per actual site condition.		
Switch gear( CT,PT,	-127.01	Increase in quantity of circuit breaker from		
Circuit Breaker, Isolator)	0.50	1 to 2, in BPI from 0 to 12, in CSD from 0 to 2, CVT 0 to 3		
Transformers	-9.58	·		
Control, relay & protection Panel	-193.74	Due to increase in quantity of CB relay panel without A/R, Bus bar protection panel augmentation and relay test kit cost increased under these item.		
Bus Bars/conductors/ Insulators'	-224.72			
Outdoor lighting, Emergency	-464.11	As per actual site requirement		
D.G. Set, Grounding System				
Structure of switch yard	-161.67	Due to increase in No of quantity Circuit breaker and controlling switching device, CVT and BPI. Accordingly no of structure for switchyard increased hence cost increased.		

(c) The Commission had approved the capital cost of similar 315 MVA ICT alongwith associated bays in earlier petitions as summarized below:

Petition No	Asset details	Apportioned	Estimated
		approved cost	Capital cost
26/TT/2016	315 MVA ICT	2143.84 Lakhs	1853.18 Lakhs
	alongwith		
	associated bays		
410/TT/2014	315 MVA ICT at	2046.87 Lakhs	1773.00 Lakhs
	Allahabad		
	Substation		

(d) As may be seen from the above Table, the cost of 315 MVA ICT alongwith associated bays cost is in range of ₹17.7-18.5 crores whereas in the instant petition the estimated completion cost claimed by the Petitioner is about Rs. 3261.2 Lakhs. The variation was mainly due to increase in award cost and price variation, increase in cost of switch gear and increase in length of control cable from 100-150 meters to 400 meters. Considering the submissions of the Petitioner, we provisionally approve the estimated capital cost of Asset-I as claimed vide Management Certificate. However, the Petitioner is directed to submit the detailed explanation with regard to variation of capital cost in respect of Asset-I at the time of truing up exercise.

#### Time over-run

32. As per the Investment Approval (IA) dated 13.5.2014, the transmission scheme was scheduled to be commissioned within 30 months from the date of IA. Accordingly, the Commissioning Schedule comes to 13.11.2016. against which the Petitioner has claimed the following actual COD in respect of instant assets:

Asset	Scheduled COD	Actual COD (claimed)	Delay
Asset-I	13.11.2016	16.12.2017	398
Asset-II		12.3.2018	484
Asset-III		28.3.2018	501
Asset-IV	December-2019	14.2.2018	No Delay**
Asset-V	13.11.2016	25.9.2017	316
Asset-VI		30.9.2018	686

<sup>\*\*</sup>The petitioner has included the 3<sup>rd</sup> 500 MVA ICT at Patna (Asset-IV) in RCE-II dated 14.3.2019. As per the RCE-II, the entire project is scheduled to be commissioned by December, 2019 against which the Asset–IV has been commissioned on 14.2.2018. Hence, there is no time delay in commissioning of Asset-IV.

33. The Petitioner has submitted that instant assets were delayed due to shut down issues, transportation problems and supplier issues and submitted the following to substantiate its claim:

#### Asset-I:

(i) The Petitioner planned to install 315 MVA ICT at Jamshedpur Sub-Station which was to be released from Patna Substation after commissioning of 500 MVA ICT at its place. The 315 MVA ICT (referred to as ICT-I at Patna) was to be taken out and installed as ICT-III at Jamshedpur S/S. The whole arrangement is part of the subject project. The new ICT (of 500MVA rating) installed at Patna after removal of 315 MVA ICT-I at Patna was

commissioned on 24.9.2016 and was filed vide petition number 69/TT/2016 and therein referred to as *Asset –III.* Although, the new 500 MVA ICT (replacing existing 315 MVA ICT-I) at Patna S/S was commissioned on 24.09.2016, well within schedule completion date (13.11.2016), it took considerable amount of time owing to delay in receipt of requisite Shutdown approval which affected the commissioning of subject Asset-I.

- (ii) The requirement for shutdown for the ICT replacement works at Patna Substation was requested to BSPTCL and also discussed and approved in the 118<sup>th</sup> OCC and 119<sup>th</sup> OCC held on 8.3.2016 and 1.4.2016. The shutdown request of Petitioner was not allowed by BSPTCL due to huge load demand in summer season at Patna. The Petitioner vide letter dated 22.4.2016 requested BSPTCL for expediting the shut down approval. Subsequently, BSPTCL gave shutdown approval from 6.9.2016 to 21.9.2016. The replacement works associated with ICT-1 at Patna Substation were completed and the new 500 MVA ICT was put under commercial operation on 24.9.2016.
- (iii) The transportation works of ICT-I (315 MVA) at Patna S/S was taken up. Upon charging of 500 MVA ICT at Patna Substation, the 315MVA Transformer was dispatched to Jamshedpur S/S in the last week of September, 2016 and reached Jamshedpur Substation on 14.10.2016. Thereafter, the works for installation of same were initiated and the 315 MVA ICT was successfully charged on 30.03.17 on no load condition. However, when this 315 MVA ICT was loaded and put under trial operation, the same was unsuccessful due to internal fault in ICT.
- (iv) In view of this, to meet the high load demand in Jamshedpur, a spare ICT of 315 MVA rating from Purnea Substation was diverted to Jamshedpur S/s. The diverted ICT reached Jamshedpur Substation in the month of October'2017 and was put under commercial operation on 16.12.2017.

#### Asset-II:

(v) The works associated with modification of existing bays was completely dependent on shutdown to be granted by BSPTCL/ERLDC and could be carried out whenever the same was made available. The delay in commission of instant asset was mainly due to non-availability of shutdown at

Purnea sub-station. The Petitioner has submitted chronology of events from 12.2.2015 to 1.12.2017 regarding shutdown issues and submitted documentary evidence in support of the same. The construction work of foundation columns/ bus duct foundation hampered was for 831 days due to non-availability of shut down from BSPTCL at Purnea S/s. Finally Shutdown was granted in the months of December'2017 to Feb'2018 of respective lines corresponding to 132 kV Bays at Purnea S/s.

(vi) The Petitioner has submitted the chronological details of shut down granted by BSPTCL at Purnea substation in varying periods of about 111 days between 1.12.2017 to 15.2.2018. After shutdown approval, modification works of bays were done and the Asset-II was commissioned on 12.03.2018.

Due to non-availability of shutdown from 12.2.2015 to 1.12.2017, the work of modification of bays got delayed by 16 months and the same was beyond the control of Petitioner.

#### Asset-III:

- (vii) There were transportation issues during transportation of the Reactor from Mumbai, due to railway track in between NH-2 and Sasaram Substation. The height of the Reactor at trolley was around 8-9 meter, due to which rail traffic cum overhead traction power block was required, while crossing the railway track. The traffic block and railway traction line shutdown was applied on 12.7.2017 for crossing the gate no 56/C/2E in between PSE-MTGE. Finally, East Central Railway (ECR) gave the clearance on 11.08.17 for one hour (from 11:30 hrs to 12:30 hrs). Hence, there was a delay of about 30 days in getting the clearance from ECR.
- (viii) There was delay in receipt of bushing of Reactor from August, 2017 to February, 2018. The delay of 7 months was due to time taken in getting custom clearance, since the bushing was manufactured outside India by Alstom Ltd.

#### Asset-IV:

(ix) The requirement of 3<sup>rd</sup> ICT at Patna was discussed and agreed in the 19<sup>th</sup> SCM of ER held on 1.9.2017 and 36<sup>th</sup> ERPC meeting held on 14.9.2017. The Petitioner has submitted the extract of minutes of these meetings. Thereafter, the Union Ministry of Power vide letter dated 10.1.2018 directed

the Petitioner to implement the 3<sup>rd</sup> 500 MVA ICT at Patna Substation. Accordingly, the Petitioner has included the Asset-IV i.e. 3<sup>rd</sup> 500 MVA ICT at Patna Substation in Revised Cost estimate—II (RCE-II) dated 14.3.2019. As per RCE-II, the Asset-IV has been commissioned on 14.2.2018. Hence there is no delay in commissioning of Asset-IV.

## Asset-V & Asset-VI:

- (x) The delay reasons for subject Assets is mainly due to delay in Manufacturing & supply delay of transformer and delay in mobilization at site by M/S GET&D.
- 34. The Commission vide ROP order dated 3.5.2019 directed the Petitioner to submit the details of time over-run and chronology of activities along with documentary evidence as per the prescribed format. In response, the Petitioner vide affidavit dated 15.5.2019 has submitted the following:-

Activity		Reasons for				
	Sc	hedule	<i>F</i>	Actual	delay	
	From	to	From	to		
Asset-I						
LOA	23.05.14	23.05.14	20.06.14	20.06.14	Timely award of contract and no delay on behalf of petitioner in this regard	
Supplies of structure, equipment etc.	10.10.14	06.10.16	10.04.15	21.08.17	The reasons for delay submitted in detail in the main	
Testing & commissioning	11.10.16	12.11.16	09.09.17	14.12.17	petition.	
Asset-II						
LOA	23.05.14	23.05.14	24.10.14	24.10.14	Delay in getting	
Supplies of structure, equipment etc.	10.10.14	06.10.16	18.11.15	23.09.17	requisite shut- down approvals from concerned	
Testing & commissioning	11.10.16	12.11.16	01.01.18	10.03.18	authorities.	
Asset-III						
LOA	23.05.14	23.05.14	31.03.15	31.03.15		
Supplies of structure, equipment etc.	10.10.14	06.10.16	29.06.17	25.08.17	Delay in supply along with transportation	
Testing commissioning	11.10.16	12.11.16	20.03.18	28.03.18	issues.	
Asset-V	ı	1		T	1	
LOA	23.05.14	23.05.14	31.03.15	31.03.15	Delay in	
Supplies of structure,	10.10.14	06.10.16	17.03.17	21.04.17	manufacturing and supply.	

Activity		Reasons for			
	Sc	hedule	<b>A</b>	ctual	delay
	From	to	From	to	
equipment etc.					Further, delay in
Testing	11.10.16	12.11.16	29.07.17	25.09.17	mobilization at site
commissioning	11.10.10	12.11.10	29.07.17	25.09.17	by contractor.
Asset-VI					
LOA	23.05.14	23.05.14	31.03.15	31.03.15	Delay in
Supplies of					manufacturing
structure,	10.10.14	06.10.16	11.06.18	02.09.18	and supply.
equipment etc.					Further, delay in
Testing	11.10.16	12.11.16	04.09.18	30.09.18	mobilization at site
commissioning	11.10.16	12.11.10	04.09.10	30.09.10	by contractor.

- 35. The respondent, BSP(H)CL vide affidavit dated 9.7.2019 has submitted that the Petitioner has not submitted statutory information like Detailed Project Report, CPM Analysis, PERT Chart and Bar Chart due to which time over run analysis is not possible.
- 36. In response, the Petitioner vide affidavit dated 30.7.2019 has submitted that the reasons for delay have already been elaborated in detail in the instant petition. The CPM/PERT chart based on schedule of the subject project was submitted vide affidavit dated 4.9.2018. The delay assessment has also been submitted in the required format vide affidavit dated 15.05.2019. The Gantt/CPM chart as per actual commissioning have been submitted.
- 37. We have considered the submissions of Petitioner and Respondent. The asset wise time over run is analyzed in the subsequent paragraphs.

#### Asset-I:

38. There is a delay of about 398 days in commissioning of the Asset-I. The Petitioner has submitted that the delay is attributable to the delay in obtaining shutdown clearance for 500 MVA ICT at Patna substation and delay due to fault in 315 MVA ICT commissioned at Jamshedpur substation. The Petitioner vide letter dated 22.4.2016 requested BSPTCL for shutdown clearance for replacement of 315 MVA 400/220 KV ICT-1 by 500 MVA at Patna substation but due to constraints in

BSPTCL system, they did not give approval for shutdown in the month of August, 2016. Thereafter, the Petitioner vide letter dated 23.8.2016 requested BSPTCL for shutdown of ICT-I from 6.9.2016 to 21.9.2016 for 15 days to which BSPTCL gave permission and the Petitioner commissioned the 500 MVA ICT at Patna on 24.9.2016. The 500 MVA ICT at Patna was commissioned within time schedule and there was no delay in commissioning of the 500 MVA ICT at Patna Substation. The Petitioner has submitted that even though there was no delay in commissioning of the 500 MVA ICT at Patna Substation but the delay in obtaining shutdown by BSPTCL had cascading effect on the commissioning of the 315 MVA ICT at Jamshedpur Substation.

- 39. The Petitioner has submitted that the replaced 315 MVA ICT from Patna substation reached Jamshedpur on 14.10.2016 and was successfully charged on 30.3.2017 but the ICT failed due to internal fault due to which the Petitioner diverted the spare ICT from Purnea Substation and finally charged it on 14.12.2017 at Jamshedpur Substation.
- 40. As regards shutdown approval by BSPTCL for the 315 MVA ICT at Patna substation it is noted that the same was done before schedule date of 13.11.2016. No delay occurred due to late approval of shutdown by BSPTCL. Also, we note that the Petitioner has not made out any case for cascading effect due to this shutdown delay. Even otherwise, the Petitioner should have factored in small duration delay in shutdown (in this case, it was only one month or so). BSPTCL also needs to plan alternative arrangement of power supply so that it will not affect BSPTCL consumers. Accordingly, the time delay due to shutdown is not condoned.
- 41. With regard to time delay of 24.9.2016 to 14.12.2017, the delay occurred due to fault in ICT and in terms of under Regulation 12(1) (b) and (c) of the 2014 Tariff

Regulations the same cannot be considered as beyond the control of the Petitioner.

Therefore, the time over-run of 398 days is not condoned.

#### Asset-II:

42. There is delay of about 484 days in commissioning of Asset-II. The Petitioner has submitted that the asset is delayed due to non-availability of shutdown at Purnea Substation. In support of the documentary evidence, the Petitioner has submitted minutes of various OCC meetings and paper clippings. As per the submissions of the petitioner, the intended shutdowns denied by BSP(H)CL at Purnea Substation between 12.2.2015 to 1.12.2017 was about 831 days. Subsequently, the shutdown was granted between 1.12.2017 to 15.2.2018 in intervals totaling to 111 days, which was availed by the petitioner for commissioning the instant asset. Thus, the delay from 12.2.2015 to 15.2.2018 due to unavailability of shutdown cannot be ascribed to the Petitioner and this delay due to denial of shutdown by the state utility is beyond the control of the Petitioner. However, the petitioner compressed the execution time and commissioned the instant asset on 12.3.2018 with overall delay of 484 days. Therefore, the time over-run of 484 days in respect of Asset-II is condoned.

#### Asset-III:

43. There is a delay of about 501 days in commissioning of the asset. The Petitioner has submitted that the delay is attributable to the railway block problem for transportation of reactor to substation from the highway which took about 30 days and also the custom clearance took about 7 months due to which the reactor got delayed at site, causing a delay of 231 days. The reasons cited by the Petitioner are not considered valid for condonation of time delay, as these activities were taken up after expiry of SCOD of 13.11.2016. The time delay due to transportation and

custom clearance of 231 days cannot be condoned. Therefore, the overall time overrun of 501 days in commissioning of Asset-III is not condoned.

#### Asset-IV:

44. The petitioner has included the 3<sup>rd</sup> 500 MVA ICT at Patna in RCE-II dated 14.3.2019. As per the RCE-II, the entire project is scheduled to be commissioned by December, 2019 against which the Asset–IV is commissioned on 14.2.2018. Hence, there is no delay in commissioning of Asset-IV.

#### Asset-V & Asset-VI:

- 45. There is a delay of about 316 days and 686 days in commissioning of the Asset-V and Asset-VI respectively. The Petitioner has submitted that the time overrun is due to delay in manufacturing and supply of transformer and delay in mobilization at site by the M/S GET&D (the contractor).
- 46. Regulation 12 (1) (b) and (c) of the 2014 Tariff Regulation provides the following:

#### "12. Controllable and uncontrollable factors:

(1)The "controllable factors" shall include but shall not be limited to the following:

\_\_\_\_\_\_

- (b) Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levied or force majeure events: and
- (c) Delay in execution of the project on account of contractor, supplier or agency of the generating company or transmission licensee."
- 47. In the instant case, the delay is due to delay by the supplier in manufacturing and supply of transformer and mobilization at site by the contractor. Therefore, the same is within control of the Petitioner, and hence, is not condoned.
- 48. Accordingly, the time over-run condoned/not condoned in respect of the instant assets is summarized as below:-

Assets	Time over-run in commissioning of asset (days)	Time over-run condoned (days)	Time over-run not condoned (days)
Asset-I	398	0	398
Asset-II	484	484	0
Asset-III	501	0	501
Asset-IV	NIL		
Asset-V	316	0	316
Asset-VI	686	0	686

# **Interest During Construction (IDC)**

49. The Petitioner has claimed Interest During Construction (IDC) for the instant assets and has submitted the Auditor / Management 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	IDC	IDC discha	rged in FY
	Auditor / Managem ent Certificate	discharged upto COD	2017-18	2018-19
Asset-I	227.82	153.84	-	73.98
Asset-II	348.94	280.87	ı	68.07
Asset-III	24.15	12.03	-	12.12
Asset-IV	14.32	0.00	- 1	14.32
Asset-V	38.89	25.81	4.52	8.55
Asset-VI	47.41	38.60	-	2.95

50. The Petitioner has submitted the statement showing IDC consisting of the name of the loan, Drawl date, loan amount, interest rate and Interest claimed. The allowable IDC as on COD has been worked out considering the information submitted by the Petitioner. The loan details submitted in Form-9C for period 2014-19 and date of drawl submitted in IDC statement has been perused for the purpose of calculating IDC for the instant assets. The loan portfolio which is mentioned in IDC statement and 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. The Petitioner is directed to submit the detailed IDC statement for all assets of the instant petition, by rectifying the above mentioned deviation, at the time of true up of 2014-19.

51. 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 true up is as below:-

(₹ in lakh)

Assets	IDC claimed as	IDC Disallowed	IDC admissible	IDC Allowed	Un- discharged	Year-wise IDC discharged		
	per Auditor Management certificates	due to computation difference and & Time overrun not condoned		on cash basis as on COD	IDC liability as on COD	2017-18	2018- 19	
	1	2	3=(1-2)	4	5=(3-4)	6	7	
Asset-I	227.82	142.76	84.72	31.45	53.61	0.00	53.61	
Asset-II	348.94	1.50	347.44	280.63	66.81	0.00	66.81	
Asset-III	24.15	17.78	6.37	3.17	3.19	0.00	3.19	
Asset-IV	14.32	0.33	14.32	0.00	13.99	0.00	13.99	
Asset-V	38.89	29.41	9.48	6.18	3.29	3.29	0.00	
Asset-VI	47.41	39.61	7.80	0.35	7.46	0.00	2.95	

#### **Incidental Expenditure During Construction (IEDC)**

- 52. The Petitioner has claimed Incidental Expenditure during Construction (IEDC) of ₹244.23 lakh, ₹441.25 lakh, ₹39.08 lakh, ₹166.92 lakh, ₹27.39 lakh and ₹32.64 lakh for Asset-I, Asset-II, Asset-IV, Asset-V, and Asset-VI, respectively. The Petitioner, vide affidavit dated 2.8.2019, has submitted that the entire IEDC claimed has been discharged upto COD.
- 53. The details of IEDC claimed and allowed is tabulated below which shall be reviewed at the time of truing up exercise:-

(₹ in lakh)

Asset	IEDC claimed as per Auditor / Management Certificate	IEDC Admissible	IEDC disallowed due to time over-run	IEDC Allowed (as on COD)
Asset-I	244.23	244.23	74.03	170.01
Asset-II	441.25	441.25	0.00	441.25
Asset-III	39.08	39.08	13.83	25.23
Asset-IV	166.92	164.23	0.00	164.23
Asset-V	27.39	27.39	7.03	20.34
Asset-VI	32.64	32.64	13.99	18.63

54. The IEDC allowed for the instant assets will be reconsidered in the light of the directions of Appellate Tribunal for Electricity (APTEL) in judgment dated 2.12.2019 in Appeal Nos. 95 of 2018 and 140 of 2018 against Commission's orders dated 29.7.2016 and 5.10.2017 in Petition Nos. 46/TT/2014 and 2/RP/2017 respectively, at the time of truing up.

## **Initial Spares**

55. This has been dealt in line with Regulation 13 of the 2014 Tariff Regulations. The Petitioner has claimed initial spares in respect of the assets covered under the instant petition and submitted Auditor / Management Certificates in support of the same. The details of initial spares claimed by the Petitioner are as under:-

(₹ in lakh)

84.00

**Particulars** Initial **Asset** spares claimed Asset-I Substation 140.31 Substation 174.43 Asset-II Asset-III Substation 57.50 Asset-IV Substation 65.00 Asset-V Substation 0.00

56. The Petitioner vide affidavit dated 02.08.2019 has submitted the following year-wise amount of initial spares discharged:-

Substation

Asset-VI

(₹ in lakh)

		Expenditure	OD in FY	Total		
Asset	Particulars	up to COD	2017-18	2018-19	2019-20	Spare Cost
Asset-I	S/S	111.01	37.04	22.73	-	170.78
Asset-II	S/S	118.61	13.72	42.10	-	174.43
Asset-III	S/S	31.63	11.38	14.50	-	57.50
Asset-IV	S/S	42.25	9.25	13.50	-	65.00
Asset-V	S/S	-	-	-	-	-
Asset-VI	S/S	-	-	-	84.00	84.00

57. The initial spares allowed for the purpose of tariff calculation after considering the Plant and Machinery cost excluding IDC, IEDC and Land expenses up to 31.3.2019, subject to true-up are as under:-

(₹ in lakh)

Asset	Particulars	Plant and Machinery Cost excluding IDC, IEDC and	Initial spare s claime d	disallowe	Initial spares disallowe d on account	Initial spares allowed as on COD	spare	-wise In	
		Land expenditure up to cut-off date (31.3.2019)	u u	of excess claim	of un- discharge d		2017- 18	2018- 19	2019- 20
		(31.3.2013)	1	2	3	4	5	6	7
Asset-I	Substation	2338.45	140.31	0.00	29.30	111.01	29.30	0.00	0.00
Asset-II	Substation	4038.10	174.43	0.00	55.82	118.61	13.72	42.10	0.00
Asset-III	Substation	769.02	57.50	12.08	13.79	31.63	11.38	2.41	0.00
Asset-IV	Substation	1527.69	65.00	0.00	22.75	42.25	9.25	13.50	0.00
Asset-V	Substation	1481.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asset-VI	Substation	1365.77	84.00	2.18	81.82	0.00	0.00	0.00	81.82

# Capital cost as on COD

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

Asset	Capital Cost claimed as on COD as per Auditor / Management Certificate	IDC Disallowed due to computational difference & Time Overrun	Un- discharged IDC as on COD	IEDC Disallowed due to computational difference & Time Overrun	Excess / un- discharged Initial spares as on COD	Capital Cost as on COD considered for tariff calculation
	1	2	3	4	5	6=(1-2-3-4-5)
Asset-I	2657.73	142.76	53.61	74.03	29.30	2358.03
Asset-II	4546.27	1.50	66.81	-	55.82	4422.14
Asset-III	507.15	17.78	3.19	13.83	25.87	446.46
Asset-IV	1308.12	0.33	13.99	2.69	22.75	1268.36
Asset-V	1436.23	29.41	3.29	7.03	1	1396.49
Asset-VI	895.74	39.61	7.46	13.99	84.00	750.69

#### Additional Capital Expenditure (ACE)

59. As per Clause (13) of Regulation 3 of the 2014 Tariff Regulations, the cut-off date for instant Asset-I & V is 31.3.2020 and that of Asset-II, III, IV & VI is 31.3.2021. The Petitioner has submitted Auditor / Management Certificates in support of the additional capitalisation. However, the Petitioner vide Form-7 for the respective asset has claimed the ACE on account of Balance and Retention payment for the year 2017-18 and 2018-19 only. Accordingly, ACE claimed by the Petitioner is summarized in the table below:-

			(₹ in lakh)
Asset	Addition expenditu	Total	
	2017-18	2018-19	
Asset-I	132.48	348.99	481.47
Asset-II	95.12	322.65	417.77
Asset-III	41.16	283.94	325.10
Asset-IV	230.07	170.74	400.81
Asset-V	61.54	50.00	111.54
Asset-VI	-	550.08	550.08

- 60. Since, FY 2019-20 & 2020-21 falls beyond the tariff period 2014-19 and is not covered under the 2014 Tariff Regulation, the projected ACE claimed by the Petitioner for FY 2019-20 & 2020-21 vide auditor / management certificate has been ignored for the purpose of tariff and shall be dealt during the next tariff period as per extant tariff Regulations.
- 61. The Petitioner has claimed additional capital expenditure towards Balance and Retention payments. The admissible un-discharged IDC liability as on COD and Initial spares undercharged as on COD have 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	Pogulation	Asset-I		Asset-II		
Particulars	Regulation	2017-18	2018-19	2017-18	2018-19	
ACE to the extent of Balance & Retention Payment	14 (1)(i)	132.48	348.99	95.12	322.65	
Initial spares discharged	14 (1)(i)	29.30	0.00	13.72	42.10	
IDC Discharged	14 (1)(i)	-	53.61	-	66.81	
Total Add-Cap allowed for	161.78	402.60	108.84	431.56		

Dortiouloro	Pogulation	Ass	et-III	Asset-IV		
Particulars	Regulation	2017-18	2018-19	2017-18	2018-19	
ACE to the extent of Balance & Retention Payment	14 (1)(i)	41.16	283.94	230.07	170.74	
Initial spares discharged	14 (1)(i)	11.38	2.41	9.25	13.50	
IDC Discharged	14 (1)(i)	-	3.19	-	13.99	
Total Add-Cap allowed for tariff		52.54	289.54	239.32	198.23	

Particulars	Pogulation	Ass	et-V	Asset-VI		
Particulars	Regulation 2017-18		2018-19	2017-18	2018-19	
ACE to the extent of Balance & Retention Payment	14 (1)(i)	61.54	50.00	-	550.08	
Initial spares discharged	14 (1)(i)	-	-	-	-	
IDC Discharged	14 (1)(i)	3.29	-	-	2.95	
Total Add-Cap allowed for tariff		64.83	50.00	-	553.03	

# Capital cost for the tariff period 2014-19

Accordingly, the capital cost considered for the tariff period 2014-19, subject 62. to truing up, is as follows:-

Asset	Capital Cost allowed as on COD	Add Cap allowed for 2017-18	Add Cap allowed for 2018-19	Total Estimated Completion Cost up to 31.3.2019
Asset-I	2357.84	161.78	402. 60	2922.40
Asset-II	4422.14	108.84	431.56	4962.54
Asset-III	446.44	52.54	289.54	788.54
Asset-IV	1268.36	239.32	198.23	1705.91
Asset-V	1396.47	64.83	50.00	1511.32
Asset-VI	750.69	-	553.03	1303.72

# **Debt-Equity Ratio**

63. 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:-

Asset-I	As on Co	OD	As on 31.	03.2019
Debt	1650.63	70.00%	2045.69	70.00%
Equity	707.40	30.00%	876.72	30.00%
Total	2358.03	100.00%	2922.40	100.00%

Asset-II	As on Co	OD	As on 31.03.2019		
Debt	3095.50	70.00%	3473.78	70.00%	
Equity	1326.64	30.00%	1488.76	30.00%	
Total	4422.14	100.00%	4962.54	100.00%	

Asset-III	As on CO	OD	As on 31.0	03.2019
Debt	312.52	70.00%	551.98	70.00%
Equity	133.94	30.00%	236.56	30.00%
Total	446.46	100.00%	788.54	100.00%

Asset-IV	As on Co	OD	As on 31.03.2019		
Debt	887.85	70.00%	1194.14	70.00%	
Equity	380.51	30.00%	511.77	30.00%	
Total	1268.36	100.00%	1705.91	100.00%	

Asset-V	As on Co	OD	As on 31.03.2019		
Debt	977.55	70.00%	1057.93	70.00%	
Equity	418.94	30.00%	453.39	30.00%	
Total	1396.49	100.00%	1511.32	100.00%	

Asset-VI	As on Co	OD	As on 31.	03.2019
Debt	525.49	70.00%	912.61	70.00%
Equity	225.20	30.00%	391.11	30.00%
Total	750.69	100.00%	1303.72	100.00%

# **Return on Equity (ROE)**

- 64. The Petitioner has submitted that ROE has been calculated at the rate of 19.610% 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.
- 65. 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.
- 66. Accordingly, the ROE allowed is as follows:-

	Asset-I		Asset-	II	Asset-III		
Particulars	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19	
Opening Equity	707.40	755.94	1326.64	1359.29	133.94	149.70	
Addition due to Additional Capitalization	48.53	120.78	32.65	129.47	15.76	86.86	
Closing Equity	755.94	876.72	1359.29	1488.76	149.70	236.56	
Average Equity	731.67	816.33	1342.97	1424.03	141.82	193.13	
Return on Equity (Base Rate )	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	
MAT rate	20.961%	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%	19.610%	
Return on Equity (Pretax)	41.67	160.08	14.43	279.25	0.23	37.87	

	Asset-IV		Asse	Asset-VI	
Particulars	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19	2018-19 (Pro-Rata)
Opening Equity	380.51	452.30	418.94	438.39	225.20
Addition due to Additional Capitalization	71.80	59.47	19.45	15.00	165.91
Closing Equity	452.30	511.77	438.39	453.39	391.11
Average Equity	416.41	482.04	428.67	445.89	308.16
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)	10.29	94.53	43.30	87.44	30.30

# Interest on Loan (IOL)

- 67. 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.
  - d) Notwithstanding moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the asset and shall be equal to the annual depreciation allowed.

- 68. 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 truing-up.
- 69. The details of IOL calculated are as follows:-

Particulars	Asset-I		Asset-II		Asset-III	
	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19
	(Pro-Rata)		(Pro-Rata)		(Pro-Rata)	
Gross Normative Loan	1650.63	1763.87	3095.50	3171.68	312.52	349.30
Cumulative Repayment up to	0.00	37.40	0.00	12.95	0.00	0.21
previous Year						
Net Loan-Opening	1650.63	1726.47	3095.50	3158.73	312.52	349.10
Addition due to Additional	113.24	281.82	76.19	302.09	36.78	202.68
Capitalization						
Repayment during the year	37.40	143.67	12.95	250.63	0.21	33.99
Net Loan-Closing	1726.47	1864.62	3158.73	3210.20	349.10	517.78
Average Loan	1688.55	1795.54	3127.11	3184.46	330.81	433.44
Weighted Average Rate of	7.96%	7.94%	8.26%	8.25%	7.87%	7.87%
Interest on Loan						
Interest on Loan	39.03	142.64	14.15	262.63	0.21	34.10

Particulars	Asset-IV		Asse	t-V	Asset-VI
	2017-18	2018-19	2017-18	2018-19	2018-19
	(Pro-Rata)		(Pro-Rata)		(Pro-Rata)
Gross Normative Loan	887.85	1055.37	977.55	1022.93	525.49
Cumulative Repayment	0.00	9.24	0.00	38.86	0.00
Up to previous Year					
Net Loan-Opening	887.85	1046.14	977.55	984.07	525.49
Addition due to Additional	167.52	138.76	45.38	35.00	387.12
Capitalization					
Repayment during the year	9.24	84.84	38.86	78.48	27.19
Net Loan-Closing	1046.14	1100.06	984.07	940.59	885.41
Average Loan	966.99	1073.10	980.81	962.33	705.45
Weighted Average Rate of	7.70%	7.70%	7.75%	7.75%	8.07%
Interest on Loan					
Interest on Loan	9.38	82.63	39.17	74.60	28.55

# **Depreciation**

70. Depreciation has been dealt with in line of Regulation 27 of 2014 Tariff Regulations. The instant assets were put under commercial operation during 2017-18 & 2018-19. Accordingly, it will complete 12 years beyond the tariff period 2014-19 and 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	Asset-I		Asse	et-II	Asset-III		
	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19	
Opening Gross Block	2358.03	2519.81	4422.14	4530.98	446.46	499.00	
Additional Capital expenditure	161.78	402.60	108.84	431.56	52.54	289.54	
Closing Gross Block	2519.81	2922.40	4530.98	4962.54	499.00	788.54	
Average Gross Block	2438.92	2721.11	4476.56	4746.76	472.73	643.77	
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%	
Depreciable Value	2430.83	2684.80	4471.11	4714.30	470.11	624.04	
Remaining Depreciable Value	2430.83	2647.40	4471.11	4701.34	470.11	623.84	
Depreciation	37.40	143.67	12.95	250.63	0.21	33.99	

Doutiondone	Asse	t-IV	Asse	Asset-VI	
Particulars	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19	2018-19 (Pro-Rata)
Opening Gross Block	1268.36	1507.68	1396.49	1461.32	750.69
Additional Capital expenditure	239.32	198.23	64.83	50.00	553.03
Closing Gross Block	1507.68	1705.91	1461.32	1511.32	1303.72
Average Gross Block	1388.02	1606.79	1428.91	1486.32	1027.20
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	1376.05	1572.95	1425.67	1477.34	999.55
Remaining Depreciable Value	1376.05	1563.71	1425.67	1438.48	999.55
Depreciation	9.24	84.84	38.86	78.48	27.19

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

71. The Petitioner has claimed the O&M expenses for assets covered in the instant petition, except for Asset-III, V & VI, as per following details:-

Asset	Particulars	2017-18	2018-19
Asset-I		33.13	116.81
Asset-II		12.51	240.52
Asset-III	O&M Expenses	-	-
Asset-IV		5.96	48.10
Asset-V		-	-
Asset-VI		-	-

- 72. 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.
- 73. The Respondent, BSP(H)CL vide affidavit dated 9.7.2019 has submitted that 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. In response, the Petitioner vide affidavit dated 30.7.2019 in Rejoinder reply 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 01.01.2017 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.

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

Element	2017-18	2018-19
Sub-Station: 400 kV bay (₹ in lakh per bay)	66.51	68.71
Sub-Station: 220 kV bay (₹ in lakh per bay)	46.55	48.10
Sub-Station: 132 kV bay (₹ in lakh per bay)	33.25	34.36

75. We have considered the submissions made by the Petitioner. 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 2017-18 & 2018-19 is given below:-

(₹ in lakh)

Asset	Details	2017-18 (Pro-rata)	2018-19
Asset-I	1 No. 400 kV & 1 No. 220 kV Bays at Jamshedpur substation	32.68	116.81
Asset-II	7 Nos. 132 kV Bays at Purnea substation	11.64	240.52
Asset-IV	1 No. 220 kV Bay at Patna substation	5.74	48.10

# **Interest on Working Capital (IWC)**

76. 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 (9.10%) as on 01.04.2017 Plus 350 Bps i.e. 12.60% have been considered in respect of Asset-I to Asset-V and for Asset-VI 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.

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

12 11 14/11						
	Asset-I		Asset-	-11	Asset-III	
Particulars	2017-18 (Pro-Rata)	7018-14   7018-14		2017-18 (Pro-Rata)	2018-19	
Maintenance Spares	16.88	17.52	31.86	36.08	0.00	0.00
O&M Expenses	9.38	9.73	17.70	20.04	0.00	0.00
Receivables	88.95	96.47	166.26	177.07	13.42	18.04
Total	115.21	123.72	215.82	233.19	13.42	18.04
Rate of Interest	12.60%	12.60%	12.60%	12.60%	12.60%	12.60%
Interest on working Capital	4.22	15.59	1.49	29.38	0.01	2.27

	Asset	-IV	Asset	Asset-VI	
Particulars	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19	2018-19 (Pro-Rata)
Maintenance Spares	6.83	7.22	0.00	0.00	0.00
O&M Expenses	3.80	4.01	0.00	0.00	0.00
Receivables	47.03	53.03	40.10	40.95	29.20
Total	57.66	64.25	40.10	40.95	29.20
Rate of Interest	12.60%	12.60%	12.60%	12.60%	12.20%
Interest on working	0.92	8.10	2.60	5.16	1.79

# **Annual Transmission charges**

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

(₹ in lakh)

Dortionland	Asset-I		Asset	-11	Asset-III	
Particulars	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19
Depreciation	37.40	143.67	12.95	250.63	0.21	33.99
Interest on Loan	39.03	142.64	14.15	262.63	0.21	34.10
Return on Equity	41.67	160.08	14.43	279.25	0.23	37.87
Interest on Working capital	4.22	15.59	1.49	29.38	0.01	2.27
O & M Expenses	32.68	116.81	11.64	240.52	0.00	0.00
Total	155.00	578.79	54.66	1062.42	0.66	108.24

Doutionland	Asset-IV		Asse	Asset-VI	
Particulars	2017-18 (Pro-Rata)	2018-19	2017-18 (Pro-Rata)	2018-19	2018-19 (Pro-Rata)
Depreciation	9.24	84.84	38.86	78.48	27.19
Interest on Loan	9.38	82.63	39.17	74.60	28.55
Return on Equity	10.29	94.53	43.30	87.44	30.30
Interest on Working capital	0.92	8.10	2.60	5.16	1.79
O & M Expenses	5.74	48.10	0.00	0.00	0.00
Total	35.56	318.19	123.93	245.68	87.83

# Filing fee and the publication expenses

79. 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**

80. 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 license 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

81. 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.

## Transmission Service Agreement (TSA)

- 82. The Respondent, BSP(H)CL vide affidavit dated 9.7.2019 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. The Petitioner vide affidavit dated 31.7.2019 has submitted the complete copy of TSA signed between the Petitioner and BSP(H)CL on 19.8.2011 along with Schedule-II uploaded on petitioner's website. The petitioner has also submitted that the tariff for the instant assets should be shared by the beneficiaries as per Regulation 43 of the 2014 Tariff Regulations.
- 83. 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.

# **Sharing of Transmission Charges**

- 84. 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.
- 85. This order disposes of Petition No.277/TT/2018.

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