

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 237/TT/2018

Coram:

Shri P.K. Pujari, Chairperson

Dr. M. K. Iyer, Member

Shri I. S. Jha, Member

Date of Order: 5th of July, 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 COD to 31.3.2019 for 5 nos of Transmission assets under "North Eastern Region Strengthening Scheme-IV (NERSS-IV)".

And in the matter of:

Power Grid Corporation of India Limited

"Saudamini", Plot No.2,

Sector-29, Gurgaon -122 001

.....Petitioner

Vs

Versus

1. Assam Electricity Grid Corporation Limited, (Formerly Assam State Electricity Board), Bijulee Bhavan, Paltan Bazar, Guwahati-781001, Assam
2. Meghalaya Energy Corporation Limited, (Formerly Meghalaya State Electricity Board), Short Round Road, "Lumjingshai", Shillong-793 001, Meghalaya
3. Government of Arunachal



Pradesh, Itanagar,
Arunachal Pradesh

4. Power and Electricity Department,
Government of Mizoram,
Aizwal, Mizoram
5. Manipur State Electricity Distribution Company Limited,
(Formerly Electricity Department, Government of
Manipur),
Keishampat, Imphal
6. Department of Power,
Government of Nagaland,
Kohima, Nagaland
7. Tripura State Electricity Corporation Limited,
Vidyut Bhawan, North Banamalipur, Agartala,
Tripura (W)-799001 , Tripura

.....Respondents

Parties present:

For Petitioner: Shri S.K. Venkatesh, PGCIL
Shri S.K. Niranjan, PGCIL
Shri S.S. Raju, PGCIL
Shri B. Dash, PGCIL
Smt. Anshul Garg, PGCIL
Shri Zafrul Hasan, PGCIL

For Respondent: None

ORDER

The present petition has been filed by the Petitioner, Power Grid Corporation of India Ltd. ("PGCIL") seeking approval of transmission tariff for 5 nos of Transmission assets under "North Eastern Region Strengthening Scheme-IV (NERSS-IV)" (hereinafter referred to as "transmission system") for 2014-19 tariff period under the 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 block for the assets covered under this petition.*
- ii. *Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.*
- iii. *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.*
- iv. *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.*
- v. *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.*
- vi. *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.*
- vii. *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.*
- viii. *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.*
- ix. *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.*



- x. *Allow the Petitioner to bill Tariff from anticipated DOCO and also the Petitioner may be allowed to submit revised Certificate and tariff Forms (as per the Relevant Regulation) based on actual COD.*

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

Background

3. The Investment Approval (hereinafter referred to as "IA") for implementation of “North Eastern Region Strengthening Scheme-IV (NERSS-IV)” in North Eastern Region was accorded by the Board of Directors of the Petitioner in 329th meeting held on 26.5.2016 for ₹36460 lakh including IDC of ₹2055 lakh based on December, 2015 price level (communicated vide Memorandum No. C/CP/NERSS-IV dated 16.6.2016).

4. The scope of the scheme was discussed and agreed in 4th & 5th Standing Committee Meeting dated 13.12.2014 & 8.8.2015 respectively. Subsequently, the scheme was discussed and agreed in 15th TCC/NERPC meeting dated 20th & 21st August, 2015 at Guwahati.

5. The scope of work covered under the project “North Eastern Region Strengthening Scheme-IV (NERSS-IV)” in North-Eastern Region are as follows:

(i) Augmentation of Transformers and Reactors

- Dismantling / Removal of 4x105 MVA, 400/220 kV ICT# at Misa Substation of POWERGRID and addition of 2x500 MVA, 400/220 kV ICT at Misa Substation with GIS bays utilizing the space vacated after removal of 4x105 MVA, 400/220 kV ICT

Note: 4x105 MVA, 400/220 kV ICT thus released shall be kept as Regional Spare



- 1x125 MVAR 420 kV bus Reactor at Balipara (POWERGRID) sub-station.
- 1x125 MVAR 420 kV bus Reactor at Bongaigaon (POWERGRID) sub-station.

(ii) Operation of Silchar-Imphal 400 kV D/C line at rated voltage (400 kV)
(presently operated at 132 kV)

- Up-gradation of existing 2x50 MVA, 132/33 kV Imphal (POWERGRID) Substation to 400 kV with following scope:
 - Installation of 400/132 kV, 2x315 MVA (7x105 MVA, 1-Ph) ICTs,
 - 2 Nos. 400kV line bays for termination of Silchar - Imphal 400 kV D/C line
 - 80 MVAR, 420 kV Bus Reactor
- Extension of existing 400/132 kV Silchar (POWERGRID) Substation
 - 2 Nos. of 400 kV GIS line bays for termination of Silchar - Imphal 400 kV D/C line
 - Installation of 1x125 MVAR, 420kV Bus Reactor with GIS bays

(iii) Reconductoring of Agartala GBPP-Agartala (State) 132kV D/c

- Reconductoring of Agartala GBPP - Agartala (State) 132 kV D/C line with High Capacity HTLS conductor along with necessary up gradation/ modification in bay equipment at both ends.

6. The details of the Assets covered under the instant Petition are as under:

Asset	Asset Name
1	Dismantling / Removal of 4 X 105 MVA, 400/220 kV ICT at Misa Substation of POWERGRID and addition of 2 X 500 MVA, 400/220 kV ICT at Misa Substation with GIS bays utilizing the space vacated after removal of 4 X 105 MVA, 400/220 kV ICT (4x105 MVA, 400/220 kV ICT thus released shall be kept as Regional Spare)



Asset	Asset Name
2	<p>(a) Up gradation of existing 2X50 MVA, 132/33 kV Imphal (POWERGRID) SS to 400 kV by installation of 400/132 kV, 2X315 MVA (7X105 MVA, 1-Ph) ICTs, 2 No. 400 kV line bays for termination of 400 kV D/C Silchar - Imphal line and 80 MVAR, 420 kV Bus Reactor along with associated bays at Imphal Substation</p> <p>(b) Extension of existing 400/132 kV Silchar (POWERGRID) SS with 2 Nos. of 400 kV GIS line bays for termination of Silchar - Imphal 400 kV D/C line</p> <p>(c) Installation of 1X125 MVAR, 420 kV Bus Reactor along with GIS bays at Silchar S/s</p>
3	1x125 MVAR, 420 kV Bus Reactor along with associated bay at Balipara (POWERGRID) Substation
4	1x125 MVAR, 420 kV Bus Reactor along with associated bay at Bongaigaon (POWERGRID) Substation
5	Reconductoring of Agartala GBPP - Agartala (State) 132 kV D/C line with High Capacity HTLS conductor along with necessary up gradation/ modification in bay equipment at both ends

7. Vide order dated 31.12.2018, Annual transmission Charges were allowed under the proviso (i) to Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC charges in respect of the Assets 3, 4 and 5.

8. The details of transmission charges claimed by the Petitioner are as under:-

(₹ in lakh)

Particulars	Asset 1		Asset 2(a) & (b)	Asset 2(c)	Asset 3	Asset 4	Asset 5	
	2017-18	2018-19	2018-19	2018-19	2018-19	2018-19	2017-18	2018-19
Depreciation	0.98	396.92	152.25	38.82	47.28	44.29	1.95	9.31
Interest on Loan	1.02	397.13	164.76	39.14	45.00	41.71	1.85	8.47
Return on Equity	1.10	445.21	171.22	43.26	52.68	49.35	2.17	10.37
Interest on working capital	0.08	32.60	14.31	3.34	5.27	5.18	0.13	0.60
O & M Expenses	0.28	106.83	83.84	16.58	45.44	47.65	-	-
Total	3.46	1378.69	586.38	141.14	195.67	188.18	6.10	28.75



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

(₹ in lakh)

Particulars	Asset 1		Asset 2(a) & (b)	Asset 2(c)	Asset 3	Asset 4	Asset 5(a)	
	2017-18	2018-19	2018-19	2018-19	2018-19	2018-19	2017-18	2018-19
O & M Expenses	8.68	8.90	39.99	4.90	5.73	5.73	-	-
Maintenance Spares	15.62	16.02	71.97	8.81	10.31	10.31	-	-
Receivables	214.54	229.78	559.32	83.34	49.31	45.22	7.31	9.59
Total	238.84	254.71	671.28	97.05	65.35	61.28	7.31	9.59
Rate of Interest	12.80%	12.80%	12.20%	12.20%	12.80%	12.80%	12.60%	12.60%
Interest	30.57	32.60	81.90	11.84	7.97	7.74	0.92	1.21
Pro-rata Interest	0.08	32.60	14.31	3.34	5.27	5.18	0.13	1.21

10. The Petitioner has served the petition to the respondents and notice of this 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.

11. The hearing on the matter was held on 13.12.2018 and 19.2.2019.

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

13. This order has been issued after considering the main Petition dated 21.3.2018 and Petitioner's affidavit dated 11.5.2018, 4.12.2018, 12.12.2018, 15.1.2019 and 22.3.2019.

Analysis and Decision

Commercial Operation Date (COD):

14. The Petitioner filed the instant Petition claiming anticipated COD in respect of the Assets covered in the instant Petition. Subsequently, vide affidavit dated 4.12.2018, the



Petitioner furnished the status of actual / anticipated COD which is summarized as under:

Asset No	Asset Name	Anticipated COD (while filing the instant Petition)	COD (Anticipated / Actual) as per affidavit dated 4.12.2018
1	Dismantling / Removal of 4 X 105 MVA, 400/220 kV ICT at Misa Substation of POWERGRID and addition of 2 X 500 MVA, 400/220 kV ICT at Misa Substation with GIS bays utilizing the space vacated after removal of 4 X 105 MVA, 400/220 kV ICT (4x105 MVA, 400/220 kV ICT thus released shall be kept as Regional Spare)	31.3.2018	31.1.2019 (Anticipated)
2	(a) Upgradation of existing 2X50 MVA, 132/33 kV Imphal (POWERGRID) SS to 400 kV by installation of 400/132 kV, 2X315 MVA (7X105 MVA, 1-Ph) ICTs, 2 No. 400 kV line bays for termination of 400 kV D/C Silchar - Imphal line and 80 MVAR, 420 kV Bus Reactor along with associated bays at Imphal Substation (b) Extension of existing 400/132 kV Silchar (POWERGRID) SS with 2 Nos. of 400 kV GIS line bays for termination of Silchar - Imphal 400 kV D/C line and installation of 1X125 MVAR, 420 kV Bus Reactor along with GIS bays at Silchar S/s	31.3.2018	31.12.2018 (Anticipated)
3	1x125 MVAR, 420 kV Bus Reactor along with associated bay at Balipara (POWERGRID) Substation	31.3.2018	3.8.2018 (Actual)
4	1x125 MVAR, 420 kV Bus Reactor along with associated bay at Bongaigaon (POWERGRID) Substation	31.3.2018	22.7.2018 (Actual)
5 (a)**	Reconductoring of Agartala GBPP - Agartala (State) circuit-2 of 132 kV D/C line with High Capacity HTLS conductor along with necessary up gradation/ modification in bay equipment at both ends	31.3.2018	24.12.2017 (Actual)
5 (b)**	Reconductoring of Agartala GBPP - Agartala (State) circuit-1 of 132 kV D/C line High Capacity HTLS conductor along with necessary up gradation/ modification in bay equipment at both ends		8.2.2018 (Actual)

**At the time of filing of the instant Petition claimed as Asset 5 and vide affidavit dated 4.12.2018 Asset 5 was split into Asset 5(a) and Asset 5(b)



15. The Petitioner vide affidavit dated 15.1.2019 again combined the Asset-5(a) and Asset-5(b) as Asset-5 and claimed its actual COD as 8.2.2018 and submitted letter dated 7.1.2019 in support of the combined COD.

16. The Petitioner vide affidavit dated 22.3.2019 made prayer to split Asset-2(a) & (b) as Assets-2(a & b) and Asset-2(c) and also revised the anticipated COD of Asset 1. The summary of COD in respect Assets 1 and 2 claimed since the filing of the instant Petition is as under:

Asset No	Asset Name	Anticipated COD (while filing the instant Petition)	COD (Anticipated / Actual) as per affidavit dated 4.12.2018	COD (Anticipated / Actual) as per affidavit dated 22.3.2019
1	Dismantling / Removal of 4 X 105 MVA, 400/220 kV ICT at Misa Substation of POWERGRID and addition of 2 X 500 MVA, 400/220 kV ICT at Misa Substation with GIS bays utilizing the space vacated after removal of 4 X 105MVA, 400/220 kV ICT (4x105 MVA, 400/220 kV ICT thus released shall be kept as Regional Spare)	31.3.2018	31.1.2019 (Anticipated)	30.5.2019 (Anticipated)
2	(a) Up gradation of existing 2X50 MVA, 132/33 kV Imphal (POWERGRID) SS to 400 kV by installation of 400/132 kV, 2X315 MVA (7X105 MVA, 1-Ph) ICTs, 2 No. 400 kV line bays for termination of 400 kV D/C Silchar - Imphal line and 80 MVAR, 420 kV Bus Reactor along with associated bays at Imphal S/s(b) Extension of existing 400/132 kV Silchar (POWERGRID) SS with 2 Nos. of 400 kV GIS line bays for termination of Silchar-Imphal 400kV D/C line	31.3.2018	31.12.2018 (Anticipated)	29.1.2019 (Actual)
	(c) 1x125 MVAR, 420 kV Bus Reactor along with GIS bays at Silchar S/s.	31.3.2018	-	20.12.2018 (Actual)



17. It may be seen from the Table above that the Petitioner has made several revisions in COD of Asset-1 and finally claimed the anticipated COD of same as 30.5.2019.

18. Regulation 7 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 provides the process for application for determination of tariff and the relevant extracts with regard to application for determination of tariff in respect of new assets are reproduced below:

“7(2) The transmission licensee may make an application for determination of tariff for new transmission system including communication system or element thereof as the case may be in accordance with the Procedure Regulations, in respect of the transmission system or elements thereof anticipated to be commissioned within 180 days from the date of filing of the petition”.

.....

7 (7) (ii) if the date of commercial operation is delayed beyond 180 days from the date of issue of tariff order in terms of clause (6) of this regulation, the tariff granted shall be deemed to have been withdrawn and the generating company or the transmission licensee shall be required to file a fresh application for determination of tariff after the date of commercial operation of the project:”

19. As per Regulation 7 of the 2014 Tariff Regulations, the Petitioner may file a petition within 180 days of the anticipated COD. The instant Petition was filed in March, 2018 and more than six months have passed and still the asset 1 is not commissioned. The Petitioner has revised the anticipated COD of the instant assets three times which indicates that the COD of the transmission assets is still not certain. The Asset 1 is not commissioned up to 31.3.2019 and same is expected to be commissioned in the new tariff control period of 2019-24. Accordingly, tariff is not allowed for the Asset 1. The Petitioner is directed to file a fresh petition in respect of Asset 1 as and when same is put into commercial operation and same would be considered under provisions of the Tariff Regulations for the 2019-24 period.



20. With regard to remaining assets covered in the instant petition, the Petitioner has submitted CEA Energisation Certificates dated 5.11.2018, 7.9.2018, 7.1.2019, 15.2.2019 & 18.2.2019 for Asset-2, dated 9.7.2018 for Asset-3, dated 29.6.2018 for Asset-4 and dated 5.2.2018 for Asset-5 respectively. The Petitioner has also submitted RLDC Charging Certificates dated 8.2.2019, 15.2.2019, 18.2.2019 & 21.2.2019 for Asset-2, dated 16.8.2018 for Asset-3, dated 31.7.2018 for Asset-4 and dated 14.2.2018 for Asset-5 respectively.

21. Taking into consideration the CEA Energisation certificate, RLDC charging certificate and CMD certificate as required under Grid Code, the details of Assets for which COD is approved for the purpose of granting tariff is as under:

Asset No.	Asset Name	Actual COD
2 (a)	Up gradation of existing 2X50 MVA, 132/33 kV Imphal (POWERGRID) SS to 400 kV by installation of 400/132kV, 2X315 MVA (7X105 MVA, 1-Ph) ICTs, 2 No. 400 kV line bays for termination of 400 kV D/C Silchar - Imphal line and 80MVAR, 420kV Bus Reactor along with associated bays at Imphal S/s	29.1.2019
2 (b)	Extension of existing 400/132 kV Silchar (POWERGRID) SS with 2 Nos. of 400 kV GIS line bays for termination of Silchar-Imphal 400 kV D/C line	
2 (c)	1X125 MVAR, 420 kV Bus Reactor along with GIS bays at Silchar S/s	20.12.2018
3	1x125 MVAR, 420 kV Bus Reactor along with associated bay at Balipara (POWERGRID) Substation	3.8.2018
4	1x125 MVAR, 420 kV Bus Reactor along with associated bay at Bongaigaon (POWERGRID) Substation	22.7.2018
5	Re-conductoring of Agartala GBPP - Agartala (State) of 132 kV D/C line with High Capacity HTLS conductor along with necessary up gradation/ modification in bay equipment at both ends	8.2.2018

Capital Cost

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



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

(2) The Capital Cost of a new project shall include the following:

(a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

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

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

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

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

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

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

23. The details of capital cost claimed by the Petitioner on the basis of the Auditor's certificate dated 18.3.2019, 9.1.2019, 18.9.2018, 11.8.2018 and 22.5.2018 for Assets



2(a & b) & 2(c), 3, 4 and 5 as on COD along with the estimated additional capital expenditure to be incurred for the instant assets are summarized below:

Asset No.	Apportioned Approved Cost (FR)	Exp. Up to COD	Proposed Expenditure			Estimated Completion Cost	Estimated Completion Cost up to 31.3.2019
			2018-19	2019-20	2020-21		
2(a & b)	22255.69	16121.00	1177.61	2042.51	77.53	19418.65	17298.51
2(c)		2654.71	23.75	203.21	-	2881.67	2678.46
3	2351.16	1192.07	351.32	451.70	200.75	2195.84	1543.39
4	1831.97	1085.76	292.61	131.43	48.59	1558.39	1378.37
5	1253.98	273.10	162.93	44.52	-	480.55	436.03

24. We have examined the submissions of Petitioner and noted that against the FR apportioned approved cost of ₹27692.80 lakh in respect of the instant assets as mentioned in Table above, the total estimated completion cost as on 31.3.2019 including additional capitalization is ₹ 23333.80 lakh. The total individual cost of each asset as on 31.3.2019 is also within the respective apportioned approved cost.

Time over-run

25. As per the "IA", the Assets covered in the petition were scheduled to be commissioned within 24 months from the date of "IA". The date of "IA" is 26.5.2016, hence the assets were to be commissioned by 25.5.2018.

26. Against the scheduled completion date of 25.5.2018, the actual COD of these assets are as under:

S. N.	Asset No.	Scheduled COD	COD (Actual)	Time overrun (days)
1	2 (a & b)	25.5.2018	29.1.2019	248
2	2 (c)		20.12.2018	208
3	3		3.8.2018	69
4	4		22.7.2018	57
6	5		8.2.2018	No delay



27. There is delay in commissioning of all Assets, except Asset 5, under instant petition as compared to “IA”.

28. Regulation 12(1) of the Tariff Regulations, 2014, provides as under:

“12. Controllable and uncontrollable factors:

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

(a)-----

(b)-----

(c) *Delay in execution of the project on account of contractor, supplier or agency of the generating company or transmission licensee.*

29. The Petitioner has attributed delay of Asset 2(a&b) and 2(c) to bandhs, unprecedented rains, flash floods in Silchar and Imphal area. The Petitioner also submitted that Assets 2 (a&b) and 2 (c) got delayed due to poor road conditions, severe rain fall, economic blockade, restriction on entry of laborers in Manipur and Assam and inordinate time required for transportation of bus reactor. The activity wise time delay is analyzed in subsequent paragraphs as under:

- I. **Poor Road conditions and Transportation of reactor / transformer:** The Petitioner has submitted that transportation of transformer/reactor was affected by poor road conditions. The Petitioner has submitted that the materials required for the instant assets were transported through Imphal-Dimapur highway and the same was affected by landslides due to which transportation of materials was severally affected. In support of delay, the Petitioner has submitted letters dated 17.10.2017, 18.10.2017, 12.12.2017, 21.12.2017 and 30.3.2018 respectively. From the submissions of the Petitioner, we observe that the transformer reached the other side of hindrance on 17.10.2017 and finally reached Silchar substation on 20.12.2017. The time delay on account of this is not attributable to the Petitioner and therefore, the period from 17.10.2017 to



20.12.2017 (64 days) was beyond the control of the Petitioner. Hence, the time delay of 64 days is condoned.

II. Delay due to Soil conditions due to rain in Silchar Substation: The Petitioner has submitted that due to heavy rains, the soil condition of the GIS extension area was so poor that it was impossible to move heavy duty crane during the time period from April 2018 to July 2018 which resulted in delay in starting of outdoor bus duct erection activities and foundation works of equipment and GIS hall. Based on the submissions of the Petitioner it is not possible to quantify the no of days affected due to poor soil condition. Moreover, the Petitioner must have accounted for rainy season in the time schedule. Therefore, the time delay due to soil condition is not condonable.

III. Delay due to Severe Rain fall: The Petitioner has submitted that severe rain fall in and around Silchar and Imphal area affected the supply of coarse and sand aggregate of the project and heavy rain resulted in difficulties in foundation works of equipment and GIS hall. In support of the delay, the Petitioner has submitted paper clippings as documentary evidence. From the submissions made by the Petitioner, it is observed that the out of the total time period of 53 days from 5.7.2017 to 28.8.2017, around 15 days is affected due to severe rail fall and which is beyond the control of the Petitioner. Hence, the time delay of 15 days is condoned.

IV. Economic Blockade and restriction on entry of laborers Manipur: The Petitioner has submitted that economic blockade in the State of Manipur affected the initial supply of cement and reinforcement that affected the progress of civil work . The restriction of laborers in Manipur also affected the



progress of the work. The Petitioner has claimed that the time period from 1.11.2016 to 19.3.2017 was affected due to economic blockade but the Petitioner has not submitted any documentary evidence in this regard. Therefore, in the absence of documents, it is difficult to quantify the time delay due to economic blockade restriction of laborers in Manipur and therefore, the said time delay is not condoned.

- V. **Economic Blockade/Bandh in Assam:** The Petitioner has submitted paper clippings as documentary evidence in support of delay due to economic blockade/Bandhs during April 2017 to March 2018. We have gone through the documentary evidence submitted by the Petitioner and it is observed that in the time period from April, 2017 to October, 2018, about 37 days is affected due to economic blockade and the same is beyond the control of the Petitioner. Therefore, the time delay of 37 days is condoned.

30. Thus, out of the total time delay of 248 days and 208 days in commissioning of Asset 2(a & b) and 2(c) respectively, a time delay of 116 (64+15 +37) days in respect of these assets which was beyond the control of the Petitioner has been condoned.

31. With regard to Assets 3 and 4, the Petitioner has submitted that delay is due to unprecedented rains, flash floods and bandh. In support of the documentary evidence, the Petitioner has submitted paper clippings and images of rain effected area. From the submissions made by the Petitioner, it is observed that about 37 days is affected due to bandhs during the time period from 24.4.2017 to 21.6.2018 and about 54 days was affected due to rain and water logging during the time period from 9.9.2017 to 28.7.2018. Factoring the same, the total time delay of 69 days and 57 days in



commissioning of the Asset 3 and 4 was beyond the control of the Petitioner and therefore, the same has been condoned.

Interest during Construction (IDC)

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

(₹ in lakh)

Asset	IDC as per Auditor certificate	IDC Discharged up to COD	IDC Discharged in 2018-19	IDC Discharged in 2019-20
Asset-2(a & b)	688.33	595.21	78.88	14.24
Asset-2(c)	281.91	213.09	14.32	54.50
Asset-3	72.37	49.53	18.33	4.51
Asset-4	45.67	0.37	45.30	-
Asset-5	8.43	-	8.43	-

33. The IDC on cash basis up to the COD has been worked out on the basis of the loan details given in the Statement showing discharge of IDC and Form-9C for the instant assets. Petitioner has submitted that it has not made any default in the payment of interest. The IDC claimed and considered as on COD and summary of discharge of IDC liability up to COD and thereafter for the purpose of tariff determination subject to revision at the time of truing up is as below:

(₹ in lakh)

Asset	IDC claimed as per Auditor certificate	IDC allowed	IDC Disallowed due to time overrun not condoned	IDC Discharged up to COD	IDC Discharged in 2018-19	IDC Discharged beyond 2018-19 and disallowed
Asset-2(a & b)	688.33	365.44	322.89	365.44	-	-
Asset-2(c)	281.91	225.03	56.88	213.09	11.94	-
Asset-3	72.37	72.37	-	49.53	18.33	4.51



Asset	IDC claimed as per Auditor certificate	IDC allowed	IDC Disallowed due to time overrun not condoned	IDC Discharged up to COD	IDC Discharged in 2018-19	IDC Discharged beyond 2018-19 and disallowed
Asset-4	45.67	45.67	-	0.37	45.30	-
Asset-5	8.43	-	-	-	8.43	-

Incidental Expenditure During Construction (IEDC)

34. The Petitioner has claimed IEDC of the instant assets as per Audited Cost Certificate. The Petitioner has submitted that the entire IEDC claimed has been discharged as on COD. The claimed IEDC as on COD is within the percentage on hard cost as indicated in the abstract cost estimate. Accordingly the claimed IEDC is being considered for determination of tariff in respect of instant assets as per following details and the same shall be subject to revision at the time of truing up:-

(₹ in lakh)

Asset	IEDC as per Auditor certificate	IEDC allowed for tariff calculation
Asset-2(a & b)	724.85	724.85
Asset-2(c)	87.37	87.37
Asset-3	68.11	68.11
Asset-4	47.51	47.51
Asset-5	71.51	71.51

Initial Spares

35. This has been dealt in line with Regulation 13 of the 2014 Tariff Regulations. The Petitioner has claimed initial spares for instant assets. We have considered the submissions of the Petitioner. The initial spares claimed by the Petitioner for Asset-2 (a & b), Asset-2(c), Asset-3 are within ceiling limit of 5% as per Regulation 13 of the CERC Regulations 2014 and the same has been allowed. The initial spares claimed by the Petitioner for Asset-4 is restricted to 6%. The Petitioner has not claimed initial



spares for Assets-5. Accordingly, Initial Spares allowed for the instant assets is as under:-

(₹ in Lakhs)

Asset	Substation (Brown Field)				Initial spares beyond the ceiling limit and disallowed
	Plant & Machinery Cost (Excluding IDC/IEDC, Land cost & Cost of Civil Works) for the purpose of Initial Spares	Initial Spares Claimed	Initial spares as % of Capital Cost	Initial spares allowed	
Asset-2(a & b)	17189.41	580.55	3.38%	580.55	-
Asset-2(c)	2512.39	50.82	2.02%	50.82	-
Asset-3	2055.36	94.24	4.58%	94.24	-
Asset-4	1465.21	111.34	7.59%	86.42	24.92
Asset-5	Not claimed by the Petitioner				

Capital cost as on COD

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

(₹ in lakh)

Asset	Capital Cost claimed as on COD (A)	IDC Disallowed due to time overrun not condoned (B)	Undischarged IDC liability (C)	Initial Spares Disallowed (D)	Capital Cost as on COD considered for tariff calculation (E)=A-B-C-D
Asset-2(a & b)	16121.00	322.89	0.00	0.00	15798.11
Asset-2(c)	2654.71	56.88	11.94	0.00	2585.89
Asset-3	1192.07	0.00	22.84	0.00	1169.23
Asset-4	1085.76	0.00	45.3	24.92	1015.54
Asset-5	273.10	0.00	8.43	0.00	264.67

Additional Capital Expenditure (ACE)

37. As per Clause (13) of Regulation 3 of the 2014 Tariff Regulations, the cut-off date in respect of Asset 2 (a & b) is 31.3.2022, Asset 2(b), 3 and 4 is 31.3.2020 and 31.3.2021 for Asset 5. The claim of additional capital expenditure has been dealt in



accordance with Regulation 14. The Petitioner has claimed the following ACE on estimation basis in respect of the instant assets and submitted the Auditor's Certificates in support of the same:-

(₹ in lakh)

Asset	Estimated Expenditure			Total estimated Additional capital expenditure as on 31.3.2019
	2018-19	2019-20	2020-21	
Asset-2(a & b)	1177.61	2042.51	77.53	1177.61
Asset-2(c)	23.75	203.21	-	23.75
Asset-3	351.32	451.70	200.75	351.32
Asset-4	292.61	131.43	48.59	292.61
Asset-5	162.93	44.52	-	162.93

38. Since, FY 2019-20 falls beyond tariff period 2014-19 and is not covered under the 2014 Tariff Regulations, the projected ACE claimed by the Petitioner for FY 2019-20 onwards has been ignored for the purpose of tariff and will be dealt during the next tariff period as per extant Tariff Regulations.

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

(₹ in lakh)

Allowed Add-cap	Asset-2 (a & b)	Asset-2 (c)	Asset-3	Asset-4	Asset-5
	2018-19	2018-19	2018-19	2018-19	2018-19
ACE to the extent of Balance and Retention Payments	1177.61	23.75	351.32	292.61	162.93
IDC Discharged	0.00	11.94	18.33	45.30	8.43
Total allowed add-cap	1177.61	35.69	369.65	337.91	171.36



Capital cost for the tariff period 2014-19

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

(₹ in lakh)			
Asset	Capital Cost Allowed as on COD	ACE allowed for 2018-19	Total Estimated Completion Cost as on 31.3.2019
Asset-2(a & b)	15798.11	1177.61	16975.72
Asset-2(c)	2585.89	35.69	2621.58
Asset-3	1169.23	369.65	1538.88
Asset-4	1015.54	337.91	1353.45
Asset-5	264.67	171.36	436.03

Debt-Equity Ratio

41. Debt:Equity Ratio is considered as per Regulation 19 of the 2014 tariff Regulations. The financial package up to COD as submitted in form 6 has been considered to determine the debt equity Ratio. The capital cost allowed as on the date of commercial operation arrived at as above and additional capitalization allowed have been considered in the debt-equity ratio of 70:30. The debt-equity as on dates of commercial operation and 31.3.2019 considered on normative basis are as under:-

(₹ in lakh)				
Asset 2 (a & b)				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	11058.68	70.00	11883.01	70.00
Equity	4739.43	30.00	5092.71	30.00
Total	15798.11	100.00	16975.72	100.00



Asset 2(c)				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	1,810.12	70.00	1835.11	70.00
Equity	775.77	30.00	786.47	30.00
Total	2585.89	100.00	2621.58	100.00

Asset 3				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	818.46	70.00	1077.22	70.00
Equity	350.77	30.00	461.66	30.00
Total	1169.23	100.00	1538.88	100.00

Asset 4				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	710.88	70.00	947.42	70.00
Equity	304.66	30.00	406.03	30.00
Total	1015.54	100.00	1353.45	100.00

Asset 5				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	185.27	70.00	305.22	70.00
Equity	79.40	30.00	130.81	30.00
Total	264.67	100.00	436.03	100.00

Return on Equity

42. 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.

43. 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 RoE. 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.

44. Accordingly, the RoE allowed is as under:-

(₹ in lakh)

Particulars	Asset 2 (a & b)	Asset 2 (c)	Asset 3	Asset 4	Asset 5	
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2017-18 (Pro-rata)	2018-19
Opening Equity	4739.43	775.77	350.77	304.66	79.40	79.40
Addition due to Additional capitalisation	353.28	10.71	110.90	101.37	0.00	51.41
Closing Equity	5092.71	786.47	461.66	406.03	79.40	130.81
Average Equity	4916.07	781.12	406.22	355.35	79.40	105.11
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the Financial year	20.960%	20.960%	20.960%	20.960%	20.960%	20.960%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre-tax)	163.75	42.81	52.60	48.30	2.22	20.61

Interest on loan (IOL)

45. The IoL has been calculated as per the provisions of Regulation 26 of the Tariff Regulations, 2014 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.

46. 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.

47. The details of IOL calculated is as under:-

(₹ in lakh)

Particulars	Asset 2 (a & b)	Asset 2 (c)	Asset 3	Asset 4	Asset 5	
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2017-18 (Pro-rata)	2018-19
Gross Normative Loan	11058.68	1810.12	818.46	710.88	185.27	185.27
Cumulative Repayment up to previous Year	0.00	0.00	0.00	0.00	0.00	1.99
Net Loan-Opening	11058.68	1810.12	818.46	710.88	185.27	183.28
Addition due to Additional Capitalization	824.33	24.98	258.76	236.54	0.00	119.95
Repayment during the year	145.62	38.42	47.21	43.35	1.99	18.50
Net Loan-Closing	11737.39	1796.69	1030.01	904.07	183.28	284.73
Average Loan	11398.04	1803.41	924.24	807.47	184.27	234.00
Weighted Average Rate of Interest on Loan	8.1406%	7.6874%	7.3634%	7.2943%	7.2772%	7.3607%



Particulars	Asset 2 (a & b)	Asset 2 (c)	Asset 3	Asset 4	Asset 5	
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2017-18 (Pro-rata)	2018-19
Interest on Loan	157.61	38.74	44.94	40.83	1.91	17.22

Depreciation

48. Depreciation has been dealt with in line of Regulation 27 of 2014 Tariff Regulations. The instant transmission Asset was put under commercial operation during 2017-18 2018-19. Accordingly, it will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations. Details of the depreciation allowed are as under:-

(₹ in lakh)

Particulars	Asset 2 (a & b)	Asset 2 (c)	Asset 3	Asset 4	Asset 5	
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2017-18 (Pro-rata)	2018-19
Opening Gross Block	15798.11	2585.89	1169.23	1015.54	264.67	264.67
Additional Capital expenditure	1177.61	35.69	369.65	337.91	0.00	171.36
Closing Gross Block	16975.72	2621.58	1538.88	1353.45	264.67	436.03
Average Gross Block	16386.92	2603.74	1354.06	1184.50	264.67	350.35
Rate of Depreciation	5.2314%	5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	14748.22	2343.36	1218.65	1066.05	238.20	315.32
Remaining Depreciable Value	14748.22	2343.36	1218.65	1066.05	238.20	313.32
Depreciation	145.62	38.42	47.21	43.35	1.99	18.50

Operation and Maintenance Expenses (O&M Expenses):-

49. The Petitioner has claimed the following O&M expenses:-



(₹ in lakh)

Asset No.	2018-19
2(a & b)	83.84
2(c)	16.58
3	45.44
4	47.65

50. 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.

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

(₹ in lakh)

Element	2018-19
400 kV GIS Bay	58.73
400 kV bay	68.71
132 kV bay	34.36

52. 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 2018-19 is given below:-

(₹ in lakh)

Details	2018-19 (pro-rata)
Asset 2 (a & b)	
7 Nos 400 kV GIS Bay	69.83



Details	2018-19 (pro-rata)
2 Nos 132 kV bay	11.61
Total	81.44
Asset 2(c)	
1 No 400 kV GIS Bay	16.41
Total	16.41
Asset 3	
1 No 400 kV Bay	45.36
Total	45.36
Asset 4	
1 No 400 kV Bay	47.62
Total	47.62

Interest on Working Capital (IWC)

53. 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 % of Operation and Maintenance expenses specified in Regulation 28.

b) O & M expenses:

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

c) Receivables:

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

d) Rate of interest on working capital:

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



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

(₹ in lakh)

Particulars	Asset 2 (a & b)	Asset 2 (c)	Asset 3	Asset 4	Asset 5	
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2017-18 (Pro-rata)	2018-19
O & M Expenses	39.95	4.89	5.72	5.73	0.00	0.00
Maintenance Spares	71.92	8.81	10.30	10.31	0.00	0.00
Receivables	551.59	83.31	49.31	44.54	7.31	9.59
Total	663.46	97.01	65.34	60.57	7.31	9.59
Rate of Interest	12.20%	12.20%	12.20%	12.20%	12.60%	12.60%
Interest (pro-rata)	13.75	3.31	5.26	5.12	0.13	1.21

Annual Transmission Charges

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

(₹ in lakh)

Particulars	Asset 2 (a & b)	Asset 2 (c)	Asset 3	Asset 4	Asset 5	
	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2018-19 (Pro-rata)	2017-18 (Pro-rata)	2018-19
Depreciation	145.62	38.42	47.21	43.35	1.99	18.50
Interest on Loan	157.61	38.74	44.94	40.83	1.91	17.22
Return on Equity	163.75	42.81	52.60	48.30	2.22	20.61
Interest on working capital	13.75	3.31	5.26	5.12	0.13	1.21
O & M Expenses	81.44	16.41	45.36	47.62	0.00	0.00
Total	562.17	139.68	195.36	185.22	6.25	57.54

Filing Fee and Publication Expenses

56. 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 is 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

57. The Petitioner has requested to allow the Petitioner to bill and recover License fee and RLDC fees and charges, separately 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.

Goods and Services Tax

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

Sharing of Transmission Charges

59. 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.

60. This order disposes of Petition No. 237/TT/2018.

Sd/-
(I. S. Jha)
Member

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

Sd/-
(P. K. Pujari)
Chairperson

