

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 159/TT/2018

Coram:

**Shri P. K. Pujari, Chairperson
Dr. M. K. Iyer, Member**

Date of Hearing : 23.10.2018

Date of Order : 19.12.2018

In the matter of:

Approval of transmission tariff from COD to 31.3.2019 for 125 MVAR Bus Reactor at 400/220 kV Manesar Sub-station Extension under "Bus Reactor Scheme in Northern Region, Phase-II" under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

And in the matter of:

Power Grid Corporation of India Limited
"Saudamini", Plot No.2,
Sector-29, Gurgaon -122 001

.....Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited
Vidyut Bhawan, Vidyut Marg, Jaipur - 302 005
2. Ajmer Vidyut Vitran Nigam Limited
132 KV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017
3. Jaipur Vidyut Vitran Nigam Limited
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017
4. Jodhpur Vidyut Vitran Nigam Limited
132 kV, GSS RVPNL Sub-station Building,
Caligiri Road, Malviya Nagar, Jaipur-302017
5. Himachal Pradesh State Electricity Board
Vidyut Bhawan, Kumar House Complex Building II
Shimla-171004
6. Punjab State Electricity Board
The Mall, Patiala-147001



7. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6
Panchkula (Haryana) 134109
8. Power Development Department
Government of Jammu & Kashmir
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg
Lucknow – 226001
10. Delhi Transco Ltd.
Shakti Sadan, Kotla Road,
New Delhi-110002
11. BSES Yamuna Power Ltd.
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Ltd.
BSES Bhawan, Nehru Place,
New Delhi
13. North Delhi Power Ltd.
Power Trading and Load Dispatch Group
Cennet Building, Adjacent to 66/11 kV Pitampura-3
Grid Building, Near PP Jewellers
Pitampura, New Delhi-110 034.
14. Chandigarh Administration
Sector -9, Chandigarh.
15. Uttarakhand Power Corporation Ltd.
Urja Bhawan, Kanwali Road,
Dehradun.
16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council
Palika Kendra, Sansad Marg,
New Delhi-110002.

--- Respondents

The following were present:

For Petitioner:

Shri S. K. Venkatesan, PGCIL

Shri S. S. Raju, PGCIL

Shri V. P. Rastogi, PGCIL

Shri S. K. Niranjana, PGCIL



For Respondents:

Shri R. B. Sharma, Advocate, BRPL

Shri Mohit Mudgal, Advocate, BRPL

ORDER

The present petition has been filed by the petitioner, Power Grid Corporation of India Ltd. ("PGCIL") seeking approval of transmission tariff for 125 MVAR Bus Reactor at 400/220 kV Manesar Substation Extension under "**Bus Reactor Scheme in Northern Region, Phase-II**" (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 prayed for the following :

- 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 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 CERC (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the PoC charges.*
- iv) Condone the delay in completion of subject assets on merit of the same being out of the control of Petitioner in line with CERC Regulations'2014 12(2)(i) "uncontrollable factors".*
- v) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges on account of Return on Equity due to change in applicable Minimum Alternate/ Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff Regulations, 2014.*
- vi) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, expenditure on publishing of notices in newspapers in terms of Regulation 52 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and other expenditure (if any) in relation to the filing of petition.*



- vii) *Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation: 52 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.*
- viii) *Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents.*
- ix) *Allow the Petitioner to approach Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 01.01.2017 onwards.*
- x) *Allow the initial spare as procured in the current petition in full as given in para-6.1 under Regulation 54 of the CERC (Terms and Condition of Tariff) Regulation, 2014, "Power to Relax".*
- xi) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further, any taxes and duties including cess, etc. imposed by any statutory/ Govt./ municipal authorities shall be allowed to be recovered from the beneficiaries.*

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

3. The above mentioned transmission system in Northern Region was discussed in 29th meeting of NRPC held on 13th September 2013 and 33rd Standing Committee meeting on Transmission System planning of Northern Region held on 23rd December 2013.

4. The investment approval of the project was accorded by Board of Directors of POWERGRID vide the Memorandum No. C/CP/BR IN NR (Phase-II), dated 02nd February, 2015 with an estimated cost of Rs. 87.27 Crores including Interest During Construction of Rs 5.11 Crores based on October, 2014 price level. Further, The Revised cost estimate of the project was accorded by Board of Directors of POWERGRID vide the Memorandum No. C/CP/RCE/BR IN NR (Phase-II), dated 29th August, 2017 with an estimated cost of Rs. 103.04 Crores (including Interest During Construction of Rs 1.64 Crore) based on April, 2017



price level. However, apportioned approved cost as per FR, for the instant asset, as submitted by the petitioner, is Rs. 1876.95 lakhs and as per Revised Cost Estimate, it is Rs. 2097.13 lakhs.

5. The scope of work covered under “**Bus Reactor Scheme in Northern Region, Phase-II**” scheme is as follows:

Substation Works:

- (i) Panchkula 400/220 kV (POWERGRID) Substation (Extension)
400 kV
Bus Reactor bays : 1 no.
400 kV Bus Reactors: 1 nos. of 125 MVAR Bus Reactor
- (ii) Sonapat 400/220 kV (POWERGRID) Substation (Extension)
400 kV
Bus Reactor bays : 1 no.
400 kV Bus Reactors: 1 nos. of 125 MVAR Bus Reactor
- (iii) **Manesar 400/220 kV (POWERGRID) Substation (Extension)**
400 kV
Bus Reactor bays : 1 no.
400 kV Bus Reactors: 1 nos. of 125 MVAR Bus Reactor
- (iv) Kaithal 400/220 kV (POWERGRID) Substation (Extension)
400 kV
Bus Reactor bays : 1 no.
400 kV Bus Reactors: 1 nos. of 125 MVAR Bus Reactor
- (v) Kanpur 400/220 kV (POWERGRID) Substation (Extension)
400 kV
Bus Reactor bays : 1 no.
400 kV Bus Reactors: 1 nos. of 125 MVAR Bus Reactor
- (vi) Jaipur South 400/220 kV (POWERGRID) Substation (Extension)
400 kV
Bus Reactor bays : 1 no.
400 kV Bus Reactors: 1 nos. of 125 MVAR Bus Reactor
- (vii) Bassi 400/220 kV (POWERGRID) Substation (Extension)
400 kV
Bus Reactor bays : 1 no.
400 kV Bus Reactors: 1 nos. of 125 MVAR Bus Reactor



Assets under Sr. No. (i), (ii) and (iv) to (vii) were covered under petition no. 57/TT/2017 and Asset under Sr. No. (iii) is covered under instant petition.

6. As per the investment approval, the scheduled completion date was 30 months from the date of investment approval. The date of Investment Approval is 02nd February, 2015. Hence, the commissioning schedule comes to 01st August, 2017 against which the subject asset is put under commercial operation on 02.10.2017. Hence, there is time over-run of 62 days.

7. The Annual Fixed Cost was granted for the instant transmission asset vide order dated 21.08.2018 under the first proviso to Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC charges.

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

Particulars	₹ in lakh)	
	2017-18 (pro-rata)	2018-19
Depreciation	48.55	109.17
Interest on Loan	48.64	103.45
Return on Equity	54.09	121.64
Interest on Working Capital	4.78	10.36
O&M Expenses	28.27	58.73
Total	184.33	403.35

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

Particulars	₹ in lakh)	
	2017-18 (pro-rata)	2018-19
Maintenance Spares	8.53	8.81
O&M expenses	4.74	4.89
Receivables	61.78	67.22
Total	75.04	80.93
Interest	4.78	10.36
Rate of Interest	12.80%	12.80%



10. This order has been issued after considering the petitioner's (PGCIL) main petition dated 16.03.2018, PGCIL's additional information dated 14.05.2018, Respondent no. 9, UPPCL's reply dated 29.05.2018, Respondent no. 12, BRPL's reply dated 18.07.2018, PGCIL's rejoinder to UPPCL 26.07.2018, PGCIL's rejoinder to BRPL 26.07.2018, PGCIL's additional information dated 08.08.2018, PGCIL's RoP reply dated 03.09.2018, PGCIL's additional information dated 11.10.2018 and PGCIL's RoP reply dated 14.11.2018.

Date of Commercial Operation ("COD")

11. The petitioner vide original petition dated 16.3.2018 has submitted that the date of the commercial operation of the transmission asset is 2.10.2017. The petitioner has submitted the CEA certificate dated 25.9.2017 under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010, RLDC certificate dated 9.10.2017 issued by NRLDC in support of the claim of commercial operation in accordance with Regulation 6.3A (5) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 which indicates the completion of successful trial operation, self declaration COD letter dated 2.11.2017 and CMD certificate as required under Grid Code.

12. Accordingly, taking into consideration CEA certificate, RLDC certificate and CMD certificate for the instant asset, the COD of the asset under consideration is approved as 2.10.2017 and has been considered for the purpose of tariff computation from COD till 31.3.2019.

Time over-run

13. As per Investment Approval, the commissioning schedule of the project is 30



months from the date of approval of Board of Directors i.e. 02.02.2015. The schedule date of commercial operation was 01.08.2017 against which instant assets were put under commercial operation on 02.10.2017. Hence, there is time over-run of 62 days in commissioning of the asset.

14. The petitioner has made submissions that the delay in commissioning of the subject asset i.e. 125 MVAR Bus Reactor at 400/220 kV Manesar Sub-station is due to transit accident of one 400kV GIS consignment on 19.11.2016 which was an offshore consignment from ABB Switzerland during execution of the project and its replacement was received on 7.3.2017 i.e. it took around 3 months 17 days to replace the GIS and inspite of the above transit delay of 3 months 17 days, the delay was compressed to 2 months with extra efforts. Accordingly, petitioner has prayed to condone the delay in line with the 2014 Tariff Regulations under regulation 12(2)(i) “uncontrollable factors”.

15. BRPL in affidavit dated 18.7.2018 has submitted that the reason for entire time overrun submitted by petitioner is due to transit accident of one 400kV GIS consignment which is on account of the contractor in the transport clearly falling under the controllable factors as mentioned in Regulation 12 of the Tariff Regulations, 2014 and accordingly, the IDC and IEDC during the time overrun may not be allowed.

16. Commission vide RoP dated 23.10.2018, directed petitioner to submit the time envisaged for different activities and the actual time consumed by the petitioner and further directed to submit the reasons for time overrun alongwith documentary evidence. In response, petitioner made its reply dated 14.11.2018 and submitted the details as under:

S.No.	Activity	Schedule		Actual		Remarks, if any
		From	To	From	To	
1	Investment approval	2.2.2015		2.2.2015		NIL
2	Scheduled COD	1.8.2017		2.10.2017		Completion Schedule of 30 months. Actual COD: 2.10.2017, There is a delay of 2 months due to transit accident.
3	Supply & Received at site	22.4.16	1.6.17	15.12.15	6.9.17	Supply and erection of Bus reactor items started approximately within schedule. There is a delay of approx. 2 months in commissioning of present asset and is due to transit accident of one of the GIS consignment on 19.11.2016. As it was an offshore consignment from ABB Switzerland, the replacement of the same took around 3 months 17 days and was received on 7.3.2017. In spite of the above transit delay of 3 months 17 days, the delay was compressed to 02 months with extra efforts.
4	Time taken in erection	17.6.16	4.7.17	20.6.16	14.9.17	

Analysis and decision:

17. We have considered the submissions of the petitioner and BRPL regarding time overrun in case of instant asset. The time over-run of 62 days in case of instant asset is due to transit accident of one 400kV GIS consignment on 19.11.2016 and its replacement was received on 7.3.2017 i.e. it took around 3 months 17 days. We have gone through the documents in the form of letters from ABB to PGCIL dated 22.11.2016 and 30.11.2016 indicating accident during transit.

Regulation 12 of CERC Regulations, 2014 read as under:



- (1) The “controllable factors” shall include but shall not be limited to the following:
- (a) Variations in capital expenditure on account of time and/or cost over-runs on account of land acquisition issues;
 - (b) Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies 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.

18. Accordingly, the delay for subject assets is in line with the 2014 Tariff Regulations, clause 12(1) i.e. “controllable factors” and accordingly, petitioner prayer for condonation of delay is not acceptable and hence delay of 2 months (62 days) is not condoned. Further, as per judgment of APTEL in Appeal no. 72 of 2010 dated 27.4.2011,

“7.4. The delay in execution of a generating project could occur due to following reasons:

- i) due to factors entirely attributable to the generating company, e.g., imprudence in selecting the contractors/suppliers and in executing contractual agreements including terms and conditions of the contracts, delay in award of contracts, delay in providing inputs like making land available to the contractors, delay in payments to contractors/suppliers as per the terms of contract, mismanagement of finances, slackness in project management like improper co-ordination between the various contractors, etc.
- ii) due to factors beyond the control of the generating company e.g. delay caused due to force majeure like natural calamity or any other reasons which clearly establish, beyond any doubt, that there has been no imprudence on the part of the generating company in executing the project.
- iii) Situation not covered by (i) & (ii) above.”

19. In our opinion, the subject assets falls under first category and accordingly, the entire cost due to time over run has to be borne by the transmission licensee company. However, the Liquidated Damages (LDs) and insurance proceeds on account of transit accident, if any, received by the transmission licensee company can be retained by the transmission licensee.

Capital Cost

20. This has been dealt with in line of Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations

21. The details of approved apportioned cost, capital cost as on the date of commercial operation and estimated additional capital expenditure incurred or



projected to be incurred during 2017-18 along with estimated completion cost, as per Auditor Certificate dated 06.02.2018, for the instant asset covered in the petition and considered for the purpose of computation of tariff are as under:-

(₹ in lakh)

Apportioned cost as per FR	Apportioned cost as per RCE	Expenditure Upto DOCO	Est. Exp. 2017-18	Estimated Completion Cost
1876.95	2097.13	1686.26	390.17	2076.43

Cost Over-Run/Variation

22. The petitioner has submitted that for procurement, open competitive bidding route is followed and by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions.

23. BRPL vide affidavit dated 18.7.2018 has submitted that there is cost over-run and cost variation, though the instant assets are of similar configuration of 125 MVAR bus reactor. Further, the estimated costs have noticeable variations and the petitioner has not provided any proper reason/justification for the same. In response, petitioner filed its rejoinder dated 26.7.2018 and submitted that the present asset i.e “125 MVAR Bus Reactor at 400/220 kV Manesar Substation Extension” is a GIS asset and is connected with GIS duct on 400kV side while other assets of the present project covered under Petition No.-57/TT/2017 have conventional type air termination. Further the contract of present asset is different than other assets of the present project covered under Petition No.-57/TT/2017. Hence, there is no comparison between the present asset and other assets covered under the present project and therefore the cost between these assets



are not comparable. Further as indicated by the respondent, the cost overrun is not attributable to the accident and is mainly on account of bid prices received through open competitive bidding.

24. Commission vide RoP dated 30.10.2018 directed petitioner to submit the details of the insurance amount recovered and the cost recovered from the contract for the damages of the reactor during the transit. In response, petitioner made its reply dated 14.11.2018 and submitted that insurance claim is still under discussion between the contractor and the insurance company. As it is a bilateral issue between the contractor and insurance company and not settled till date. Further, as per provision of contract any additional loss due to accident will be completely born by the contractor and there is no additional cost implication in capital cost of the asset due to damages.

Analysis/Decision for cost variation:

25. We have considered the submissions made by petitioner and BRPL. As compared with revised apportioned approved cost of Rs. 2097.13 lakh, the total estimated completion cost including additional capital expenditure of the instant asset is Rs. 2076.43 lakh. Thus, there is a cost under run of about 20.70 lakh (0.98%) as compared with revised apportioned approved cost of Rs. 2097.13 lakh. The total estimated completion costs of the assets are within the revised apportioned approved cost of the assets. We are of the view that the reduction in cost is mainly because of prevailing market condition which were beyond the control of the petitioner and accordingly, the reduced cost is considered for the grant of tariff.



Interest During Construction (IDC)

26. The petitioner has claimed IDC of ₹ 80.79 lakh for the instant asset and has submitted the Auditor's certificate dated 06.02.2018 in support of the same. The petitioner has submitted IDC computation statement which consist of the name of the loan, Drawl date, loan amount, interest rate and Interest claimed. Further, the Loan amount as on COD has been mentioned in Form 6 and Form 9C. While going through these documents certain discrepancies have been observed such as mismatch in loan amount between IDC statement and in forms, floating rate of interest details of SBI etc. The allowable IDC has been worked out based on the available information. However the petitioner is directed to submit the detailed IDC statement by rectifying the above mentioned deviations, at the time of true up of 2014-19.

27. The allowed IDC which is subject to true up are shown below

IDC claimed as per Auditor certificate dated 06.02.2018	IDC disallowed due to time over run and Computational difference	IDC worked out as allowed on accrual basis	IDC Allowed on cash basis as on COD	Un-discharged IDC liability as on COD	Discharge of IDC liability allowed as Add. Cap.	
					2017-18	2018-19
					1	2=(3-1)
80.79	15.71	65.08	32.12	32.96	29.52	3.44

Incidental Expenditure During Construction (IEDC)

28. The petitioner has claimed ₹ 49.60 lakhs. The petitioner has claimed IEDC as on COD, which is within the percentage on hard cost as indicated in the abstract cost estimate. In the instant petition, 10.75% of hard cost is indicated as



IEDC in the abstract cost estimate. However, IEDC of Rs. 3.16 is disallowed due to time over run. Hence, IEDC of Rs. 46.44 has been allowed as per Tariff Regulations, 2014.

Initial spares

29. The initial spares claimed by the petitioner in affidavit dated 16.3.2018 vide auditor's certificate dated 6.2.2018 based on actual COD 2.10.2017 is as under:

(Rs. in lakh)	
Particulars	Sub-station
Total cost(P&M cost excluding IDC, IEDC, Land cost and cost of civil works for the purpose of initial spares)	1946.04
Initial spares included	181.16 (9.30%)

30. The reasons for claiming high initial spares made by petitioner are as under:

- a) Asset I is GIS and is being established under extension of the existing substation i.e. these assets are getting commissioned under Brown Field category. In Regulation 2014, initial spare norms for non-GIS AC substations has been differentiated and set higher norms for Brown Field Substation than the Green Filed Substation. But there is no provision of such Brown Field norms for GIS substations. In absence of any norm it is requested to consider the initial spares as procured for the purpose tariff.
- b) Further to clarify that in Green Field substations (i.e. new substation) normally a large number of equipment's are commissioned under single project and the spares are taken against these large numbers of equipment's. But in this case only few GIS elements at Manesar is commissioned instead of such large number bays and S/S equipment's as in case of Green Field project. This means population of equipment's & total capital cost for green field project is much higher than the project cost of an extension project. Even though similar type of spares have been procured for this system as is normally done for green field project, the percentage of cost of initial spares w.r.t. the capital cost for this

system is higher because of the lower capital population of equipment's in present project for the substation compared to green field substations.

- c) GIS installations are highly specialized and costly imported equipment's. Gas Insulated Substation (GIS) is a compact, multi-component assembly enclosed in a metallic housing with compressed sulphur hexafluoride (SF6) gas as the primary insulating medium. The bay equipment's are enclosed in these enclosures. The different parts of the GIS systems are modular and designed with respect to the location of the installation and the assembly of this modular section is done in manufacturer works only. Unlike convention AC system where bay equipment's are connected with conductor which is very flexible to connect but in case of GIS system the bay equipment's are through modular section housing all bay equipment's and which is assembled in the factory only. These modular sections are manufactured for fitting the same at a specific location so one single modular section as spare will not serve any purpose as the same may not be fitted in case of replacement is required. Hence interchangeability of the modular sections is limited resulting into higher initial spares for this system with respect to conventional AC system. One to one replacement of any component of this system is not possible from domestic source as these are imported equipment's. Further, generally the equipment's are different from one supplier to other supplier. In case of any replacement is needed, the element / equipment has to be replaced by similar design of same manufacturer only. In case sufficient spares are not kept, any failure of equipment shall lead to longer outage as procurement of spare from offshore will require long duration which sometime may stretch to one and half years.
- d) Further, in GIS substation there is special type of Bushings (i.e. SF6 to Air connection type) and similarly for reactors also there is special type of Bushings (i.e. SF6 to Oil connection type, oil to oil connection type RIP bushing). These bushings are not manufactured in India and worldwide only a few manufactures are supplying these bushings with lead time of procurement of around one year. To have a reliable system one set of each type and rating bushing are kept as spares. These bushings are very costly in comparison to the conventional bushings of same ratings.
- e) Operating a GIS substation without adequate spares shall render the system un-reliable and may call for long outages.

In view of the above, petitioner has prayed to allow the initial spares for subject assets under Regulation 54 of the CERC (Terms and Condition of Tariff) Regulation, 2014 i.e. Power to Relax.

31. UPPCL in affidavit dated 29.5.2018 has submitted that the facts observed are not new but they are general in nature which were known to PGCIL at the outset since it has sufficient experience in case of GIS sub-stations and has submitted that initial spares may be allowed only to the extent of 5% of the capital cost as in case of GIS as per CERC (Terms and Conditions of Tariff) Regulations, 2014.

32. BRPL vide affidavit dated 18.7.2018 has submitted that invoking “power to relax” is a judicial discretion which cannot be exercised purely for profit motive and the same is liable to be rejected.

33. In response, to above UPPCL & BRPL reply, petitioner filed its rejoinder dated 26.7.2018 and submitted its reply and reiterated submissions as in para-30 above.

Analysis/Decision:

34. We have considered the submissions made by petitioner, UPPCL&BRPL. The petitioner has claimed initial spares amounting to Rs. 181.16 lakh (9.30%) upto cut-off date i.e. 31.3.2020 corresponding to sub-station cost of Rs. 1946.04 lakh. Petitioner vide affidavit dated 3.9.2018 has submitted year-wise initial spares discharge during various years. The initial spare has been worked out in line with Regulation 13 of the tariff regulation 2014. The allowable and excess initial spares for the asset covered in the instant petition are given below:-

(Rs. in lakh)



Element	Total cost (P&M cost excluding IDC,IEDC, Land cost and cost of civil works for the purpose of initial spares)	Initial spares claimed	Ceiling Limit as per 2014 Tariff Regulations	Initial Spares worked out as per CERC norms	Excess Initial Spares	Initial spares allowed
Substation	1946.04	181.16	5.00%	92.89	-88.27	92.89

Capital Cost allowed as on COD

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

(₹ in lakh)

Assets	Capital Cost claimed as on COD	IDC disallowed and Un-discharged IDC liability as on COD	IEDC Disallowed as on COD	Excess Initial Spares disallowed as on COD	Capital Cost as on COD considered for tariff calculation
	(A)	(B)	(C)	(D)	(E)=(A)-(B+C+D)
Asset-I	1686.26	48.67	3.16	54.30	1580.13

Additional Capital Expenditure (ACE)

36. The cut-off date for the instant assets is 31.3.2020 as per clause (13) of Regulation 3 of CERC Tariff Regulations 2014.

37. As per Auditor certificate dated 06.02.2018, the petitioner has claimed the following Additional Capital Expenditure:

(₹ in lakh)

Assets	2017-18
Asset-I	390.17

38. The petitioner has also claimed the discharge of IDC liability for 2017-18 and 2018-19 in respect of the asset as Additional Capital Expenditure. Form 4A,



as submitted with the petition shows closing liability of 2017-18 as 17.25 lakhs. However, Form 7 submitted vide affidavit dated 11.10.2018 shows Balance and Retention payment for the year 2018-19 of Rs. 17.65 lakhs. IDC calculation statement, submitted vide petition, also shows accrual IDC upto COD (discharged during 2018-19) as RS. 17.65 Lakhs. The Auditor certificate is also silent on the amount of liability as on COD. Therefore, the closing liability of 2017-18 has been provisionally treated as 17.65 lakhs and the petitioner is directed to submit the revised form 4A and Form 7 with duly reconciled balances and payments at the time of true up of 2014-19 petition.

39. Accordingly the allowable Additional Capital Expenditure has been summarized as under:-

(₹ in lakh)

Additional Capital expenditure Allowed for Asset				
Allowed Add-cap	Regulation	2017-18 (admitted COD to 31.03.2018)	2018-19	Total
1. Discharge of Liability other than IDC	14(1)(i)	34.11	0.00	34.11
2. Add cap to the extent of unexecuted work	14(1)(ii)	356.06	0.00	356.06
3. Discharge of un discharged liabilities-IDC.	14(1)(i)	29.52	3.44	32.96
4. Total allowed add-cap		419.69	3.44	423.13
5. Less: Excess Initial spare		33.97	0.00	33.97
6. Net allowed add cap		385.72	3.44	389.16

40. The capital cost considered for the purpose of computation of tariff is as follows:-

(₹ in lakh)

Asset	Expenditure up to COD	2017-18	2017-18	Total Estimated Completion Cost up to 31.3.2019
Asset-I	1580.13	385.72	3.44	1969.29

Debt-Equity Ratio

41. This has been dealt with in line of Clause 1 and 5 of Regulation 19 of the 2014 Tariff Regulations.

42. The petitioner has claimed debt:equity ratio of 70:30 as on the date of commercial operation. Debt:equity ratio of 70:30 is considered as provided in Regulation 19 of the 2014 Tariff Regulations. The details of debt:equity ratio in respect of the instant assets as on the date of commercial operation and as on 31.3.2019 are as under:-

(₹ in lakh)

Particular	Asset			
	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	1106.09	70.00	1378.51	70.00
Equity	474.04	30.00	590.79	30.00
Total	1580.13	100.00	1969.29	100.00

Return on Equity

43. This has been dealt with in line of Clause (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations.

44. The petitioner has submitted that it is liable to pay income tax at MAT rate, the RoE has been calculated @ 19.610% after grossing up the RoE with MAT rate of 20.961% as provided under Regulation 25(2)(i) of the 2014 Tariff Regulations. As per Regulation 25(3) of the 2014 Tariff Regulations, the grossed up rate of RoE at the end of the financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2014-19 period on actual gross income of any financial year.



45. We have considered the submissions made by the petitioner and respondent. 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. Accordingly, the RoE allowed is as follows:-

Particulars	Asset (₹ in lakh)	
	2017-18 (pro-rata)	2018-19
Opening Equity	474.04	589.76
Addition due to Additional Capitalization	115.72	1.03
Closing Equity	589.76	590.79
Average Equity	531.90	590.27
Return on Equity (Base Rate)	15.50%	15.50%
MAT rate for the Financial year 2013-14	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.611%	19.611%
Return on Equity (Pre-tax)	51.73	115.76

Interest on loan (IOL)

46. This has been dealt with in line of Regulation 26, 2014 Tariff Regulations.

47. IOL has been worked out as under:-

(i) Gross amount of loan, repayment of instalments and rate of interest on actual average loan have been considered as per the petition;



(ii) The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year; and

(iii) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

48. Based on above, details of IOL calculated are as follows:-

Particulars	Asset (₹ in lakh)	
	2017-18 (pro-rata)	2018-19
Gross Normative Loan	1106.09	1376.10
Cumulative Repayment upto previous Year	0.00	46.42
Net Loan-Opening	1106.09	1329.68
Addition due to Additional Capitalization	270.00	2.41
Repayment during the year	46.42	103.89
Net Loan-Closing	1329.68	1228.20
Average Loan	1217.88	1278.94
Weighted Average Rate of Interest on Loan	7.7018%	7.6961%
Interest on Loan	46.51	98.43

Depreciation

49. This has been dealt with in line of Regulation 27 of 2014 Tariff Regulations.

50. The instant transmission asset was put under commercial operation on 02.10.2017. 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.



51. Details of the depreciation allowed are as under:-

(₹ in lakh)

Particulars	Asset	
	2017-18 (pro-rata)	2018-19
Opening Gross Block	1580.13	1965.85
Additional Capital expenditure	385.72	3.44
Closing Gross Block	1965.85	1969.29
Average Gross Block	1772.99	1967.57
Rate of Depreciation	5.2800%	5.2800%
Depreciable Value	1595.69	1770.82
Remaining Depreciable Value	1595.69	1724.39
Depreciation	46.42	103.89

Operation and Maintenance Expenses (O&M Expenses)

52. This has been dealt with in line of Clause 29(4)(a) of 2014 Tariff Regulations.

53. The petitioner has claimed the O&M Expenses as below:-

(₹ in lakh)

Element	2017-18 (pro-rata)	2018-19
Asset	28.27	58.73

54. The petitioner has submitted that O&M Expenses for the tariff period 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O&M rates specified for the tariff block 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.

55. We have considered the submissions submitted by both petitioner and respondent. We are of the view that the O&M Expenses have been worked out as per the O&M Expenses norms specified in the 2014 Tariff Regulations. As regards the impact of wage revision, any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

56. O&M Expenses considered as per Regulation:-

(₹ in lakh)		
Element	2017-18 (pro-rata)	2018-19
Asset	28.18	58.73

Interest on Working Capital (IWC)

57. As per 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 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, SBI Base Rate (9.10%) as on 01.04.2017 Plus 350 Bps i.e. 12.60 % have been considered as the rate of interest on working capital.

58. The interest on working capital allowed for the instant assets is shown in the table given below:-

(₹ in lakh)

Particulars	Asset	
	2017-18 (pro-rata)	2018-19
Maintenance Spares	8.52	8.81
O & M expenses	4.74	4.89
Receivables	59.62	64.44
Total	72.88	78.15
Interest	4.55	9.85

Annual Transmission charges

59. In view of the above, the annual transmission charges being allowed for the instant assets are summarized hereunder:-

(₹ in lakh)

Particulars	Asset	
	2017-18 (pro-rata)	2018-19
Depreciation	46.42	103.89
Interest on Loan	46.51	98.43
Return on Equity	51.73	115.76
Interest on Working	4.55	9.85
O&M Expenses	28.18	58.73
Total	177.40	386.65

Filing fee and the publication expenses

60. 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.

Licence fee and RLDC Fees and Charges

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

Goods and Services Tax

62. The petitioner has made a prayer to be allowed to bill and recover the 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. The petitioner has further prayed that if any taxes and duties including cess etc. are imposed by any statutory/Government/municipal authorities, it shall be allowed to be recovered from the beneficiaries. Accordingly, the transmission charges is exclusive of GST and the same shall be borne and additionally paid by the respondents to the petitioner, if at any time GST on transmission is withdrawn from negative list in future. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

63. The transmission charges shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations and shall be shared by the beneficiaries and long term transmission customers in Central Electricity



Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time.

64. This order disposes of Petition No. 159/TT/2018.

-Sd-

(Dr. M. K. Iyer)
Member

-Sd-

(P. K. Pujari)
Chairperson

