

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.272/TT/2018

Coram :

Shri P.K. Pujari, Chairperson

Shri I.S. Jha, Member

Date of Order: 29.3.2020

In the matter of

Approval of transmission tariff for **Asset I** - STATCOM System (+/-) 300 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor), cooling system & STATCOM protection/ controller etc. at Ranchi Substation and **Asset II** - STATCOM System (+/-) 200 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor and 2x125 MVAR Capacitor), cooling system & STATCOM protection/ controller etc. at Kishanganj Substation under "Eastern Region Strengthening Scheme –XI (ERSS-XI)" in Eastern Region from COD to 31.3.2019 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

Versus

1. Grid Corporation of Orissa Ltd.
Shahid Nagar, Bhubaneswar - 751 007
2. Bihar State Power (Holding) Company Ltd
(Formerly, Bihar State Electricity Board)
Vidyut Bhavan, Bailey Road,
Patna – 800 001
3. West Bengal State Electricity Distribution Company Ltd.
Bidyut Bhawan, Bidhan Nagar
Block DJ, Sector-II, Salt Lake City
Calcutta - 700 091



4. Jharkhand State Electricity Board
In front of Main Secretariat
Doranda, Ranchi - 834002
5. Damodar Valley Corporation
DVC Tower, Maniktala
Civic Centre, VIP Road, Calcutta - 700 054
6. Power Department
Government of Sikkim,
Gangtok - 737 101

...Respondents

Parties present:

For Petitioner: Shri Amit Yadav, PGCIL
Shri Amit Jain, PGCIL

For Respondent: **None**

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("the Petitioner") seeking approval of transmission tariff for the Asset I - STATCOM System (+/-) 300 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor), cooling system & STATCOM protection/ controller etc. at Ranchi Substation and Asset II - STATCOM System (+/-) 200 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor and 2x125 MVAR Capacitor), cooling system & STATCOM protection/ controller etc. at Kishanganj Substation under "Eastern Region Strengthening Scheme –XI (ERSS-XI)" in Eastern Region (hereinafter referred as "transmission asset") for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the asset.

2. The Petitioner has made the following prayers:
 - (i) *Approve the Transmission Tariff for the tariff block 2014-19 for the assets covered under this petition;*



- (ii) *Allow the Petitioner to approach the Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any during 2014-19;*
- (iii) *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;*
- (iv) *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 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition;*
- (v) *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;*
- (vi) *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;*
- (vii) *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.*
- (viii) *Allow the Petitioner if GST is imposed on transmission charges under the proposed GST the same may be allowed to be recovered from the beneficiaries.*
- (ix) *Allow tariff upto 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 CERC (Terms and Conditions of tariff) Regulations,2014 for purpose of inclusion in the PoC charges;*
- (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 DOCO.*

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

Background

3. The Investment Approval (hereinafter referred to as "IA") for implementation of "Eastern Region Strengthening Scheme –XI (ERSS-XI)" in Eastern Region was accorded by Board of Directors of the Petitioner in 328th meeting held on 5.5.2016 for ₹76,621 lakh having nil IDC component based on October, 2015 price level (communicated vide Memorandum No.C/CP/ERSS-XI dated 9.5.2016).



4. An enquiry committee was constituted by Ministry of Power to analyse the causes of grid disturbances in NEW Grid in July 2012 under the chairmanship of Chairperson, CEA. The committee, inter-alia, recommended installation of adequate static and dynamic reactive power compensators to provide voltage support under steady state and dynamic conditions.

5. In view of the above, system studies were carried out jointly by CEA and the petitioner to identify/ estimate the dynamic reactive power support requirement. Study results were discussed in various meetings of Standing Committee on Power System Planning of Eastern Region, TCC & ERPC wherein it was decided to provide dynamic reactive compensation at four sub-stations in Eastern Region viz. Rourkela, Ranchi (New), Kishanganj and Jeypore in Eastern Region.

6. The scope of the scheme was discussed and agreed in the 14th and 15th Standing Committee meetings on Transmission System planning of Eastern Region held on 5.12.2013 and 27.8.2013 and 25th meeting of TCC and ERPC held on 20.9.2013 and 21.9.2013, respectively. Further, the scheme was also discussed and agreed in the 28th meeting of TCC and ERPC held on 12.9.2014 and 13.9.2014, respectively.

7. The scope of work covered under the project “Eastern Region Strengthening Scheme –XI (ERSS-XI)” are as follows:-

Substation	Mechanically Switched Compensation		Dynamic Compensation (STATCOM)
	Reactor x125 MVAR	Capacitor x125 MVAR	+/- MVAR
1. Rourkela	2	0	±300
2. Ranchi (new)	2	0	±300
3. Kishanganj	2	0	±200
4. Jeypore	2	2	±200



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

S.N.	Name of Asset	Remarks
1	Asset I - STATCOM System (+/-) 300 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor), cooling system & STATCOM protection/ controller etc. at Rourkela Substation.	Covered under petition no 173/TT/2018
2	Asset II - STATCOM System (+/-) 200 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor and 2x125 MVAR Capacitor), cooling system & STATCOM protection/ controller etc. at Jeypore Substation.	(Order dated 1.11.2019)
3	Asset I - STATCOM System (+/-) 300 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor), cooling system & STATCOM protection/ controller etc. at Ranchi (New).	Covered under instant petition
4	Asset II - STATCOM System (+/-) 200 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor and 2x125 MVAR Capacitor), cooling system & STATCOM protection/ controller etc. at Kishanganj.	

9. The Petitioner had filed the instant petition with anticipated COD. However, vide affidavit dated 17.5.2019, the Petitioner has claimed the actual COD for the assets claimed in the petition. The same has been summarized as under:-

S.N.	Name of Asset	COD claimed at the time of filing instant petition	COD claimed vide affidavit dated 17.5.2019
1	Asset I - STATCOM System (+/-) 300 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor), cooling system & STATCOM protection/ controller etc. at Ranchi Substation	31.7.2018 (Anticipated)	16.7.2018 (Actual)
2	Asset II - STATCOM System (+/-) 200 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor and 2x125 MVAR Capacitor), cooling system & STATCOM protection/ controller etc. at Kishanganj Substation	31.12.2018 (Anticipated)	16.3.2019 (Actual)



10. Vide order dated 11.6.2019 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 instant Assets.

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

Particulars	(₹ in lakh)	
	Asset-I 2018-19 (pro-rata)	Asset-II 2018-19 (pro-rata)
Depreciation	66.82	2.98
Interest on Loan	0.00	0.00
Return on Equity	170.21	11.08
Interest on Working Capital	9.78	0.59
O&M Expenses	97.52	5.91
Total	344.33	20.56

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

Particulars	(₹ in lakh)	
	Asset-I 2018-19 (Pro-rata)	Asset-II 2018-19 (Pro-rata)
Maintenance Spares	20.61	20.61
O&M expenses	11.45	11.45
Receivables	80.87	79.66
Total	112.93	111.72
Rate of Interest	12.20%	12.20%
Interest on working Capital	9.78	0.59

13. The Petitioner has served the copy of the petition upon 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. None of the Respondents have filed reply.



14. The Petition was last heard on 11.2.2020 and the Commission reserved the order in the Petition.

15. This order has been issued after considering the petition dated 30.7.2018 and Petitioner's affidavits dated 16.8.2018, 20.11.2018, 7.3.2019, 17.5.2019 and 21.6.2019.

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

Analysis and Decision

Date of Commercial Operation (COD)

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

Details of Asset	Actual COD (Claimed)
Asset I - STATCOM System (+/-) 300 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor), cooling system & STATCOM protection/ controller etc. at Ranchi Sub-station	16.7.2018
Asset II - STATCOM System (+/-) 200 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor and 2x125 MVAR Capacitor), cooling system & STATCOM protection/ controller etc. at Kishanganj Sub-station	16.3.2019

18. In support of the actual COD of the assets covered in the instant petition, the Petitioner has submitted CEA Energisation Certificates dated 21.6.2018 and 4.2.2019 in respect of Asset-I & Asset-II respectively, under Regulation 43 of CEA (Measures Related to Safety & Electricity Supply) Regulations, 2010. The Petitioner has also submitted RLDC Charging Certificates dated 21.8.2018 and 18.4.2019 in respect of Asset-I and Asset-II respectively. Further, the Petitioner has also submitted self-declaration COD letters and CMD certificates as required under grid code for Assets-I & II.



19. Taking into consideration the CEA Energisation certificate, RLDC charging certificate and CMD certificate submitted by the Petitioner, the COD for Asset-I and Asset-II is approved as 16.7.2018 and 16.3.2019, respectively.

Capital Cost

20. 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.”

21. The Petitioner, vide affidavit dated 7.3.2019 and 17.5.2019, has submitted the Auditor certificates along with revised tariff forms for instant assets. The details of claimed apportioned cost, capital cost as on COD and estimated additional capital expenditure incurred or projected to be incurred during 2018-19, 2019-20 and 2020-



21 along with estimated completion cost for the assets covered in the petition are as under:-

Asset	AppORTIONED APPROVED COST (FR)	Cost up to COD	Projected Expenditure				Estimated completion Cost
			2018-19	2019-20	2020-21	2021-22	
Asset-I	20971.11	9830.04	3349.67	4187.09	837.42	-	18204.22
Asset-II	17008.46	12060.67	2148.03	756.97	378.49	378.49	15722.64

Cost Over-run

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

Time over-run

23. As per the IA, the assets covered under the instant petition were scheduled to be put into commercial operation within 30 months from the date of IA i.e. 5.5.2016. Hence, the Scheduled COD comes to 5.11.2018 against which COD of Asset-I and Asset-II have been approved as 16.7.2018 and 16.3.2019 respectively. Thus, there is no time overrun in Asset-I. However, there is a time over-run of 4 months 10 days (131 days) in Asset-II.

24. The Petitioner has submitted the following reasons for time overrun in case of Asset-II in the main petition and additional reasons vide affidavit dated 17.5.2019 along with detailed chronology of events and supporting letters, photographs and documents:-

(i) Delay due to work being hampered by unprecedented rains and flash floods in Kishanganj area during July-August, 2017:

a) The works associated with Asset-II were initiated immediately upon



investment approval (i.e. 5.5.2016) and the LOA (Letter of Award) was issued timely as planned. Subsequent to site preparation at Kishanganj Substation, the civil works were started for foundation and erection works. However, during the months of July and August 2017, the northern part of state of Bihar was severely affected by rains and flash floods. The extent of flooding that took place in Bihar in this period was unprecedented in recent history. The severity of rains accompanied by floods wreaked havoc and brought the entire machinery of the State to standstill. Entire northern Bihar was affected with Kishanganj District, lying across basin of Mahananda river, being the worst affected.

b) The Petitioner has submitted reports of Disaster Management Authorities and newspaper clippings along with rainfall data from Indian Meteorological Department (IMD) for the period from July to September 2017 indicating pictorial representation of flood affected basin of River Mahananda along with "Situation Report" indicating involvement of Army, Air Force and National Disaster Response Force (NDRF). The report stated that 14 out of 38 districts of Bihar were affected by flood involving a population of 65.37 lakhs in 3641 villages and the severely affected districts include Kishanganj.

c) The unprecedented rain had severely hampered communication, physical infrastructure and transport as most of the blocks and subdivisions were cut off with their district headquarters in Kishanganj.

d) The Petitioner was aware of the hindrance caused by the rains during the Monsoon season and the same was taken into account while drawing the completion schedule. However, the unprecedented nature of the event had affected the works being carried out by the petitioner. As a result of rains and floods, the construction works were brought to complete halt for period July-August 2017 whereas in the succeeding month of September 2017, the Petitioner had to carry out assessment of damage that had been caused to its civil and erection works. The unforeseen event had also affected the supplies of the project as the major routes and modes of transport were rendered useless.



e) This event had led to cascading effect that pushed the schedule of petitioner beyond its target date and severity of flood impacted the timely completion apart from other undesired consequences.

f) The Petitioner has submitted that these unforeseen events and its aftermath were out of the control of Petitioner and, therefore, in terms of provisions of Regulation 12(2)(i) of the 2014 Tariff Regulations, these may be considered as "uncontrollable factors".

(ii) Damage to connectivity and Delay in transportation:

a) The Petitioner has further submitted that the Mahananda River had topped over the National Highway-31 (traversing through Kishanganj) at many places and water had entered into Kishanganj city as well. The rail and road infrastructure had been severely damaged and this affected connectivity to/ from Kishanganj. The vehicular movement on the Kishanganj stretch of NH-31 had come to a complete halt due to submergence and damage to road. Many villages lost road connectivity and the critical communication link of Kishanganj district was disconnected from the rest part of places.

b) The Kishanganj substation (PG) is situated at a distance of approximately 1 km in the right side (West bank) of Mahananda river and is about 20 km from the center of Kishanganj town. Due to raising level, the water flooded into Kishanganj substation premises and gradually substation had been inundated up to approximately 800 mm above Fixed Ground Level. Thus, the substation was completely cut-off from nearby areas and the approach roads to substation were washed away at various places. Owing to these issues, the construction activity at site, which was badly affected in July 2017 due to heavy rains, had to be completely halted by early August 2017.

c) The two approach roads to Kishanganj substation were submerged during floods, severely damaged with cracks and erosion at multiple locations with deep and wide potholes all along. The roads were not motorable even during the day and no heavy vehicular movement could be possible.



d) Meanwhile, the Petitioner approached the Rural Works Department of Government of Bihar, requesting to expedite the construction of badly damaged approach roads. To increase the pace of works, the request was converted into a proposal of construction of these roads as part of scope of works under CSR (of the Petitioner company) for benefiting its internal and external stakeholders at and around its commercial operation and also in the interest of work completion in schedule.

e) In response to Petitioner's request letter dated 27.9.2017, the Rural Works Department gave consent vide letters dated 16.11.2017 and 9.11.2017. Further, the cost estimate was provided to the Petitioner and subsequently, a MOU was signed between the Petitioner and district administration of Kishanganj on 8.1.2018.

f) The roads were repaired by Government of Bihar by March 2018 for transportation of heavy materials like transformers etc.

g) In view of these facts, the requisite equipment related to Asset-II could reach the site i.e. Kishanganj S/S with approximately 7-8 months delay vis-à-vis planned schedule.

25. The Commission vide order dated 11.6.2019 had directed the Petitioner to submit the details of time over-run and chronology of activities along with documentary evidence. In response, the Petitioner vide affidavit dated 21.6.2019 has submitted the following chronology of activities for Asset-II:-

Activity	Period of activity				Remarks, if any
	Schedule		Actual		
	From	to	From	to	
LOA	9.5.16	5.10.16	19.5.16	19.5.16	LOA awarded immediately after investment approval, before the planned schedule
Supplies	5.7.17	8.8.18	18.3.17	31.10.18	Receipts of supplies started timely as per schedule without delay. Marginal delay in supply due to damaged roads in aftermath of floods.
Testing & COD	4.10.18	2.11.18	10.2.19	16.3.19	Eventual delay of 4 months (approx.), due to flash floods.



26. We have considered the submissions made by the Petitioner and perused the documents available on records. As per the investment approval dated 5.5.2016, Asset-II i.e. “STATCOM System (+/-) 200 MVAR complete in all respect including Coupling transformer, Mechanically switched compensation (2x125 MVAR reactor and 2x125 MVAR Capacitor), cooling system & STATCOM protection/ controller etc. at Kishanganj Sub-station” was scheduled to be put into commercial operation on 5.11.2018. However, the instant Asset-II achieved COD on 16.3.2019 with a delay of 131 days as the Petitioner was not able to put it into commercial operation due to unprecedented rains and flash floods in the Kishanganj area during July-August, 2017 and resultant wide spread damage to road connectivity due to which the transportation of heavy equipment like transformer got further delayed.

27. It is observed that the Petitioner has commenced the initial activities of placing letter of award and commencement of supplies on time. However, delay has occurred in the completion of supply due to unprecedented rains and road connectivity issues. The Petitioner was aware of the hindrance caused by the rains during the Monsoon season and the same was taken into account while drawing the completion schedule. However, in the instant case, the unprecedented nature of the event affected the works being carried out by the Petitioner. The rains and flooding resulted in widespread damage of roads and rails leading to severe connectivity issues which could not have been foreseen while finalizing the project schedule.

28. It is observed from the chronology of scheduled versus actual project activities, that actual time taken for completion of supplies was 592 days (18.3.2017 to 31.10.2018) against the time line of 399 days (5.7.2017 to 8.8.2018) stipulated for this activity, resulting in a time over-run of 193 days (i.e. 592-399). This delay of 193 days was caused by unprecedented rains and flooding which resulted in



damage of roads and rails, submergence and severe damage of substation approach roads due to which the main equipment i.e. transformer itself could not be transported to site, resultantly other related works of erection etc. were put to complete halt.

29. We observe that the additional time of 193 days taken for completion of supplies had a cascading effect on the equipment erection timeline, testing dates and COD activities. Notwithstanding the fact that this delay was beyond the control of Petitioner, the Petitioner has made efforts and has compressed the execution time due to which the overall delay could be brought down to 131 days. In our opinion, the time over-run of 131 days due to unprecedented rains and flood was beyond the control of the Petitioner and is, therefore, condoned.

Interest During Construction (IDC)

30. The Petitioner has submitted that the entire project is funded through PSDF grant up to 90% of COD. The balance is through the internal resources and there is no deployment of loan. Accordingly, Petitioner has claimed "NIL" IDC for instant assets and has submitted the Auditor certificates in support of the same.

Incidental Expenditure During Construction (IEDC)

31. As indicated in Para 8 of this Order, with the COD of the two assets of the instant petition, the Project is complete. The Petitioner has claimed IEDC for Asset-I and Asset-II of the present petition vide Auditor Certificates dated 20.11.2018 and 14.5.2019, respectively, as per the table given here:-

(₹ in lakh)		
Assets	IEDC claimed as per Auditor Certificate	IEDC discharged Up to COD
Asset-I	201.70	201.70
Asset-II	674.54	674.54



32. Commission, vide Order dated 4.2.2020 in Petition No 1/TT/2019 had observed that:

“Incidental Expenditure During Construction (IEDC)

23. The Petitioner has claimed IEDC of the assets covered in the petition and submitted Auditor certificate in support of the same. We observe that all the assets of the transmission system “Common Scheme for 765 kV Pooling Station and Network for NR, Import by NR from ER and Common Scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER” have been put under commercial operation, either during 2009-14 period or during 2014-19 period.

24. The Appellate Tribunal for Electricity (APTEL), vide its judgment dated 2nd December 2019 in Appeal Nos. 95 of 2018 and 140 of 2018 on the issue of “IEDC to be considered in tariff” has held that IEDC should be computed only on actual basis after due prudence check based on the data submitted by the Appellant in accordance with the Tariff Regulations. Further, vide para 7.12 of the judgment, ATE has, inter alia, observed that “.....without prejudice to the contention that hard costs should not be considered, even if hard cost is to be seen then, at least “IEDC” including contingencies should be applied”.

25. As per the APTEL judgment, computation of IEDC of the Project is to be made on actual basis after applying due prudence. The Petitioner files tariff petitions for individual assets and Commission decides tariff for these assets, which are subsequently combined when all the assets of the Project are brought under commercial operation. Thus, prudence can only be applied with reference to the combined IEDC as per FR Cost /RCE on completion of the Project. The present petition is a true up (2009-14) petition, and as mentioned in para 23, all the assets of the Project have been commissioned and their tariff determined on individual basis. As a part of prudence exercise, the IEDC allowed as per respective tariff orders for all the assets of the Project has been compared with the IEDC (including contingencies) for the Project as per RCE. We observe that the IEDC allowed for the Project, except that for the eight assets of the present petition, is Rs 7424.85 lakh which is well within the IEDC limit of Rs 13959.00 lakh as per RCE. The actual IEDC (as claimed) against the eight assets of the present petition is Rs 2604.12 lakh. After disallowing an amount of ₹4.50 lakh, ₹3.13 lakh and ₹33.03 lakh, in case of Asset-3, Asset-7 and Asset- 8 respectively due to time over run, ₹2563.56 lakh is being allowed as IEDC.

26. We reiterate that Commission has applied prudence in the above manner in the present case as all the assets of the Project have been commissioned. For asset wise



tariff determination, Commission intends to continue with the existing practice of IEDC and prudence shall be applied on the IEDC, once the Project is fully commissioned.”

33. It is observed that as per the Abstract Cost Estimate annexed with the Investment Approval for ERSS-XI memorandum dated 9.5.2016, the IEDC including contingencies for the Project is ₹ 5001.00 lakh. Vide Order dated 1.11.2019 in petition no 173/TT/2018, the IEDC claimed by the Petitioner, ₹ 595.55 lakh for both the assets considered together, was allowed by the Commission. As the IEDC claimed in the instant petition along with that allowed by the Commission in petition no 173/TT/2018 is within the limits of the Project IEDC (including contingencies), the IEDC as claimed in the instant petition is allowed

Initial Spares

34. This has been dealt in line with Regulation 13 of the 2014 Tariff Regulations.

The details of initial spares claimed by the Petitioner is as follows:-

(₹ in lakh)				
Asset	Element	Plant and Machinery Cost excluding IDC, IEDC and Land Expenditure as on cut-off date	Initial spares claimed	Ceiling limit as per Regulations (%)
Asset-I	Sub-Station	17666.80	706.67	6.00%
Asset-II	Sub-Station	14786.30	591.45	6.00%

35. The Petitioner has claimed initial spares as indicated in the Auditor Certificate for instant assets and has also submitted discharge details. We have considered the submissions of the Petitioner. However, as the tariff in the instant petition is being allowed only up to 31.3.2019, accordingly, initial spares have been worked out considering admissible plant and machinery cost (excluding IDC, IEDC, land cost and cost of civil works), upto 31.3.2019 subject to review at the time of true up.

36. The Petitioner vide affidavit dated 21.6.2019 has submitted the following year wise discharge of initial spares:-



(₹ in lakh)

Asset	Discharged as on COD	Discharged from COD to 31.03.2019	Discharged beyond 31.03.2019	Total
Asset-I	238.34	397.66	70.67	706.67
Asset- II	259.76	2.55	329.14	591.45

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

(₹ in lakh)

Asset	Initial Spare claimed as per Auditor certificates	Excess Initial Spare Disallowed	Initial Spare allowed	Initial Spare Discharged as on COD	Un-discharged Initial Spare liability as on COD	Initial Spare liability allowable as ACE during 2018-19
	1	2	3=(1-2)	4	5=(3-4)	6
Asset-I	706.67	0.00	706.67	238.34	468.31	397.66
Asset- II	591.45	0.00	591.45	259.76	331.69	2.55

Treatment of grant received

38. Ministry of Power (MOP), Government of India vide their sanction order dated 5.1.2016 has conveyed approval of competent authority for sanction of an amount of ₹63028 lakh as grant from PSDF towards the subject scheme “Eastern Region Strengthening Scheme–XI (ERSS-XI)”. The sanction order dated 5.1.2016 stipulates, inter-alia, the following conditions:

- (i) Xxxx
- (ii) No tariff shall be claimed by POWERGRID for the portion of the scheme funded from PSDF.
- (iii) Xxxx.
- (iv) Xxxx.
- (v) Xxxx



- (vi) Expenditure beyond Rs.630.28 Crores shall be provided by POWERGRID from their own resources.
(vii) Xxxx

Xxxxxxx

39. The Petitioner's Investment Approval Letter dated 9.5.2016 states that "the above funding may undergo changes during project execution considering that the grant component of ₹630.28 crore has been worked out on the basis of 90% of the estimated cost of the project submitted to NLDC for PSDF grant". Also, as per Para 3 (vi) of the terms and conditions of the sanction letter No. 10/1/2014 – OM dated 5.1.2016 conveying approval of the PSDF Grant, the expenditure beyond ₹630.28 crore shall be provided by PGCIL from their own resources.

40. During the hearing held on 23.04.2019 for petition no 173/TT/2018, which is also a part of the Project ERSS-XI, the Petitioner informed that out of the sanctioned grant, an amount of ₹31638 lakh was received at the time of filing of that petition and the second installment of grant amounting to ₹31690 lakh was received on 14.02.2019. The same was reiterated by the Petitioner during the hearing held on 24.5.2019 for the instant petition. The Petitioner vide affidavit dated 21.6.2019 has submitted that the entire grant of ₹630.28 Cr has been received and allocated to various assets of the project as 90% of their respective cost with the balance funded through internal resources.

41. As referred in para 8 of this Order, the Commission vide Order dated 1.11.2019 in petition no. 173/TT/2018, had approved the tariff for other two Assets of ERSS-XI, wherein grant considered up to 31.03.2019 is as below:-

(₹ in lakhs)			
Grant utilized	Asset-I (Rourkela S/s)	Asset-II (Jeypore S/s)	Total
Up to COD	9461.83	7969.26	17431.09
Estimated Add Cap during COD to 31.03.2019	4080.60	5426.65	9507.25
Total	13542.43	13395.91	26938.34



42. The Petitioner, vide affidavit dated 21.6.2019 in the instant petition, has claimed the grant utilized up to 31.03.2019 as below:-

(₹ in lakhs)

Grant utilized	Asset-I (Ranchi S/s)	Asset-II (Kishanganj S/s)	Total
Up to COD	8847.04	10854.60	19701.64
Estimated Add Cap during COD to 31.03.2019	1749.20	1933.23	3682.43
Total	10596.24	12787.83	23384.07

43. It is observed from the above tables that the grant approved by the Commission vide order dated 1.11.2019 in petition no. 173/TT/2018 along with the grant claimed in the instant petition is well within the grant sanctioned amount of ₹63028 lakh. In line with the MOP "Sanction of PSDF Grant" letter dt. 5th January, 2016 and PGCIL's Investment Approval letter dt. 9th May, 2016, grant to the tune of 90% of cost incurred as on COD for both the assets has been taken out of the capital expenditure, however in case of ACE for both the assets for 2018-19 ceiling limit of 90% has been considered for working out the grant against the add cap.

44. The Petitioner has claimed the tariff considering the IR deployment of 10% of COD cost. The status of total grant will be reviewed at the time of truing up, after considering the total actual expenditure and total grant received.

45. As per proviso to clause (d) of Regulation 9(6) of the 2014 Tariff Regulations:-

"Provided that any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment shall be excluded from the Capital Cost for the purpose of computation of interest on loan, return on equity and depreciation."

46. Further, as per proviso (iii) of Regulation 19(1) of the 2014 Tariff Regulations:-



“iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.”

47. The Commission, however, takes note of the conditions associated with sanctioning of PSDF grant in the instant project and accordingly intends to work out debt: equity ratio.

Capital cost as on COD

48. Accordingly, the capital cost allowed as on COD for tariff purpose is summarized as under:

(₹ in lakh)					
Assets	Capital cost as per Auditor Certificate as on COD	Initial Spares Disallowed as on COD	Initial Spares Undischarged as on COD	Grants received up to COD	Capital cost as on COD considered for tariff calculation
	1	2	3	4	5=(1-2-3-4)
Asset-I	9830.04	0.00	468.31	8847.04	514.67
Asset-II	12060.67	0.00	331.69	10854.60	874.38

Additional Capital Expenditure (ACE)

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

(₹ in lakh)					
Asset	Estimated Expenditure in the FY				Total Estimated ACE claimed by Petitioner
	2018-19	2019-20	2020-21	2021-22	
Asset-I	3349.67	4187.09	837.42	-	8374.18
Asset-II	2148.03	756.97	378.49	378.49	3661.98

50. Since, FY 2019-20, 2020-21 and 2021-22 falls beyond tariff period 2014-19 and is not covered under the 2014 Tariff Regulations, the projected ACE claimed by the Petitioner for FY 2019-20, 2020-21 and 2020-21 has not been considered for the



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

51. We have considered the submission made by the Petitioner. The admissibility of ACE incurred after COD is to be dealt in accordance with provision of Regulation 14(1) and (2) of the 2014 Tariff Regulations. The ACE incurred and projected to be incurred for the transmission asset claimed by the Petitioner is within the cut-off date, it is within the approved cost (FR) and it is on account of balance and retention payment and hence additional capitalization claimed by the Petitioner for period up to 2018-19 is allowed under Regulation 14(1)(i) & 14(1)(ii) of the 2014 Tariff Regulations.

52. The Petitioner has submitted the following details in respect of Additional Capital Expenditure for the period from COD to 31.03.2019 for both the assets:-

(₹ in lakh)

Particulars	Asset-I	Asset-II
Debt	1120.33	-
Equity	480.14	214.80
Grant utilized	1749.20	1933.23
Total Add Cap claimed during 2018-19	3349.67	2148.03

53. In respect of Asset-I, the Petitioner has claimed grant utilized as 52.22% of the total Add Cap claimed and the remaining amount has been segregated into debt and equity in the ratio of 70:30 with normative loan of ₹1120.33 lakh. However, the Petitioner has not claimed any Interest on Loan for the asset. In view of the grant received as discussed in para 38 above, we have considered the amount for grant utilized, as the sum of normative loan and grant. Hence, the equity claimed, in respect of Asset-I, is the actual equity of ₹480.14 lakh which is 14.33 % of ACE. Accordingly, Add Cap has been considered as ₹3349.67 lakh. However, in case of



Asset-II, 90% grant of ACE of 2018-19 has been considered and equity is 10% of ACE.

54. Further, discharge of initial spare has been added to the add cap during 2018-19 for both the assets.

55. Accordingly, the Add Cap allowed after reducing grant of ₹1749.20 lakh for the purpose of tariff is summarized as below:-

Particulars	(₹ in lakh)	
	Asset-I	Asset-II
Equity	480.14	214.80
Discharged Initial Spare	397.66	2.55
Add Cap allowed during 2018-19 for the purpose of Tariff	877.80	217.35

Capital cost for the tariff period 2014-19

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

Asset	(₹ in lakh)		
	Capital Cost as on COD considered for tariff after deducting grant	ACE for FY 2018-19	Total cost considered for tariff as on 31.03.2019 after deducting grant
Asset-I	514.67	877.80	1392.47
Asset-II	874.38	217.35	1091.73

Debt-Equity Ratio

57. The Petitioner has claimed that capital cost was met from the grant to the extent of 90% and balance 10% through internal sources. In consonance with the terms and conditions of the MOP letter dated 5.12.2016 and observation of the Commission vide order dated 01.11.2019 in petition no. 173/TT/2018, the details of Debt and Equity considered are as under:-



(₹ in lakh)

Asset-I				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	0.00	0.00	0.00	0.00
Equity	514.67	100.00	1392.47	100.00
Total	514.67	100.00	1392.47	100.00

Asset-II				
Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	0.00	0.00	0.00	0.00
Equity	874.38	100.00	1091.73	100.00
Total	874.38	100.00	1091.73	100.00

Return on Equity (ROE)

58. The Petitioner has submitted that ROE has been calculated at the rate of 19.61% after grossing up the ROE with MAT rate of 20.961%. 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.

59. 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.

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



(₹ in lakh)		
Particulars	Asset-I	Asset-II
	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Opening Equity	514.67	874.38
Addition due to Additional Capitalization	877.80	217.35
Closing Equity	1392.47	1091.73
Average Equity	953.57	983.05
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)	19.610%	19.610%
Return on Equity (Pre-tax)	132.69	8.45

Interest on Loan (IOL)

61. The IOL has been claimed as “NIL” considering the PSDF grant. As the balance amount after reducing grant is being treated as equity, there shall be no interest on loan.

Depreciation

62. Depreciation has been dealt with in line of Regulation 27 of 2014 Tariff Regulations. The COD of the instant assets falls in financial year 2018-19, accordingly it will complete 12 years beyond 2018-19. Thus, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-II. Details of the depreciation allowed are as under:-

(₹ in lakh)		
Particulars	Asset-I	Asset-II
	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Opening Gross Block	514.67	874.38
Additional Capital expenditure	877.80	217.35
Closing Gross Block	1392.47	1091.73
Average Gross Block	953.57	983.05
Rate of Depreciation	5.2800%	5.2800%
Depreciable Value	858.21	884.75
Remaining Depreciable Value	858.21	884.75
Depreciation	35.73	2.28



Operation and Maintenance Expenses (O&M Expenses)

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

(₹ in lakh)

Particulars	Asset-I	Asset-II
	2018-19 (Pro-rata)	2018-19 (Pro-rata)
Substation	97.52	5.91

64. 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.

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

(₹ in lakh)

Element	2017-18	2018-19
Sub-Station: 400 kV bay (₹ in lakh per bay)	66.51	68.71

66. 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:-



Particulars	(₹ in lakh)	
	Asset-I 2018-19 (Pro-rata)	Asset-II 2018-19 (Pro-rata)
2 Nos. 400 kV Bay	97.52	5.91

Interest on Working Capital (IWC)

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

a) Maintenance spares:

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

b) O & M expenses:

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

c) Receivables:

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

d) Rate of interest on working capital:

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

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

Particulars	(₹ in lakh)	
	Asset-I 2018-19 (Pro-rata)	Asset-II 2018-19 (Pro-rata)
Maintenance Spares	20.61	20.22
O&M expenses	11.45	11.24
Receivables	64.42	65.22
Total	96.49	96.67
Rate of Interest	12.20%	12.20%
Interest on working Capital	8.35	0.52



Annual Transmission charges

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

(₹ in lakh)		
	Asset-I	Asset-II
Particulars	2018-19 (pro rata)	2018-19 (pro rata)
Depreciation	35.73	2.28
Interest on Loan	0.00	0.00
Return on Equity	132.69	8.45
Interest on Working Capital	8.35	0.52
O&M Expenses	97.52	5.91
Total	274.29	17.15

Filing fee and the publication expenses

70. 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

71. 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

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



Sharing of Transmission Charges

73. 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.

74. This order disposes of Petition No. 272/TT/2018.

Sd/-
(I. S. Jha)
Member

Sd/-
(P. K. Pujari)
Chairperson

