

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No.248/TT/2019

Coram :

Shri P.K. Pujari, Chairperson

Shri I.S. Jha, Member

Shri Arun Goyal, Member

Date of Order: 25.02.2021

In the matter of

Approval 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 for determination of transmission tariff from DOCO to 31.3.2019 for 2 Nos. of 240 MVAR, 765 kV Switchable Line Reactors (6x80 MVAR, 765 kV, 1-Ph Shunt Reactor), along with Reactor Bays & 2 Nos. 765 kV Line Bays excluding PLCC, Telecom equipment and Line Terminal equipment such as LA, CVT & Wave Trap at 765/400 kV Kurnool Sub-station under "Sub-station works Associated with Additional Inter-regional AC link for Import of Power into Southern Region i.e., Warora-Warangal and Chilakaluripeta-Hyderabad-Kurnool 765 kV Link".

And in the matter of

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

.... Petitioner

Versus

1. Karnataka Power Transmission Corporation Ltd. (KPTCL),
Kaveri Bhavan,
Bangalore - 560009
2. Transmission Corporation of Andhra Pradesh Ltd. (APTRANSCO),
Vidyut Soudha,
Hyderabad- 500082
3. Kerala State Electricity Board (KSEB),
Vaidyuthi Bhavanam Pattom,
Thiruvananthapuram - 695 004
4. Tamil Nadu Generation and Distribution Corporation Ltd (TANGEDCO),
(Formerly Tamil Nadu Electricity Board -TNEB)
NPKRR Maaligai, 800, Anna Salai,
Chennai - 600002



5. Electricity Department,
Government of Goa
Vidyuti Bhawan, Panaji,
Goa 403001
6. Electricity Department,
Government of Pondicherry,
Pondicherry – 605001
7. Eastern Power Distribution Company of Andhra Pradesh Ltd. (APEPDCL),
P&T Colony, Seethmmadhara,
Vishakhapatnam
8. Southern Power Distribution Company of Andhra Pradesh Ltd. (APSPDCL),
Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta, Tirupati-517 501
9. Central Power Distribution Company of Andhra Pradesh Ltd. (APCPDCL),
Corporate Office, Mint Compound,
Hyderabad - 500063
10. Northern Power Distribution Company of Andhra Pradesh Ltd. (APNPDCL),
Opp. NIT Petrol Pump, Chaitanyapuri,
Kazipet, Warangal - 506004
11. Bangalore Electricity Supply Company Ltd., (BESCOM),
Corporate Office, K.R.Circle,
Bangalore - 560 001, Karanataka
12. Gulbarga Electricity Supply Company Ltd. (GESCOM),
Station Main Road,
Gulbarga, Karnataka
13. Hubli Electricity Supply Company Ltd. (HESCOM),
Navanagar, PB Road,
Hubli, Karnataka
14. MESCOM, Corporate Office,
Paradigm Plaza, AB Shetty Circle,
Mangalore - 575001, Karnataka
15. Chamundeswari Electricity Supply Corporation Ltd. (CESC),,
927, L J Avenue Ground Floor,
New Kantharaj Urs Road, Saraswatipuram,
Mysore - 570009, Karnataka
16. Transmission Corporation of Telangana Limited,
Vidhyut Soudha, Khairatabad,
Hyderabad-500082
17. POWERGRID Southern Interconnector Transmission System Ltd.
B-9, Qutab institutional Area, Katwaria Sarai,
New Delhi-110016
18. Warora-Kurnool Transmission Limited (WKTL)
6th Floor, Plot No. 19 & 20, Film City,
Sector 16A, Gautam Buddha Nagar,
Noida, Uttar Pradesh 201301

...Respondents



For Petitioner: Shri S. S. Raju, PGCIL
Shri A. K. Verma, PGCIL
Shri V. P. Rastogi, PGCIL
Shri B. Dash, PGCIL
Shri Zafrul Hasan, PGCIL

For Respondent: Shri S. Vallinayagam, Advocate, TANGEDCO
Ms. Poonam Verma, Advocate, WKTCL
Ms. Aprajita Upadhyay, Advocate, WKTCL.
Dr. R. Kathiravan, TANGEDCO

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("PGCIL") for determination of tariff for 2 Nos. of 240 MVAR, 765 kV Switchable Line Reactors (6x80 MVAR, 765 kV, 1-Ph Shunt Reactor), along with Reactor Bays & 2 Nos. 765 kV Line Bays excluding PLCC, Telecom equipment and Line Terminal equipment such as LA, CVT & Wave Trap at 765/400 kV Kurnool Sub-station under "Sub-station works Associated with Additional Inter-regional AC link for Import of Power into Southern Region i.e., Warora- Warangal and Chilakaluripeta-Hyderabad -Kurnool 765 kV Link". (hereinafter referred to as "the transmission asset") for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

2. The Petitioner has made the following prayers:

- "1) Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition,*
- 2) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.*
- 3) Allow the Petitioner to approach Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19.*



- 4) *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.*
 - 5) *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.*
 - 6) *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.*
 - 7) *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.*
 - 8) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is withdrawn from the exempted 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.*
 - 9) *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.*
 - 10) *Allow the petitioner to bill Tariff from actual DOCO.*
- and pass such other relief as Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.”*

Background

3. The Investment Approval (hereinafter referred to as "IA") for the transmission asset "Sub-station Works Associated with Additional Inter-Regional AC Link for Import into Southern Region i.e., Warora-Warangal and Chilakaluripeta-Hyderabad-Kurnool 765 kV Link" was accorded by Board of Directors of the Petitioner in its 338th meeting held on 10.3.2017 for ₹28372 lakh including an IDC of ₹1768 lakh based on October 2016 price level (communicated vide Memorandum No. C/CP/PA 1617-03-0AB-IA027 dated 11.4.2017).

4. The scope of the transmission asset was discussed and agreed in the 37th, 38th and 39th meetings of the Standing Committee on Power System Planning of



Southern Region held on 31.7.2014, 7.3.2015 and 29.12.2015, respectively. It was also agreed in 26th Meeting of SRPC held on 20.12.2014.

5. The Empowered Committee on Transmission in the 33rd and 35th meeting held on 30.9.2014 and 14.9.2015, respectively, decided the implementation of the transmission asset through Tariff Based Competitive Bidding (TBCB) route. The sub-station works for TBCB lines terminating at the Petitioner's sub-stations including line bays and line reactors were brought under the scope of the Petitioner.

6. The scope of work covered under the transmission asset "Sub-station works associated with additional inter-regional AC link for import of power into Southern Region i.e., Warora-Warangal and Chilakaluripeta-Hyderabad- Kurnool 765 kV Link" in Southern Region is as follows:

Sub-station

1. New 765/400 kV Hyderabad (Maheshwaram) GIS Sub-station (Extension)

765 kV

a) 4 nos. line bays (GIS)

2. 765/400 kV Kurnool Sub-station (Extension)

765 kV

a) 2x240 MVAR, 765 kV, Switchable Line Reactors
(6x80 MVAR, 765 kV 1-Ph, Shunt Reactor)

b) 2 nos. Switchable Line Reactor Bays

c) 2 nos. Line Bays

3. 400/220 kV Warangal Sub-station (Extension)

400 kV

a) 2 nos. line bays

7. The transmission asset covered in the instant petition is as under:



Asset	COD
Asset-1: a) 2X240 MVAR, 765 kV, Switchable Line Reactors (6X80 MVAR, 765 kV, 1-Ph Shunt Reactor) b) 2 Nos Switchable Line Reactor Bays c) 2 Nos Line bays*	11.3.2019

* Excluding PLCC, Telecom equipment and Line Terminal equipment such as LA, CVT & Wave Trap at 765/400 kV Kurnool Sub-station in the instant petition which are part of 2 Nos Line Bays.

8. The remaining scope of the work as per Investment Approval is covered in Petition No 169/TT/2020, where in the petitioner has also claimed the balance items of PLCC, Telecom equipment and Line Terminal equipment such as LA, CVT & Wave Trap at Kurnool 765/400 Sub-station which are part of Asset-I in the instant petition.

9. The petitioner has claimed 04 Nos Line Bays (GIS) at (Hyderabad) Maheshwaram 765/400 kV Sub-station, 02 Nos. Line Bays at Warangal 400/200 kV Sub-station in Petition No.169/TT/2020. Therefore, the complete scope of the work as per Investment Approval is covered in Petition Nos. 248/TT/2019 and 169/TT/2020.

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

Particulars	(₹ in lakh)
	2018-19 (Pro-rata)
Depreciation	23.12
Interest on Loan	26.40
Return on Equity	26.98
Interest on Working Capital	2.67
O&M Expenses	21.72
Total	100.89

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



Particulars	(₹ in lakh)
	2018-19 (Pro-rata)
O&M Expenses	32.06
Maintenance Spares	57.71
Receivables	297.87
Total	387.65
Rate of Interest	12.20%
Interest on working Capital	2.67

12. The Petitioner has served a copy of the petition upon the respondents and notice of this tariff application has been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the notices published by the Petitioner under Section 64 of the Electricity Act, 2003. Reply to the petition has been filed by the TANGEDCO (Respondent No.4) and Warora-Kurnool Transmission Limited (WKTL) (Respondent No.18), vide their affidavits dated 6.2.2020 and 18.6.2020, respectively. The Petitioner vide affidavit dated 13.5.2020 has filed its rejoinder to the reply of TANGEDCO.

13. The Petition was last heard on 29.6.2020 and the Commission reserved the order in the Petition. Having heard the representatives of the Petitioner present at the hearing and perused the material on record, we proceed to dispose of the petition.

14. This order has been issued after considering the main petition dated 22.7.2019, the Petitioner's affidavits dated 20.3.2020, 13.5.2020 and 16.7.2020 and replies dated 6.2.2020 and 18.6.2020 of TANGEDCO and Warora-Kurnool Transmission Limited (WKTL) respectively.



Date of Commercial Operation (COD)

15. The Petitioner has claimed COD for the transmission asset as 11.3.2019. The Petitioner has submitted that as per IA, the transmission asset was scheduled to be put into commercial operation on 9.11.2019. However, it was put into commercial operation before the scheduled COD. The reasons submitted by the petitioner for early COD and subsequent utilisation of the transmission asset are as under:

- a) In the 35th meeting of SRPC held on 2.2.2019, it was intimated that due to over-voltage, there are occurrences of frequent tripping of 765 kV Nizamabad-Maheswaram, 765 kV Kurnool-Kadapa and 765 kV Kadapa-Thiruvalem lines, causing stress on EHV equipment due to frequent switching.
- b) SRLDC issued codes on daily basis for taking these 765 kV lines (765 kV Nizamabad-Maheswaram, 765 kV Kurnool-Kadapa and 765 kV Kadapa-Thiruvalem lines) out of service during night and taking back into service early morning.
- c) Accordingly, in order to reduce the voltage at Kurnool, early COD of the line reactors at Kurnool Sub-station under instant project, intended for Hyderabad- Kurnool 765 kV D/C Line, was agreed.

16. TANGEDCO, vide affidavit dated 6.2.2020, while referring to the submissions of the Petitioner regarding the decision taken in the 35th meeting of SRPC to prepone COD of the transmission asset, submitted that since Warora Kurnool Transmission Ltd. (WKTL) did not achieve COD of its entire scope of the project, the transmission charges in respect of the transmission asset should be borne by WKTL.

17. In response, the Petitioner vide affidavit dated 13.5.2020 has submitted that the transmission asset is being implemented by the Petitioner, whereas the associated transmission lines are being executed by WKTL, a subsidiary of Essel Infra, under TBCB route. The Petitioner has further reiterated the submissions made



earlier in the petition and submitted that it was agreed in the 35th SRPC that the transmission asset is being utilized for voltage control in Southern Region.

18. We have considered the submissions of the Petitioner and TANGEDCO. It is observed that as per the Investment Approval dated 10.3.2017, the transmission asset was scheduled to be put into commercial operation on 9.11.2019 while the Petitioner has claimed COD of the transmission asset as 11.3.2019. The Petitioner has submitted that the constituents of SR agreed in the 35th SRPC meeting held on 2.2.2019 for early declaration of COD of the transmission assets to control the voltage issues in Kurnool Sub-station. TANGEDCO has submitted that as the transmission line under the scope of WKTL has been delayed, WKTL has to bear the transmission charges for the period from COD of the transmission assets to the COD of the transmission line under the scope of WKTL and the beneficiaries should not be burdened with the same. TANGEDCO has further submitted that though the issue of voltage was discussed in the 35th SRPC meeting, there was no clear approval for using the transmission asset for controlling the voltage in Kurnool Sub-station. In view of the rival contentions, we would like to decide first whether the SRPC has approved early declaration of COD and use of the transmission assets to control the voltage at Kurnool Sub-station as contended by the Petitioner. The relevant portion of the Minutes of the 35th Meeting of SRPC held on 2.2.2019 is as follows:

“SRPC deliberations

SRPC noted the above.

ED, SR-I, PGCIL stated that the nodes at Maheswaram and Kurnool were experiencing high voltages and for effective management of the system POSOCO was instructing closing and opening of the lines on a daily basis. For the TBCB line coming from Warora, PGCIL was carrying out the works of bay extension at Warangal, Maheswaram and Kurnool. The contractual schedule was around February/March 2019 while the lines were expected by November 2019. However, PGCIL was ready with bays at Kurnool with two reactors (2 x 240 MVAR) which could be energized by end of February 2019 or first week of March 2019. The reactors were



likely to reduce the voltages of 765 kV node by 10-11 kV and about 4-5 kV of 400 kV node at Kurnool, if the reactors are permitted to be commissioned by the forum.

CTU as well as SRLDC supported this proposal of SR-I.

SRPC agreed for early commissioning (end of February 2019/first week of March 2019) of the line reactors at Kurnool for voltage management.”

19. It is observed from the minutes of meeting of SRPC that the issue of high voltage at Maheswaram and Kurnool Sub-station was discussed and it was agreed for early declaration of COD of the line reactors at Kurnool Sub-station for voltage management. Thus, there is approval of the 35th SRPC for using the line reactors at Kurnool Sub-station for voltage control. TANGEDCO's contention regarding the sharing of transmission charges is dealt in paras 64 and 65 of this order.

20. The Petitioner has submitted CEA energisation certificate dated 4.2.2019 for 6 Nos. 765 kV 80 MVAR Shunt Reactors and 765 kV D/C Hyderabad-I&II Line Bays (Bays No. 714, 715, 715R, 716, 717, 718 & 718R) and the Petitioner has submitted RLDC charging certificate dated 19.3.2019. Accordingly, taking into consideration the minutes of the 35th SRPC meeting, CEA energisation certificate and the RLDC certificate, the COD of the following elements has been approved as 11.3.2019.

“765/400 kV Kurnool Sub-station (Extn).

765 kV

- a) 2X240 MVAR, 765 kV, Switchable Line Reactors (6X80 MVAR, 765 kV, 1-Ph Shunt Reactor)
- b) 2 Nos Switchable Line Reactor Bays

- C) 2 Nos Line bays.”

Capital Cost

21. Clauses (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.”

22. The Petitioner was directed to submit the reasons for excluding the PLCC, telecom equipment and line terminal equipment such as LA, CVT and Wave Trap. In response, the Petitioner, vide affidavit dated 16.7.2020, has submitted that in order to reduce the voltage issues at Kurnool, early declaration of COD of the line reactors at Kurnool Sub-station intended for Hyderabad-Kurnool 765 kV D/C Line was agreed. Therefore, in order to utilize the line reactors as bus reactors, the line reactors are connected to the bus bars through line bays. The line reactors are being utilized as bus reactors and have to be connected to both the buses for charging. Thus, in order to charge line reactor bays (715R and 718R), the associated Line bays (715 and 718) have to be charged. Further, in order to utilize the line reactors as bus reactors, the line side isolators were to be opened. Therefore, LA, CVT and Wave Trap are excluded and are not part of the charged portion of the line bays. The line side equipment can be charged only when the associated Transmission Line is charged/ ready for charging/ put into commercial operation. Hence, it is not possible to operate this equipment without the transmission line. Further, PLCC and Telecom equipment are required for transmission line protection and data transfer application and thus cannot be utilized



in absence of transmission line. As the utilization of PLCC, telecom equipment and line terminal equipment such as LA, CVT and Wave Trap is not possible without the transmission line, it is excluded from the scope of the transmission asset.

23. The Petitioner has claimed following capital cost incurred as on COD and projected ACE, in respect of the transmission asset covered in the instant petition:

(₹ in lakh)

Apportioned Approved Cost (FR)	Cost up to COD	Proposed ACE in FY		Estimated Completion Cost
		2018-19	2019-20	
11488.19	7931.20	445.87	1007.13	9384.20

24. As the Petitioner has excluded the cost of PLCC, telecom equipment and Line Terminal equipment such as LA, CVT & Wave Trap at Kurnool 765/400 kV Sub-station, the capital cost as submitted by the Petitioner is considered for the purpose of computation of tariff in respect of the transmission asset covered in the instant petition. Since the Petitioner has voluntarily excluded the PLCC, Telecom equipment and Line Terminal equipment such as LA, CVT & Wave Trap at 765/400 kV Kurnool Sub-station which is part of 2 Nos Line Bays and their capital cost in the instant petition, the same would not be considered in the Petition No. 169/TT/2020.

Cost Over-run

25. The Petitioner has submitted that against the total apportioned approved cost of ₹11488.19 lakh, the estimated completion cost is ₹9384.20 lakh and it has prayed to allow the capital cost and tariff as claimed under instant petition.

26. We have considered the submissions of the Petitioner. It is observed that the estimated completion cost including ACE is within the FR apportioned approved cost. Therefore, there is no cost over-run.



Interest During Construction (IDC)

27. The Petitioner has claimed Interest During Construction (IDC) of ₹192.12 lakh for the transmission asset and submitted the Auditor's Certificate dated 9.5.2019 in support of the same. The Petitioner has submitted computation of IDC along with year-wise details of the IDC discharged which is summarized as under:

(₹ in lakh)			
IDC as per Auditor's Certificate	IDC discharged up to COD	IDC un-discharged up to COD	IDC to be discharged during 2019-20
192.11	161.34	30.78	30.78

28. The Petitioner has submitted IDC computation statement which consists of the name of the loan, drawl date, loan amount, interest rate and interest claimed. IDC is worked out based on the details given in the IDC statement. 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 Form 6 and Form 9C. The allowable IDC has been worked out based on the available information and relying on loan amount as per Form 9C. However, the Petitioner is directed to submit the detailed IDC statement by rectifying the above-mentioned deviation, at the time of true up of capital cost for 2014-19 period. Accordingly, details of IDC considered for tariff computation, subject to revision at the true up is as follows:

(₹ in lakh)				
IDC claimed	IDC disallowed as on COD		Allowable IDC as on COD (Cash basis)	IDC to be discharged during 2019-20
	Computational Difference	Un-discharged liability		
192.12	0.31	30.47	161.34	30.47

Incidental Expenditure During Construction (IEDC)

29. The Petitioner has claimed IEDC of ₹113.61 lakh for the transmission asset and submitted Auditor's Certificate dated 9.5.2019 in support of the same. The



Petitioner has submitted that entire IEDC has been discharged up to COD. IEDC claimed is within the percentage of hard cost as indicated in the abstract cost estimate. Hence, IEDC of ₹113.61 lakh has been allowed, subject to true up.

30. IEDC allowed for the subject asset will be reconsidered in the light of the directions of Appellate Tribunal for Electricity (APTEL) in judgment dated 2.12.2019 in Appeal No. 95 of 2018 and Appeal No 140 of 2018, at the time of truing up.

Initial Spares

31. This has been dealt in line with Regulation 13 of the 2014 Tariff Regulations. The Petitioner has claimed initial spares corresponding to brownfield substation under for transmission asset and has submitted Auditor's Certificate dated 9.5.2019 in support of the same. The Petitioner vide affidavit dated 20.3.2020 has submitted details of year-wise capitalisation and initial spares discharged up to COD. The Petitioner has further submitted that the expenditure incurred towards initial spares up to COD have been considered in COD cost. The amount towards balance initial spares liabilities have been considered in additional capital expenditure of the respective year and the Petitioner has prayed to allow the entire initial spares claimed under the instant petition. The details of initial spares claimed by the Petitioner is as follows:

(₹ in lakh)					
Element	Total Capital Cost (Plant and machinery Cost excluding IDC, IEDC, Land cost and cost of Civil works) up to Cut-off date	Initial Spares Claimed	Expenditure up to COD	Additional Capital Expenditure in 2019-20	Additional Capital Expenditure in 2020-21
	(a)	(b)	(c)	(d)	(e)
Sub-station (Brownfield)	7705.38	237.67	217.59	7.15	12.93

32. We have considered the submissions made by the Petitioner. The initial spares claimed by the petitioner are within ceiling specified in the 2014 Tariff Regulations. The initial spares are allowed considering the Plant and Machinery cost



excluding IDC, IEDC and land expenses up to 31.3.2019. Accordingly, the initial spares allowed is as under:

(₹ in lakh)				
Element	Plant and Machinery Cost excluding IDC, IEDC and Land expenditure up to cut-off date (31.3.2019)	Initial spares claimed	Ceiling prescribed in the 2014 Tariff Regulations	Initial spares allowed
Sub-station (Brownfield)	7705.38	237.67	6%	237.67

Capital cost as on COD

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

(₹ in lakh)			
Capital Cost as on COD as per Auditor's Certificate	Less: Un-discharged IDC	Less: Computational difference in IDC	Capital Cost as on COD considered for tariff calculation
1	2	3	4=1-2-3
7931.20	30.47	0.31	7900.42

Additional Capital Expenditure (ACE)

34. As per Regulation 3 (13) of the 2014 Tariff Regulations, the cut-off date for transmission assets is 31.3.2022. The Petitioner has claimed ACE for the period 2018-19 and 2019-20 as under:

(₹ in lakh)	
Additional Capital Expenditure claimed	
2018-19	2019-20
445.87	1037.91

35. Since 2019-20 falls beyond the tariff period 2014-19 and is not covered under provisions of the 2014 Tariff Regulations, the projected ACE claimed beyond 2018-19 has not been taken into consideration and the same shall be dealt during the next tariff period as per the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

36. ACE approved are summarized below which is subject to true up:



(₹ in lakh)		
Particulars	Regulation	2018-19
ACE to the extent of Balance & Retention Payment	14 (1)(i)	445.87

Capital cost for the tariff period 2014-19

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

(₹ in lakh)		
Capital Cost as on COD considered for tariff calculation	ACE allowed during 2018-19	Total Estimated Completion Cost up to 31.3.2019
7900.42	445.87	8346.29

Debt-Equity Ratio

38. 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. Accordingly, the capital cost allowed as on the date of commercial operation have been considered in the debt-equity ratio of 70.00:30.00. The debt-equity as on dates of commercial operation and 31.3.2019 considered on normative basis are as under:

Particulars	As on COD		As on 31.03.2019	
	Amount (₹ in lakh)	Percentage	Amount (₹ in lakh)	Percentage
Debt	5530.29	70.00	5842.40	70.00
Equity	2370.13	30.00	2503.89	30.00
Total	7900.42	100.00	8346.29	100.00

Depreciation

39. Depreciation has been dealt with in line of Regulation 27 of 2014 Tariff Regulations. The transmission asset was put under commercial operation during 2018-19. Accordingly, it will complete 12 years beyond the tariff period 2014-19. The Gross Block during 2018-19 has been depreciated at weighted average rate of depreciation (WAROD) (as placed in Annexure-1). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during the 2018-19 is as under:



Particulars	(₹ in lakh)
	2018-19 (Pro-rata) (21 Days)
Opening Gross Block	7900.42
Additional Capitalisation	445.87
Closing Gross Block	8346.29
Average Gross Block	8123.36
Weighted Average Rate of Depreciation (WAROD)	5.0421%
Depreciable Value	6981.65
Depreciation during the year	23.57
Remaining Depreciable Value at the end of the year	6958.08

Interest on Loan (IOL)

40. The IOL has been calculated as per the provisions of Regulation 26 of the 2014 Tariff Regulations as detailed below:

- (i) *Gross amount of loan, repayment of instalments and rate of interest on actual loans have been considered as per petition including additional information.*
- (ii) *The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year.*
- (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."*

41. The Petitioner has submitted that 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. 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.

42. The details of IOL approved for the transmission asset are as follows:



Particulars	(₹ in lakh)
	2018-19 (Pro-rata) (21 Days)
Gross Normative Loan	5530.29
Cumulative Repayment upto previous Year	0.00
Net Loan-Opening	5530.29
Addition due to Additional Capitalization	312.11
Repayment during the year	23.57
Net Loan-Closing	5818.84
Average Loan	5674.56
Weighted Average Rate of Interest on Loan	8.24%
Interest on Loan	26.89

Return on Equity (ROE)

43. The Petitioner has submitted that ROE has been calculated at the rate of 19.61% after grossing up ROE with MAT rate of 20.961% as per provisions of Regulations 24 and 25 of the 2014 Tariff 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.

44. We have considered the submissions made by the Petitioner and the Respondents. 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 2018-19 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.

45. Accordingly, ROE allowed is as follows:

Particulars	(₹ in lakh)
	2018-19 (Pro-rata 21 days)
Opening Equity	2370.13
Addition due to Additional Capitalization	133.76
Closing Equity	2503.89



Particulars	2018-19 (Pro-rata 21 days)
Average Equity	2437.01
Return on Equity (Base Rate)	15.50%
MAT rate for the Financial year	21.549%
Rate of Return on Equity (Pre-tax)	19.758%
Return on Equity (Pre-tax)	27.70

Interest on Loan (IOL)

46. IOL has been calculated as per the provisions of Regulation 26 of the 2014

Tariff Regulations as detailed below:

- (iv) *Gross amount of loan, repayment of instalments and rate of interest on actual loans have been considered as per petition including additional information.*
- (v) *The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year.*
- (vi) *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."*

47. The Petitioner has submitted that 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. 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.

48. The details of IOL approved for the transmission asset are as follows:

Particulars	(₹ in lakh) 2018-19 (Pro-rata for 21 days)
Gross Normative Loan	5530.29
Cumulative Repayment upto previous Year	0.00
Net Loan-Opening	5530.29
Addition due to Additional Capitalization	312.11
Repayment during the year	23.57



Particulars	2018-19 (Pro-rata for 21 days)
Net Loan-Closing	5818.84
Average Loan	5674.56
Weighted Average Rate of Interest on Loan	8.24%
Interest on Loan	26.89

Depreciation

49. Depreciation has been dealt with in line of Regulation 27 of 2014 Tariff Regulations. The transmission asset was put under commercial operation during 2018-19. Accordingly, it will complete 12 years beyond the tariff period 2014-19. The Gross Block during 2018-19 has been depreciated at weighted average rate of depreciation (WAROD) (as placed in Annexure-1). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during the 2018-19 is as under:

Particulars	(₹ in lakh)
	2018-19 (Pro-rata for 21 days)
Opening Gross Block	7900.42
Additional Capitalisation	445.87
Closing Gross Block	8346.29
Average Gross Block	8123.36
Weighted Average Rate of Depreciation (WAROD)	5.0421%
Depreciable Value	7735.09
Depreciation during the year	23.57
Remaining Depreciable Value at the end of the year	7711.53

Operation and Maintenance Expenses (O&M Expenses)

50. The Petitioner has claimed the following O&M Expenses for the transmission asset:

Asset	Particulars	(₹ in lakh)
		2018-19
2 nos. 240 MVAR, 765kV Switchable Line Reactor Bays & 2 Nos 765 kV Line Bays	O&M Expenses	21.72

51. The Petitioner in the instant petition has submitted that O&M Expenses norms provided in the 2014 Tariff Regulations for the tariff period 2014-19 had been arrived 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.

52. We have considered the submissions of Petitioner. The O&M Expenses norms specified for the transmission asset under Regulation 29(4) of the 2014 Tariff Regulations are as follows:

Element	2018-19
Sub-station: 765 kV bay (₹ in lakh per bay)	96.20

53. The O&M Expenses have been worked out as per the 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. The Petitioner has computed normative O&M Expenses as per Regulation 29(4)(a) of the 2014 Tariff Regulations. Accordingly, the O&M Expenses approved is given below:

Asset	(₹ in lakh) 2018-19 (Pro rata for 21 days)
2 nos. 240 MVAR, 765kV Switchable Line Reactors Bays and 2 nos. 765 kV Line bays	21.72
Total O&M Expenses Allowed	21.72

Interest on Working Capital (IWC)

54. 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 29.

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 as on 1.4.2018 (8.70%) plus 350 bps i.e. 12.20% has been considered as the rate of interest on working capital.

55. Accordingly, the interest on working capital approved for the transmission is summarized hereunder:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata for 21 days)
Maintenance Spares	56.63
O&M Expenses	31.46
Receivables	297.15
Total	385.24
Rate of Interest	12.20%
Interest on working Capital	2.70

Annual Transmission charges

56. Accordingly, the annual transmission charges allowed for the transmission assets are as under:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata for 21 days)
Depreciation	23.57
Interest on Loan	26.89
Return on Equity	27.70
Interest on Working Capital	2.70
O&M Expenses	21.72
Total	102.58



Filing fee and the publication expenses

57. 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

58. 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

59. 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

60. The Petitioner has submitted that the billing, collection and disbursement of transmission charges and shall be governed by provision of the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 (2010 Sharing Regulations) as per Regulation 43 of 2014 Tariff Regulations.

61. TANGEDCO has submitted that the work of "Additional inter-regional AC link for import of power into Southern Region i.e. Warora-Warangal and Chilakaluripeta-Hyderabad-Kurnool 765 kV Link" (line) was awarded to WKTL, a subsidiary of Essel



Infra under TBCB route. The execution of the line was stalled because of the objections of Western Coal Field Limited (WCL) and Singareni Collieries Company Limited (SCCL) as the Warora-Warangal Transmission Line was crossing the proposed coal fields. The issue is being taken up by Ministry of Power (MoP) with Ministry of Coal (MoC). TANGEDCO has submitted that in the present case, WKTL has completely stalled the project and there is no possibility of putting the assets into beneficial use. Hence, even if COD of the transmission assets is approved by the Commission in anticipation, WKTL is liable to pay the transmission charges as per the 2010 Sharing Regulations. TANGEDCO has submitted that the Commission in order dated 25.1.2016 in Petition No. 253/TT/2015 has held that in case of delay on account of commissioning of the concerned generating station or in COD of the upstream or downstream transmission system, the DIC causing delay shall bear the transmission charges. TANGEDCO has further submitted that as WKTL has not commissioned its entire scope of the project, the transmission charges are to be borne by WKTL till commissioning of the assets in their scope.

62. WKTL has submitted that the scheduled COD of the line under its scope for import of power into Southern Region as per TSA is 6.11.2019. However, there is time over-run in case of the line due to certain *force majeure* events that are beyond WKTL's reasonable control. The cumulative impact of such *force majeure* events on the 'critical path' of the line, has led to delays in the completion of the foundation, erection and stringing works of the line. The time over-run in case of the line is due to ROW, overlapping of route alignment of the Petitioner's 800 kV HVDC Raigarh-Pugalur Transmission Line with the transmission lines of WKTL, unprecedented heavy rainfall in the States of Telangana and Andhra Pradesh, objections raised by the Telangana State Industrial Infrastructure Corporation (TSIIC) on the ground that TSIIC was in the process of acquiring the land over which the said lines were being



constructed, for development of industries, directions issued by Western Coalfields Ltd. (WCL) and Singareni Collieries Company Ltd. (SCCL) to stop construction of tower and Prof. Jayashankar Open Cast project, crossing of proposed wayside amenity and helipad on the Project line raised by National Highway Authority of India (NHAI), etc.

63. WKTL has further submitted that WKTL has filed Petition No. 334/MP/2020 for extension of the scheduled COD under Article 4.4.2 of the TSA. WKTL has submitted that in terms of Article 4.4.2 of the TSA, if an element or the project is not put into commercial operation within the scheduled COD on account of *force majeure* events, then such scheduled COD shall be extended. Therefore, WKTL is eligible for extension of the scheduled COD till the actual COD of the line in view of the afore-said *force majeure* events due to which WKTL was hindered from performing its obligations under the TSA. WKTL has further submitted that it is not liable to pay transmission charges for the period from 11.3.2019 to 9.11.2019 as the same is outside the scope of the terms and conditions of the TSA executed by WKTL as it was required to commission its transmission system only by November, 2019.

64. We have considered the submissions of the Petitioner, TANGEDCO and WKTL. WKTL's prayer for extension of scheduled COD of its transmission asset due to *force majeure* conditions has already been decided by the Commission vide order dated 7.2.2021 in Petition No. 334/MP/2020. As such, there is no necessity for us to dwell into the issue in this order. The relevant portion of the order dated 7.2.2021 is extracted hereunder:

"35. During the course of hearing on 25.8.2020, in response to a specific query of the Commission regarding likely COD of the transmission Project, learned counsel for the Petitioner informed the Commission that since many of the force majeure events such as pending court proceedings, objections raised by TSIC and pendency of wildlife approval are still continuing, the Petitioner is not in position to confirm the likely COD



of the Project. Learned counsel further submitted that lenders of the Petitioner are also in process of substituting Essel Infra project Limited with their nominee, Adani Transmission Limited (successful bidder) due to continuous defaults in debt payment.

36. It is observed that events cited above are still continuing and the Petitioner has approached the Commission for declaration of these events as force majeure events and requested for extension of SCOD of the Project, in advance. The Petitioner itself stated that it is unable to quantify and to confirm the likely COD of the Project as some of above events are still continuing. Therefore, we are of the view that since the project has not been completed by the Petitioner till date and is still under implementation with uncertainty about the likely COD, it would not be appropriate to take a view on the claimed force majeure issues and extension of SCOD at this stage. Accordingly, the Petitioner is granted liberty to approach the Commission to seek the appropriate relief for force majeure events, after completion of the Project.”

65. TANGEDCO has contended that the transmission charges for the period from the COD of the transmission asset till the COD of the transmission lines under the scope of WKTL should be borne WKTL.

66. We have already approved the COD of the transmission asset as 11.3.2019 based on the recommendation of the 35th SRPC meeting for early commissioning of the line reactors at Kurnool Sub-station for controlling the voltage at Kurnool Sub-station. Therefore, we are of the view that the transmission charges approved in this order should be included in PoC pool from COD of the Asset i.e. 11.3.2019 to up to SCOD of the instant Asset i.e. 8.11.2019. It is observed from minutes of the 35th SRPC that RPC approved only for early commissioning of the line reactors at Kurnool Sub-station on the anticipation that the associated transmission lines will be expected to be commissioned in the month of November, 2019. The associated transmission line is scheduled to be commissioned on 9.11.2019. However, the associated transmission line has not achieved COD as anticipated. Therefore, the petitioner is directed to approach SCM/RPC for continuing to use the line reactor as bus reactor post scheduled COD of the associated transmission line and treatment of transmission charges beyond scheduled COD.

67. Accordingly, the billing, collection and disbursement of the transmission charges approved in this order 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 as provided in Regulation 43 of the 2014 Tariff Regulations.

68. To summarise, annual transmission charges allowed for the instant transmission assets for the year 2018-19 (pro-rata for 21 days) are ₹102.58 lakh and the petitioner is directed to approach SCM/RPC for continuing to use the line reactor as bus reactor post scheduled COD of the associated transmission line and treatment of transmission charges beyond scheduled COD.

69. This order disposes of Petition No.248/TT/2019.

sd/-
(Arun Goyal)
Member

sd/-
(I. S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson



Annexure-1

(₹ in lakh)					
Capital Expenditures as on COD	Admissible Capital Cost as on COD for tariff purpose	Projected Additional Capital Expenditure		Rate of Depreciation as per Regulation 27	Annual Depreciation as per Regulation
		2018-19	Total		2018-19
Freehold Land	365.97	-	-	-	-
Sub-station Equipment	7534.45	445.87	445.87	5.28%	409.59
Total	7,900.42	445.87	445.87		409.66
Average Gross Block (₹ in lakh)					8,123.36
Weighted Average Rate of Depreciation					5.0421%

