CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 103/TT/2019

Coram:

Shri P. K. Pujari, Chairperson Shri I. S. Jha, Member Shri Arun Goyal, Member

Date of Order: 05.03.2021

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 of transmission tariff from COD to 31.3.2019 for 2x1500 MVA 765/400 kV ICTs along with associated bays at Srikakulam Pooling Station under "Common System associated with East Coast Energy Private Limited and NCC power projects limited LTOA generation projects in Srikakulam Area-part-C" in Southern and Eastern Region.

And in the matter of

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

.... Petitioner

Vs

- Tamil Nadu Generation and Distribution Corporation Ltd. (TANGEDCO), (Formerly Tamil Nadu Electricity Board-TNEB), NPKRR Maaligai, 800, Anna Salai, Chennai-600002.
- Transmission Corporation of Andhra Pradesh Ltd. (APTRANSCO), Vidyut Soudha, Hyderabad-500082.
- Kerala State Electricity Board (KSEB), Vaidyuthi Bhavanam Pattom, Thiruvananthapuram-695004.
- 4. Electricity Department, Government of Goa, Vidyuti Bhawan, Panaji, Goa-403001.
- 5. Electricity Department, Government of Pondicherry, Pondicherry-605001.



- Eastern Power Distribution Company of Andhra Pradesh Ltd. (APEPDCL), P&T Colony, Seethmmadhara, Vishakhapatnam.
- Southern Power Distribution Company of Andhra Pradesh Ltd. (APSPDCL), Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana Gunta, Tlrupati-517501.
- Central Power Distribution Company of Andhra Pradesh Ltd. (APCPDCL), Corporate Office, Mint Compound, Hyderabad-500063.
- Northern Power Distribution Company of Andhra Pradesh Ltd. (APNPDCL), Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet, Warangal-506004.
- Bangalore Electricity Supply Company Ltd. (BESCOM), Corporate Office, K. R. Circle, Bangalore-560001, Karnataka.
- Gulbarga Electricity Supply Company Ltd. (GESCOM), Station Main Road, Gulburga, Karnataka.
- Hubli Electricity Supply Company Ltd. (HESCOM), Navanagar, PB Road, Hubll, Karnataka.
- Mangalore Electricity Supply Company Ltd. (MESCOM), Corporate Office, Paradigm Plaza, AB Shetty Circle, Mangalore-575001, Karnataka.
- Chamundeswari Electricity Supply Corporation Ltd. (CESC), # 927, L J Avenue Ground Floor, New Kantharaj Urs Road, Saraswatipuram, Mysore-570 009, Karnataka.
- 15. Bihar State Electricity Board, Vidyut Bhawan, Bailey Road, Patna-80000I.
- West Bengal State Electricity Distribution Company Ltd., Vidyut Bhawan, Bidhan Nagar, Block- DJ, Sector-II, Salt Lake City, Kolkata-700091.
- Grid Corporation of Orissa Ltd., Shahid Nagar, Bhubaneswar-751007.



- Damodar Valley Corporation, DVC Tower, Maniktala, Civic Centre, VIP Road, Kolkata-700054.
- 19. Power Department, Government of Sikkim, Gangtok-737101.
- 20. Jharkhand State Electricity Board, In Front of Main Secretariat, Doranda, Ranchi-834002.
- East Coast Energy Pvt. Ltd.,
 7-1-24, B Block, 5th Floor, Roxana Towers,
 Green lands, Begumpet, Hyderabad-500016.
- 22. NCC Power Projects Ltd., 6th Floor, NCC House, Madhapur, Hyderabad-500081.
- 23. Karnataka Power Transmission Corporation Ltd. (KPTCL), Kaveri Bhavan, Bangalore-560009.
- 24. Tamil Nadu Transmission Corporation Ltd., NPKRR Maaligai, 800, Anna Salai, Chennai-600002.
- 25. Transmission Corporation of Telangana Ltd., Vidhyut Sudha, Khairatabad, Hyderabad-500082.

...Respondents

For Petitioner:	Shri S. S. Raju, PGCIL
	Shri A. K. Verma, PGCIL
	Shri V. P. Rastogi, PGCIL
	Shri B. Dash, PGCIL
	Shri Anil Kumar Meena, CTU

For Respondent: Shri S. Vallinayagam, Advocate, TANGEDCO Dr. R. Kathiravan, TANGEDCO

<u>ORDER</u>

The present petition has been filed by Power Grid Corporation of India Ltd. ("the Petitioner") for determination of transmission tariff from COD to 31.3.2019 under Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff



Regulations") of 2 x 1500 MVA 765/400 kV ICTs along with associated bays at Srikakulam Pooling station (hereinafter referred as "assets" or "transmission assets") under "Common System associated with East Coast Energy private limited (in short, 'East Coast Energy') and NCC Power Projects Limited (in short, 'NCC Power') LTOA generation projects in Srikakulam Area-part-C" in Southern and Eastern Region (hereinafter referred as "the Transmission Project").

- 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, as per para-8.2 above.
 - 2) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.
 - 3) Tariff may be allowed on the estimated completion cost.
 - 4) Allow the Petitioner to approach Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19.
 - 5) 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 Tariff Regulations 2014.
 - 6) 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.
 - 7) 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.
 - 8) 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.
 - 9) Allow the Petitioner to bill and recover any taxes and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.
 - 10) Allow the Petitioner to recover GST from the beneficiaries, if GST is imposed on transmission charges in future.



- 11) 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.
- 12) Allow the Petitioner to bill tariff from DOCO and also the Petitioner may be allowed to submit revised Certificate and tariff Forms (as per the relevant Regulation) based on actual DOCO, if any.

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

Background

3. The Transmission Project was discussed and agreed in the 30th Standing Committee meeting of Southern Region held on 13.4.2010 and later modified in the 35th Standing Committee meeting of Southern Region held on 4.1.2013. The Transmission Project was also discussed and agreed for implementation in the special SRPC meeting held on 25.11.2010. The Transmission Project was also discussed and agreed in Standing Committee meeting of Eastern Region held on 28.12.2010. The prior approval under Section 68 of the Electricity Act, 2003 for the Transmission Project was accorded by Ministry of Power, Government of India vide ref. No. 11/4/2007-PG dated 29.7.2010.

4. The Investment Approval for the Transmission Project was accorded by the Board of Directors of the Petitioner in its 285th meeting held on 28.3.2013 at an estimated cost of ₹51420 lakh including IDC of ₹2879 lakh based on February, 2013 price level (notified vide Memorandum Ref No. C/CP/Srikakulam-Part-C dated 5.4.2013).

5. The approval of RCE (Revised Cost Estimate) for the Transmission Project was accorded by Board of Directors of the Petitioner in its 339th meeting held on 29.3.2017 at an estimated cost of ₹70310 lakh including IDC of ₹7643 lakh based on August, 2016 price level (notified vide Memorandum Ref No. C/CP/PA 1617-03-0U-RCE009 dated 31.3.2017).



6. The Commission vide order dated 31.5.2010 in Petition No. 233/2009 had accorded the Regulatory Approval for execution of the Transmission Project.

7. The scope of work covered under the Transmission Project "Common System associated with East Coast Energy Private Limited and NCC Power Projects Limited LTOA generation projects in Srikakulam Area-part-C" is as follows:

Substation

a) Up gradation of 765/400 kV Srikakulam Pooling Station (765 kV-40kA, 400 kV-50kA)

The Srikakulam 765/400 kV Substation (initially charged at 400 kV) is envisaged under Part-A shall be upgraded to its rated voltage 765 kV under this project. The 400 kV switchyard was to be constructed as AIS and 765 kV switchyard to be constructed as GIS. The upgradation shall comprise of following scope of works:

- i. 2x1500 MVA, 765/400 kV transformers along with associated 765 kV & 400 kV Bays.
- ii. 2 nos. 765 kV line bays for termination of Srikakulam Pooling Station-Angul 765 kV D/C line.

b) Extension of 765/400 kV Angul Sub-station

This sub-station is owned by the Petitioner and shall be executed to accommodate following bays under this project:

i. 2 number 765 kV line bays for termination of Srikakulam PS-Angul 765 kV D/C line.

Reactive Compensation

a) Bus Reactors (765 kV)

i. 1x330 MVAR 765 kV bus reactor at Srikakulam Pooling Station.

b) Line Reactors (765 kV)

- ii. 240 MVAR Switchable line reactors with 800 ohms NGR at each end at Srikakulam Pooling station and Angul for both the circuits of Srikakulam Pooling Station-Angul 765 kV D/C line.
- 8. The scope of work was revised subsequent to approval of RCE as follows:



Sub-station

a) Establishment of new 765/400 kV Srikakulam Pooling Station

- i. 2x1500 MVA, 765/400 kV transformers along with associated 765 kV & 400 kV bays.
- ii. 2 nos. 765 kV line bays for termination of Srikakulam Pooling Station-Angul 765 kV D/C line.

b) Extension of 765/400 kV Angul Sub-station

i. 2 nos. 765 kV line bays for termination of Srikakulam Pooling Station-Angul 765 kV D/C line.

Reactive Compensation

a) Bus Reactors (765 kV)

i. 1x330 MVAR 765 kV Bus reactor at Srikakulam Pooling Station.

b) Line Reactors (765 kV)

 ii. 2x240 MVAR Switchable line reactors with 800 ohms NGR each at Srikakulam Pooling station and Angul for both the circuits of Srikakulam Pooling Station-Angul 765 kV D/C line.

(Note: The transmission system inter alia comprised of establishment of 765/400 kV pooling station at Srikakulam, where power from IPPs shall be pooled and transmitted to various beneficiaries through Srikakulam pooling station-Angul 765 kV D/C line. The entire system was to be initially operated at 400 kV (under Srikakulam-Part-A) and to be upgraded to 765 KV at a later date (under Srikakulam-Part-C). However, due to changed load generation scenario in Southern Region (SR), it was agreed to operate the Srikakulam polling station at its rated voltage of 765 kV right from the beginning. Accordingly, new 765/400 kV substation at Srikakulam is being established under the project).

9. The details of the petitions in which the transmission asset of the

SI. No.	Asset Name	COD	Remarks
1	2 nos. 765 kV Line bays along with 2x240 MVAR Switchable Line reactors each at Srikakulam & Angul for termination of both circuit of 765 kV D/C Srikakulam-Angul Transmission line, and 1x330 MVAR 765 kV Bus Reactor at Srikakulam	1.2.2017 (Actual)	Covered under Petition No. 231/TT/2016 order dated 23.7.2018
2	2x1500 MVA 765/400 kV ICTs along with associated bays at Srikakulam Pooling station	7.8.2018 (Actual)	Instant petition

Transmission Project are covered as under:



10. The tariff for transmission asset (2x1500 MVA 765/400 kV ICTs along with associated bays at Srikakulam Pooling Station) was claimed earlier under Petition No. 231/TT/2016 on the basis of the anticipated COD of 31.3.2018. However, the Commission vide order dated 23.7.2018 had disposed the petition, *inter alia*, considering the fact that the asset did not achieve commercial operation by then and directed the Petitioner to file a fresh petition after COD of the asset. The Petitioner has claimed that the transmission asset has now achieved COD on 7.8.2018 and, accordingly, has filed this petition for claiming tariff for the transmission asset. Further, with COD of transmission asset, the entire scope of the Transmission Project gets completed.

11. The details of the Annual Transmission Charges claimed by the Petitioner for 2014-19 tariff period are as under:

	(₹ in lakh)
Particulars	2018-19
	(Pro-rata-
	237 days)
Depreciation	392.16
Interest on Loan	399.79
Return on Equity	436.95
Interest on Working Capital	36.19
O&M Expenses	214.56
Total	1479.65

12. The details of the interest on working capital (IWC) claimed by the Petitioner for 2014-19 period are as under:

	(₹ in lakh)
Particulars	2018-19 (Pro-rata- 237 days)
Maintenance Spares	49.47
O&M Expenses	27.48
Receivables	379.08
Total	456.04
Rate of Interest	12.20%
Interest on working Capital	36.19



13. The Petitioner has served the copy of the petition upon the Respondents and notice of this tariff petition was 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 TANGEDCO, Respondent No. 1, vide affidavit dated 2.5.2019 and the Petitioner has filed rejoinder, vide affidavit dated 19.5.2020, to the reply of TANGEDCO.

14. The Petition was last heard on 29.6.2020 and the Commission reserved the order in the Petition.

15. Having heard the representatives of the Petitioner and the Respondent TANGEDCO, and perused the material on record, we proceed to dispose of the petition.

16. This order has been issued after considering the submission made in the petition dated 28.12.2018, Petitioner's affidavits dated 31.7.2020, 5.5.2020, 19.5.2020 and reply of TANGEDCO vide affidavit dated 2.5.2019.

Date of Commercial Operation (COD)

17. The Petitioner has claimed COD for the transmission asset as 7.8.2018. In support of COD, the Petitioner has submitted CEA energisation certificates dated 8.11.2016 and 27.12.2016 under Regulation 43 of CEA (Measures Related to Safety & Electricity Supply) Regulations, 2010, RLDC Charging Certificate dated 23.8.2018 and CMD Certificate as required under the Grid Code.



18. Taking into consideration the submissions of the Petitioner, CEA energisation

certificates, RLDC Charging Certificate and CMD Certificate, COD of the

transmission asset is approved as 7.8.2018.

Capital Cost

19. 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."

20. The Petitioner has submitted details of FR apportioned approved cost, RCE

apportioned approved cost, capital cost as on COD and estimated additional capital

expenditure incurred or projected to be incurred during 2018-19 along with

estimated completion cost along with Auditor's certificate dated 24.11.2018 in

support of the same, for the transmission asset, as under:

				(₹ in lakh)
FR	RCE	Expenditure	Estimated Expenditure	Estimated
Apportioned	Apportioned	up to COD	in 2018-19	Completion
Approved	Approved			Cost
Cost (FR)	Cost			
11167.63	13040.59	11512.62	17.21	11529.82



Cost Over-run

21. The Petitioner has submitted Form-5 in the petition and also submitted the following reasons of cost variation:

a) The cost variation can be bifurcated into two parts i.e. one from FR cost to awarded cost of various contracts and other from awarded cost to final execution cost/completion cost.

b) Transmission projects are finalised based on system requirements, comprising *inter-alia* the transmission line(s) and associated substations. FR is prepared indicating the scope of work, description of equipment & bill of quantities, completion schedule and cost estimate of the project and its funding. For the purpose of working out the estimated cost of the project (FR cost), the unit rates considered for preparation of cost estimates are generally taken from Schedule of Rates.

For implementation of the project, the Petitioner divides the project into C) defined packages based on the definite scope of works falling under various categories viz., 'Supply-cum-Installation', 'Supply', 'Civil', 'Consultancy' packages etc. for the purpose of competitiveness, efficiency, availability of prospective bidders, project execution schedule, combination/clubbing of equipment/services that can be advantageously engineered and independence with regard to its work content and clear cut terminal points for interfacing. Bids are invited against the various packages from prospective bidders. Contracts for various packages under this project are awarded to the overall lowest evaluated and responsive bidder, on the basis of Competitive Bidding, after publication of Notice Inviting Tender (NIT) in leading Newspapers. Thus, the award prices represent the lowest prices available considering prevalent market forces and perception of bidders at the time of bidding of various packages. Therefore, in certain cases variation between estimated price and actual price especially in unit rates of individual Bill of Quantity (BOQ) items are inevitable and such variations are beyond the control of the executing agencies.

d) The price variation from awarded cost to final execution cost is mainly on account of PV based on indices as per provision of respective contracts. In



addition to the above, there is variation in taxes and duties paid during the execution of the project.

e) The cost over-run was mainly due to factors which were beyond its control and it may be condoned.

22. We have considered the submissions of Petitioner. The estimated completion cost of ₹11529.82 lakh is beyond FR apportioned approved cost of ₹11167.63 lakh, but is within the RCE apportioned approved cost of ₹13040.59.

Time over-run

23. As per the investment approval, the scheduled COD of the 2x1500 MVA 765/400 kV ICTs along with associated bays at Srikakulam Pooling Station was 27 months from the date of investment approval. The date of investment approval being 28.3.2013, the scheduled COD was 28.6.2015 against which it achieved COD on 7.8.2018 after a time over-run of about 37 months and 9 days (1136 days). The Petitioner has attributed the time over-run to the delay in implementation of 765 kV Angul-Srikakulam Transmission Line. The Petitioner has submitted that delay in 765 kV Angul-Srikakulam Transmission Line is mainly attributable to delay in forest clearance, RoW issues during construction of transmission line, delay in land acquisition at Srikakulam, severe RoW issues at Angul, law and order problem at Angul sites and cyclones (Phailin and Hudhud).

24. The Petitioner has submitted the following in connection with implementation of the transmission asset:

a) The transmission asset i.e. 2x1500 MVA 765/400 kV ICTs along with associated bays at Srikakulam Pooling Station was ready in November/ December 2016 and CEA clearance under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 was also received for the same vide certificates dated 8.11.2016 and 27.12.2016, respectively.



However, due to delay in commissioning of associated generation projects along with their associated 400 kV transmission lines, the transmission asset could not be utilized and put under commercial operation along with 765 kV D/C Angul-Srikakulam Transmission Line and 765 kV Srikakulam Sub-station on 1.2.2017 as utilization of these ICTs depended upon the COD of the downstream system.

b) Therefore, the transmission asset at Srikakulam were eventually put into commercial operation along with COD of 400 kV D/C Srikakulam-Garividi Transmission Line (executed under TBCB route) in August, 2018.

c) The Commission in Petition Nos. 231/TT/2016 (comprising of transmission asset) and 230/TT/2016, had approved COD of the transmission scheme comprising 765 kV D/C Angul-Srikakulam Transmission Line and 765 kV Srikakulam Sub-station and condoned the time over-run in respect of those assets.

d) The transmission asset is part of 765 kV Srikakulam Sub-station which could be made ready only along with Srikakulam Sub-station and their charging was possible only after the readiness/ commissioning of upstream/ downstream lines i.e. 765 kV Angul-Srikakulam and 765 kV Srikakulam-Vemagiri Transmission Lines.

e) Chronological order in respect of land acquisition for Srikakulam substation is as under:

SI. No.	Date	Description			
1	5.12.2011	Submitted proposal for Land acquisition			
2	12.12.2012	Srikakulam District Gazette regarding draft declaration under Section 6 of Land Acquisition Act, 1884			
3	10.5.2013 Proceeding of LAO & RDO, Award of Land (u Section II of Land Acquisition Act, 1884) Cons Award under Section 11 (2) of the Land Acqui Act, 1884				
4	22.5.2013	Land delivery Certificate			

f) Keeping in view the fact that land acquisition takes considerable time, the Petitioner started the process of land acquisition in advance so as to receive the land in a time bound manner and not to adversely affect the project. The Petitioner was not able to acquire this land at Srikakulam in time.



Due to non-finalization of land, the work on the transmission line could not be started and, hence, there was delay of about 12 months on this account.

g) Various problems occurring concurrently could have delayed the project enormously, but the Petitioner curtailed the delay. RoW in Nayagarh, Berhampur section could be resolved as late in July/ August, 2016. Thereafter, the Petitioner completed the work on war footing and put the 765 kV D/C Angul-Srikakulam Transmission Line along with sub-station at Srikakulam and Angul into commercial operation in February, 2017.

h) The Petitioner had made earnest efforts to put the transmission asset into commercial operation. The time over-run is attributable to unavoidable delay in associated transmission line due to which the Petitioner had no option but to shift the readiness of assets (covered in this petition) matching with associated transmission line and sub-station.

25. The Commission, vide RoP of hearing dated 11.2.2020, 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 5.5.2020 has submitted the following chronology of events:

		Period of activity			Time overrun	Decesso for	
Activity	Plar	ned	Achieved		(In Months	Reasons for time overrun	
	From	То	From	То	or days)		
Land Acquisition				NA			
LOÁ	8.5.2013		6.5.2	2013		Detailed time over run	
Supplies (Structures, equipment, etc.)	5.2.2014	26.3.2015	5.5.2014	19.10.2016		justification is mentioned at page nos.: 11-20 in the original	
Civil Works and Erection	13.8.2013	21.5.2015	26.11.2013	23.12.2016		petition along with supporting	
Testing and COD	22.5.2015	28.6.2015	16.5.2015	7.8.2018		documents placed at page nos.: 293-507.	

26. We have gone through the submissions of the Petitioner. There is time overrun of about 37 months and 9 days (1136 days) in case of the transmission asset. The Petitioner has submitted that the transmission asset is part of 765 kV



Srikakulam Sub-station and it could be put into commercial operation only on the completion of the Srikakulam Sub-station and the charging of the transmission line was possible only after the readiness/ COD of upstream/ downstream lines i.e. 765 kV Angul-Srikakulam Transmission Line and 765 kV Srikakulam-Vemagiri Transmission Line.

27. The Petitioner has contended that the Commission has already condoned the time over-run in case of Angul-Srikakulam 765 kV D/C Transmission Line and 2 nos. 765 kV line bays along with 2X240 MVAR switchable line reactors at Srikakulam and Angul sub-stations vide orders dated 19.7.2018 and 23.7.2018 in Petition No. 230/TT/2016 and Petition No. 231/TT/2016 respectively. In view of this, the Petitioner has requested that the time over-run in case of instant ICTs at Srikakulam Sub-station should also be condoned as they are linked with the said two associated transmission assets.

28. We observe that the Petitioner has claimed that the 2X1500 MVA ICTs along with associated bays were ready in the month of November/ December, 2016. In support of readiness of the asset, the Petitioner has submitted CEA energisation certificate dated 8.11.2016 and 27.12.2016. The ICTs are placed at Srikakulam Substation and the usage of the ICTs at Srikakulam Sub-station was changed as the associated generation projects were abandoned. Therefore, the Petitioner was not able to put into commercial operation the ICTs at Srikakulam alongwith Srikakulam Sub-station.

29. The time over of 20 months and 3 days, i.e. upto 1.2.2017, in case of 765 kV D/C Srikakulam-Angul Transmission Line has already been condoned by the Commission vide order dated 19.7.2018 in Petition No. 230/TT/2016. The time overrun of 19 months and 4 days, i.e. upto 1.2.2017, in case of the Switchable Line



Reactors at Srikakulam and Angul for termination of Srikakulam-Angul Transmission

Line, and Reactors at Srikakulam Pooling Station was condoned vide order dated

23.7.2018 in Petition No. 231/TT/2016. The relevant extracts of the order dated

19.7.2018 in Petition No. 230/TT/2016 is as follows:

"35. We have considered the submissions of TANGEDCO, KSEB and the petitioner with respect to the time over-run. The time over-run of 20 months and 03 days has been mainly attributed to the reasons for (a) delay in obtaining forest clearance (b) RoW issues faced during construction of the transmission line and various court cases and orders for relocation of tower at various locations.

36. It is noticed that the petitioner was required to obtain the forest clearance from 16 sections in respect of the transmission line. The petitioner had submitted the proposal for forest clearance for line on 28.6.2012. The forest approval in Ghumsur south division section was obtained on 29.1.2016. The last forest approval was obtained for Berhampur section on 11.2.2016. Accordingly, the forest clearance for the entire transmission line was obtained on 11.2.2016. The forest clearance took around 03 years and 08 months. As per the Forest (Conservation) Amendment Rules, 2004 notified by MoEF on 3.2.2004, the timeline for forest approval after submission of proposal is 210 days by the State Government and 90 days by the Forest Advisory Committee of Central Government, resulting in processing time of 300 days. As against the statutory period of 300 days for processing and obtaining the forest clearance. We are of the view that this period is beyond the control of the petitioner and the petitioner cannot be held responsible for the delay.

37. It is also observed that there were severe RoW problems at location nos. 60/1, 49, 101. The petitioner faced similar RoW issues and court cases at other locations as well. The petitioner has also submitted the documents in support of the same. The petitioner was not able to take up any work from 15.9.2014 to 14.10.2016 at location no.60/1. We are of the view that the delay at this location from 15.9.2014 to 14.10.2016 (25 months) is beyond the control of the petitioner.

38. In our view, on account of delay in forest clearance, which is beyond the control of the petitioner, the COD of the assets was delayed. Accordingly, the entire period of time overrun in respect of instant asset is condoned. Since, the other reason for time over-run such as RoW issues and court cases were resolved during the period of obtaining the forest clearance, the said period ran parallel to the period consumed for obtaining the forest clearance and accordingly, subsumed in the time for obtaining forest clearance."

30. Relevant extract from Order dated 23.7.2018 in Petition No. 231/TT/2016 is

as follows:

"30. We have considered the submissions of TANGEDCO, KSEB, BSP(H)CL and the petitioner with respect to the time over-run. The petitioner has submitted that the asset is delayed due to non-readiness of the 765 kV D/C Srikakulam-Angul transmission line. With regard to delay in transmission line the petitioner has submitted that delay in forest clearance, land acquisition at Srikakulam, ROW issues at Angul substation, ROW in construction of 765 kV D/C Srikakaulam-Angul transmission line, statutory clearances for construction of 765 kV D/C Srikakaulam-Angul transmission line, cyclonic storm, Phailin and extended monsoon. The petitioner has submitted that due



to unavoidable delay in transmission line, the petitioner has shifted the commissioning of assets matching with associated line. The asset covered in the instant petition is 765 kV line bays and switchable line reactors and bus reactors. The assets are associated with the 765 kV D/C SrikakulamAngul transmission line. The time delay due to transmission line is already taken cognizance in Petition No 230/TT/2016 and the time delay of 19 months 4 days has been condoned in Petition No 230/TT/2016. We agree with the submission of the petitioner and the assets covered in the instant petition are delayed due to non-readiness of 765 kV transmission line and accordingly, the time delay of 19 months 4 days is beyond the control of the petition and the same has been condoned."

31. The instant 2x1500 MVA 765/400 kV ICTs along with associated bays at Srikakulam Pooling Station was ready for charging along with all the other assets of the subject scheme as may be seen from the CEA energisation certificates dated 8.11.2016 and 27.12.2016 under Regulation 43 of CEA (measures relating to Safety and Electric Supply) Regulations, 2010. Thus, the transmission asset was simultaneously completed along with all other assets of the subject scheme. Further, the instant ICTs are dependent on the COD of Srikakulam Sub-station and other assets of the subject scheme. Therefore, the instant ICTs could not have been put into commercial operation before COD of the Srikakulam Sub-station. As the time over-run in case of Srikakulam Sub-station and associated transmission line upto 1.2.2017, i.e. 584 days, has already been condoned, the time over-run from COD and upto 1.2.2017 in case of the instant ICTs is also condoned.

32. As regards the time over-run from 1.2.2017 to 7.8.2018, the Petitioner has submitted that due to abandonment of generation projects by East Coast Energy and NCC Power, the instant ICTs could not be put to use. The Petitioner has submitted that the issue was discussed in meetings of Standing Committee and Regional Power Committee and based on that, it connected the instant ICTs to 400 kV Srikakulam-Garividi Transmission Line (being implemented by the Petitioner under TBCB route) so that the instant ICTs could be put to use. The Petitioner had filed Petition No. 258/TT/2018 for determination of tariff for 2 Nos. of 400 kV line



bays at Srikakulam for termination of Srikakulam-Garividi 400 kV Quad D/C line. It is observed that the Investment Approval for these two 400 kV line bays was accorded on 24.10.2016 and were scheduled to be put into commercial operation within 30 months i.e., by 23.4.2019. COD of the bays (implemented by the Petitioner under cost-plus route) as well as the Srikakulam-Garividi 400 kV Quad D/C Transmission Line (implemented by the Petitioner under TBCB route) is 7.8.2018. The actual COD of the instant ICTs is also 7.8.2018, which is same as that of the TBCB line implemented by the Petitioner and the 400 kV line bays at Srikakulam for termination of the TBCB line. It is clear that the Petitioner had taken the decision to match the instant ICTs with the TBCB line (and associated bays under cost-plus route) implemented by the Petitioner. The Petitioner on its own took a conscious decision, even though the instant ICTs were stated to be ready in November/ December, 2016 to match COD of the instant ICTs with COD of the TBCB line under its own scope. The Petitioner had the option to approach the Commission for approval of COD of instant ICTs under proviso (ii) to Regulation 4(3) of the 2014 Tariff Regulations for declaration of COD. However, the Petitioner chose not to do so. Therefore, in our view, the delay from 1.2.2017 to 7.8.2018 is due to the decision of the Petitioner to match COD of transmission assets with TBCB line under its own scope. Therefore, we are not inclined to condone the time over-run of 552 days i.e. from 1.2.2017 to 7.8.2018.

33. In view of the above deliberations, the time over-run of 584 days, out of the total time over-run of 1136 days, in case of the instant ICTs is condoned. The time over-run of 552 days, i.e. from 1.2.2017 to 7.8.2018 is not condoned as it was the decision of the Petitioner to match the instant ICTs with the Srikakulam-Garividi Transmission Line.



Interest During Construction (IDC)

34. The Petitioner has claimed Interest During Construction (IDC) of ₹1027.52 lakh for the transmission asset and submitted Auditor's Certificate dated 24.11.2018 in support of the same. The Petitioner has submitted statement showing computation of IDC along with year-wise details of 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 discharged during 2018-19	IDC discharged during 2019-20
	1027.52	860.63	166.90	125.60	41.30

35. We have worked out IDC on the basis of available information and relying on loan amount as per Form 9C. It is observed that all the loans availed for funding have been drawn after the scheduled COD, i.e. 28.6.2015. As out of the total time over-run of 1136 days of time over-run, 584 days has been allowed and 552 days has been disallowed, the IDC approved is as follows:

				(₹ in lakh)
	Allowable	IDC disallowed	as on COD	Allowable
IDC claimed as per	IDC as on	Time over-run	Un-	IDC as on
Auditor certificate	COD	not condoned /	discharged	COD (Cash
	(Accrual)	Excess claim	liability	basis)
1027.52	147.42	880.10	0.00	147.42

Incidental Expenditure During Construction (IEDC)

36. The Petitioner has claimed IEDC of ₹505.71 lakh for the transmission asset and submitted Auditor's Certificate dated 24.11.2018 in support of the same. The Petitioner has submitted that entire IEDC has been discharged up to COD. The IEDC claimed is within the percentage of hard cost as indicated in the abstract cost estimate. IEDC allowed, subject to true up, is as under:



IEDC claimed as	Allowable IEDC	IEDC Disallowed as on COD	(₹ in lakh) IEDC Allowed
per Auditor's certificate	as on COD (Accrual)	due to Time over-run not condoned	on cash basis as on COD
1	2	3	4
505.71	505.71	142.50	363.21

37. 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 Nos. 95 of 2018 and 140 of 2018 as implemented vide Commission's Order dated 4.2.2020 in Petition No. 1/TT/2019, at the time of truing up, after all the assets under the scope of the Transmission Project are put to commercial use and the actual quantum of IEDC is known. The Petitioner is directed to furnish IEDC details of all the assets of the Transmission Project at the time of true-up of capital cost.

Initial Spares

38. This has been dealt in line with Regulation 13 of the 2014 Tariff Regulations. The Petitioner has claimed initial spares corresponding to greenfield sub-station under for transmission asset and has submitted Auditor's Certificate dated 24.11.2018 in support of the same. The Petitioner vide affidavit dated 5.5.2020 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 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 (31.03.2019)	Initial Spares Claimed
	(a)	(b)
Sub-station (Greenfield)	9996.59	121.53



39. We have considered the submissions made by the Petitioner. The initial spares are allowed considering the Plant and Machinery cost excluding IDC, IEDC and land expenses up to 31.3.2019. The initial spare claimed by the Petitioner are within the norms specified for the transmission assets is within the norm specified in Regulation 13(d) of the 2014 Tariff Regulations. Accordingly, the initial spares allowed is as under:

						(₹ in lakh)
Element	Project cost up to 31.3.2019	Initial Spares claimed	Ceiling limit as per the 214 Tariff Regulations	Initial spares worked out	Excess initial spares claimed	Initial spares allowed
Greenfield Sub-station	9996.59	121.53	4%	411.46	0.00	121.53

Capital cost as on COD

40. Accordingly, the capital cost allowed as on COD under Regulation 9(2) of the

2014 Tariff Regulations is summarized as under:

				(₹ in lakh)
Capital Cost as on COD as per Auditor's Certificate	Less: IDC disallowed as on COD	Less: IEDC disallowed as on COD	Less: Excess Initial Spares	Capital Cost as on COD considered for tariff calculation
1	2	3	4	5=1-2-3-4
11512.61	880.10	142.50	0.00	10490.01

Additional Capital Expenditure (ACE)

41. As per Regulation 3(13) of the 2014 Tariff Regulations, the cut-off date for transmission asset is 31.3.2021. The Petitioner has claimed additional capital expenditure. As per Form-7, Balance and Retention Payment shown is as under:

		(₹ in lakh)
ACE in 2018-19	ACE in 2019-20	Total ACE
17.21	41.30	58.51

42. The Petitioner has claimed ACE for the year 2018-19 and 2019-20 under Regulation 14(1)(i) of the 2014 Tariff Regulations for balance and retention payment



discharged within cut-off date including IDC discharge of ₹125.60 lakh for 2018-19.

ACE for 2019-20 shall be considered as per provisions of the 2019 Tariff Regulations.

43. Based on above, the allowed ACE is summarized below which is subject to true up:

		(₹ in lakh)
Particulars	Regulation	2018-19
ACE to the extent of Balance & Retention	14 (1)(i)	17.21
Payment		
Add: IDC discharged during the year after	14 (1)(i)	0.00
COD		
Total	17.21	

Capital cost considered for the 2014-19 tariff period

44. 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	ACE allowed	Total Estimated
considered for tariff	during 2018-19	Completion Cost up to
calculation		31.3.2019
10490.01	17.21	10507.22

45. Based on the above capital cost, the tariff in respect of the transmission asset from COD 7.8.2018 to 31.3.2019 (for a period of 237 days in 2018-19) is determined in subsequent paragraphs.

Debt-Equity Ratio

46. 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 70:30. The debt-equity as on dates of commercial operation and 31.3.2019 considered on normative basis are as under:



	As on COD		As on 31.03.2019	
Particulars	Amount (₹ in lakh)	Percentage	Amount (₹ in lakh)	Percentage
Debt	7343.01	70.00%	7355.06	70.00%
Equity	3147	30.00%	3152.17	30.00%
Total	10490.01	100.00%	10507.22	100.00%

Return on Equity (ROE)

47. 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 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.

48. We have considered the submissions of the Petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of RoE. 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.

49. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates for the Petitioner company. The relevant extracts of the order dated 27.4.2020 are as under:

"26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing-up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not



be taken into account for the purpose of grossing up of rate of return on equity. Any under-recovery or over-recovery of grossed up rate on return on equity after truingup, shall be recovered or refunded to beneficiaries or the long term transmission customers/ DICs as the case may be on year to year basis.

27. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of rate of return on equity:

Year	Notified MAT rates (inclusive of surcharge & cess)	Effective tax (in %)
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549
,		

50. As per the order dated 27.4.2020 in Petition No. 274/TT/2019, the actual

MAT rates and corresponding grossed up RoE details are as under:

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	Base rate of RoE (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	20.9605	15.50	19.610
2015-16	21.3416	15.50	19.705
2016-17	21.3416	15.50	19.705
2017-18	21.3416	15.50	19.705
2018-19	21.5488	15.50	19.758

51. Although the petition for true-up of capital cost and tariff for the transmission asset shall be filed by the Petitioner in due course, we are considering the year-wise actual MAT rates while working out the RoE for 2014-19 period. Accordingly, the ROE allowed is as follows:

	(₹ in lakh)
Particulars	2018-19
	(Pro-rata-
	237days)
Opening Equity	3147.00
Addition due to Additional Capitalization	5.16
Closing Equity	3152.17
Average Equity	3149.59
Return on Equity (Base Rate)	15.50%
MAT rate for the Financial year 2018-19	21.5488%
Rate of Return on Equity (Pre-tax)	19.758%
Return on Equity (Pre-tax)	404.07



Interest on Loan (IOL)

52. 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.

53. 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.

54. We have considered the actual loan portfolio submitted in the petition along with the interest rates therein. Any change in rates of interest subsequent to the date of commercial operation will be considered at the time of truing-up.

55. The details of IOL approved for the transmission assets are as follows:

	(₹ in lakh)
Particulars	2018-19
	(Pro-rata-
	237days)
Gross Normative Loan	7343.01
Cumulative Repayment upto previous Year	0.00
Net Loan-Opening	7343.01
Addition due to Additional Capitalization	12.05
Repayment during the year	359.93
Net Loan-Closing	6995.12
Average Loan	7169.07
Weighted Average Rate of Interest on Loan	7.8828%
Interest on Loan	366.95



Depreciation

56. 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:

	(₹ in lakh)
Particulars	2018-19 (pro-rata- 237days)
Opening Gross Block	10490.01
Additional Capitalisation	17.21
Closing Gross Block	10507.22
Average Gross Block	10498.62
Freehold Land	0.00
Weighted Average Rate of Depreciation (WAROD)	5.2800%
Balance useful life of the asset at the beginning of the year	25
Elapsed life of the asset at the beginning of the year	0
Aggregated Depreciable Value	9448.76
Combined Depreciation during the Year	359.93
Aggregate Cumulative Depreciation	359.93

Operation and Maintenance Expenses (O&M Expenses)

57. The Petitioner has claimed the O&M Expenses of ₹214.56 lakh for transmission asset.

58. The Petitioner in the instant petition has submitted that O&M expense rates for the tariff period 2014-19 were 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.

59. We have considered the submissions of the Petitioner. Norms for O&M expenditure for Transmission System have been specified under Regulation 29(4) of the 2014 Tariff Regulations as follows:

Element	2018-19
Sub-Station: 765 kV bay (₹ in lakh per bay)	96.20
Sub-Station: 400 kV bay (₹ in lakh per bay)	68.71

60. 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 of ₹214.56 lakh is approved for the transmission asset.

Interest on Working Capital (IWC)

61. 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.

62. Accordingly, IWC approved for the transmission asset is summarized hereunder:

	(₹ in lakh)
Particulars	2018-19 (Pro-rata- 237days)
Maintenance Spares	49.47
O&M Expenses	27.49
Receivables	354.03
Total	430.98
Rate of Interest	12.20%
Interest on working Capital	34.14

Annual Transmission charges

63. Accordingly, the annual transmission charges allowed for the transmission asset are as under:

	(₹ in lakh)	
Particulars 2018-19		
	(Pro-rata-	
	237days)	
Depreciation	359.93	
Interest on Loan	366.95	
Return on Equity	404.07	
Interest on Working Capital	34.14	
O&M Expenses	214.16	
Total	1379.24	

Filing fee and the publication expenses

64. 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

65. 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

66. 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

67. The Petitioner has submitted that the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period.

68. TANGEDCO has made the following submissions in respect of sharing of transmission charges:

a) The scope of work in "Common System associated with East Coast Energy private limited and NCC power projects limited LTOA generation projects in Srikakulam Area" was divided into three schemes, Part-A, B & C.

b) The issue of sharing of transmission charges and mitigation of risk due to the non-committed IPP developers was deliberated in the special meeting of



the SRPC held at Mamallapuram on 25.11.2010 and the commitments of the

Petitioner is extracted below:

"2.13 ED, PGCIL clarified that the States were not being asked to pay for the transmission and the responsibility /liability rested with the IPPs to bear the transmission charges till the firm beneficiaries were identified. The issue would be further evident in the new Transmission Price Sharing Mechanism, the entire burden would be on the IPPs till the beneficiaries are identified. For MPPs, the charges would be same as the rates for LTOA, MTOA & STOA would be same. Except for the LTA quantum for which beneficiaries has been identified, the liability of the transmission charges would continue to be with the IPPs.

2.14 Chairman, KSEB enquired whether the transmission capacity was being built for the only firmed up shares or for the total installed capacity.

2.15 ED, PGCIL said that the capacity was being planned for firmed up shares. However, due to inherent design & operational margins, MTOA & STOA transactions were being honoured in line with existing Regulations"

c) The transmission asset is a part of the Common System associated with East Coast Energy and NCC Power LTOA generation projects in Srikakulam Area-Part-C and has been developed for evacuation of power by these generators. Hence, the Petitioner is bound to explain the action taken by the Petitioner to recover the cost as per BPTA and the Petitioner should furnish the details.

d) The stranded asset created by the Petitioner for the generators has to be dealt as per the order of the Commission dated 8.3.2019 in Petition No. 92/MP/2015 and relinquishment charges are to be borne by the generators. Therefore, the Petitioner should be directed to assess stranded transmission capacity in the entire scope of "Common System associated with East Coast Energy private limited and NCC power projects limited LTOA generation projects in Srikakulam Area" for calculation of relinquishment charges to be payable by the generators.

69. In response, the Petitioner has submitted the following:

a) The transmission asset i.e. ICTs at Srikakulam were conceived for evacuation of power from generating stations of East Coast Energy and NCC Power. However, NCC Power has abandoned its generation project whereas the detailed status of generation project of East Coast Energy was discussed in various JCCs (8th to 24th) held between 17.7.2012 to 28.9.2018.



b) The transmission asset along with associated bays at Srikakulam Pooling Station was ready in November 2016/ December, 2016 and CEA clearance under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 was also received for the same vide letter dated 8.11.2016 and 27.12.2016. However, due to delay in commissioning of generation projects and associated transmission line at 400 kV level, the said ICTs could not be utilized and put under commercial operation along with 765 kV D/C Srikakulam-Angul Transmission Line and 765 kV Srikakulam Substation on 1.2.2017 as utilization of these ICTs depends upon the COD of downstream system. Therefore, the transmission asset was eventually put into commercial operation along with the COD of 400 kV D/C Srikakulam-Garividi Transmission line (executed under TBCB route) in August, 2018 after the successful trial peration.

c) After COD of 2x1500 MVA ICTs at Srikakulam along with Srikakulam-Garividi 400 kV (Quad) D/C line, ATC of 300 MW was enhanced in August, 2018. This is being utilised for import of power to Southern Region.

d) As regards relinquishment charges, the Petitioner has submitted that as per the methodology specified in order dated 8.3.2019 in Petition No. 92/MP/2015, the 2x1500 MVA ICTs were to be apportioned in the transmission lines emanating from Srikakulam Pooling Station. Further, relinquishment charges are 'NIL' since the transmission lines associated with the LTA, viz. Srikakulam-Angul and Angul-Jharsuguda 765 kV D/C lines carry power towards Southern Region which only increases upon simulation with relinquishment scenario. Accordingly, the utilisation of referred transmission lines increases with the relinquishment of LTA by East Coast Energy. Accordingly, the relinquishment charges are 'NIL'. Further with regard to relinquishment charges for NCC Power, the generation developer did not sign the BPTA and accordingly the LTA was revoked. Further, the developer shifted the generation project to Nellore area.

70. We have considered the submissions of the Petitioner and Respondent. TANGEDCO has submitted that the transmission charges should be levied on the generators instead of including in the POC mechanism. We already dealt with the



issue of utilisation of the transmission assets of the subject project in view of noncommissioning/ delayed commissioning by the generators and the Petitioner's resultant action under relevant provisions of BPTA/ TSA/ LTA together with levy of relinquishment charges on the defaulting generators in detail in the order dated 23.7.2018 in Petition No. 231/TT/2016, where the tariff for the other transmission asset of the Transmission Project was granted. The Commission in order dated

23.7.2018 held as under:

"Sharing of Transmission Charges 78. Xxxxxxx xxxxxxx

81. The Petitioner was directed to submit the documentary proof with regard to the purpose for which the transmission line was envisaged, capacity of the line and actual power flow of the line and the upstream and downstream transmissions system of the transmission line. As regards the purpose of the transmission line, the Petitioner has submitted that Angul-Srikakulam 765 kV D/C line was earlier placed as part of common transmission system for IPP generation projects in Srikakulam area. In this connection, the Petitioner has placed on record the Minutes of 30th SR SCM held on 13.4.2010, 31st SR SCM held on 27.12.2010 and 12th ER SCM held on 28.12.2010. The Petitioner has submitted that on account of slowing down of the capacity addition based on imported coal, Southern Region became net importer of power. It was agreed in the 33rd SR SCM held on 20.10.2011 that Srikakulam Pooling Station-Vemagiri Pooling Station 765 kV D/C line as a System Strengthening Scheme for import of power from Eastern Region to Southern Region could be made. As regards the power flow, the Petitioner as submitted that the capacity of the Srikakulam Pooling Station-Vemagiri Pooling Station 765 kV D/C line is 2750 MW based on the limit considered for 765 kV D/C line under N-I condition against which the actual power flow on the line is about 1660 MW as per the data available from NLDC.

82. The Commission sought comments of CEA vide letter dated 6.2.2017 as to whether 765 kV D/C Srikakulam-Angul transmission line is in regular service and whether the transmission line is serving any useful purpose in the configuration as proposed by PGCIL. In response, CEA replied that Angul-Srikakulam pooling station 765 kV D/C line is connected to Vemagiri Pooling Station and charged at 765 kV. At Vemagiri pooling station this power is stepped down to 400 kV and connected to Gazuwaka and Vijayawada through Order in Petition No.231/TT/2016 LILO of existing Gazuwaka-Vijayawada S/C line at the Vemagiri Pooling Station. Presently, the flow on this line Angul-Srikakulam Pooling Station 765 kV D/C is 600-1000 MW and the line is in use.

83. We have considered the submission of the Petitioner and Respondents. The transmission line was originally conceived for evacuation of power from two generating stations, namely, East Coast Energy Private Limited and NCC Power Projects Limited who have taken the LTA of 1320 MW each. On account of the delay in commissioning of the generation projects, it was subsequently decided in the 33rd SR SCM held on 20.10.2011 to use the transmission line as a System Strengthening Scheme for import of power from Eastern Region to Southern Region. CEA has also certified that the line is in use. Therefore, keeping in view that the transmission line is a part of meshed network and is being used as a System Strengthening Scheme for



carrying power from Eastern region to Southern region, the tariff of the said line shall be included in PoC Charges."

71. 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.

72. This order disposes of Petition No. 103/TT/2019.

sd/-(Arun Goyal) Member sd/-(I. S. Jha) Member sd/-(P. K. Pujari) Chairperson



ANNEXURE-1

DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION (WAROD) FOR THE 2014-19 TARIFF PERIOD

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014	Projected ACE during tariff period 2014-19	Admitted Capital Cost as on 31.3.2019	Depreciation	Annual Depreciation as per the 2014 Tariff Regulations				
					2014- 15	2015- 16	2016- 17	2017- 18	2018-19
Land- Freehold	0.00	0.00	0.00	0.00%	-	-	-	-	0.00
Land-Lease hold	0.00	0.00	0.00	3.34%	-	-	-	-	0.00
Building, Civil Works & Colony	0.00	0.00	0.00	3.34%	-	-	-	-	0.00
Transmission Line	0.00	0.00	0.00	5.28%	-	-	-	-	0.00
Substation	10490.01	17.21	10507.22	5.28%	-	-	-	-	554.33
PLCC	0.00	0.00	0.00	6.33%	-	-	-	-	0.00
IT Equipment (Incl. Software)	0.00	0.00	0.00	15.00%	-	-	-	-	0.00
Total	10490.01	17.21	10507.22	Total	-	-	-	-	554.33
Average Gross Block (₹ in lakh)					-	-	-	-	10498.62
Weighted Average Rate of Depreciation (WAROD)					-	-	-	-	5.28%

