# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 29/TT/2019

Coram : Shri P.K. Pujari, Chairperson Dr. M. K. Iyer, Member Shri I.S. Jha, Member

Date of Order: 28 January, 2020

### In the matter of:

Approval under regulation-86 of CERC (Conduct of Business) Regulations,1999 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of Transmission Tariff from anticipated COD to 31.03.2019 for **Asset-I**: 1X125 MVAR 400 kV Bus reactor along with associated bays at Cuddapah Substation, 1X240 MVAR 765 kV Bus reactor along with associated bays at Kurnool Sub-station, 1X240 MVAR 765 kV Bus reactor along with associated bays at Nellore PS Substation, 1X240 MVAR 765 kV Bus reactor along with associated bays at Raichur Sub-station, **Asset II**: 2X240 MVAR 765 kV Bus Reactors along with associated bays at Cuddapah, Nellore PS , Kurnool, Raichur and Thiruvalam" in Southern Region.

## And in the matter of:

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

.....Petitioner

## Versus

- Tamil Nadu Generation And Distribution Corporation Limited, (TANGEDCO), NPKRR Maaligai, 800, Anna Salai, Chennai - 600 002
- 2. Transmission Corporation Of Andhra Pradesh Limited, (APTRANSCO), Vidyut Soudha, Hyderabad- 500082



Order in Petition No. 29/TT/2019

- Kerala State Electricity Board (KSEB), Vaidyuthi Bhavanam, Pattom, Thiruvananthapurarn - 695 004
- Tamil Nadu Electricity Board (TNEB), NPKRR Maaligai, 800, Anna Salai, Chennai - 600 002
- Electricity Department, Government Of Goa, Vidyuti Bhawan, 3rd Floor, Panaji, Goa-403001
- 6. Electricity Department, Government Of Pondicherry, Pondicherry – 605001
- Eastern Power Distribution Company of Andhra Pradesh Ltd. (APEPDCL), P&T Colony, Seethmmadhara, Vishakhapatnam, Andhra Pradesh
- Southern Power Distribution Company of Andhra Pradesh Limited, (APSPDCL), Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana Gunta, Tirupati-517 501, Andhra Pradesh
- Central Power Distribution Company Of Andhra Pradesh Limited, (APCPDCL), Corporate Office, Mint Compound, Hyderabad - 500 063, Andhra Pradesh
- Northern Power Distribution Company Of Andhra Pradesh Limited, (APNPDCL), Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet, Warangal - 506 004, Andhra Pradesh
- 11. Bangalore Electricity Supply Company Ltd. (BESCOM), Corporate Office, KR.Circle, Bangalore - 560001, Karnataka
- 12. Gulbarga Electricity Supply Company Ltd, (GESCOM), Station Main Road, Gulburga, Karnataka
- 13. Hubli Electricity Supply Company Ltd. (HESCOM), Navanagar, PB Road, Hubli, Karnataka



- 14. Mangalore Electricity Supply Company Limited, (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
- 16. Transmission Corporation Of Telangana Limited, Vidhyut Sudha, Khairatabad, Hyderabad, 500082
- 17. Karnataka Power Transmission Corporation Limited (KPTCL), Kaveri Bhawan, Bangalore – 560009
- Tamil Nadu Transmission Corporation Ltd. (TANTRANSCO), NPKKR Maaligai, 800, Anna Salai, Chennai-600002

### ...Respondents

#### Parties present:

For Petitioner:	Shri Amit Kumar Jain, PGCIL Shri Zafrul Hasan, PGCIL Shri S.S.Raju, PGCIL Shri B.Dash, PGCIL

For Respondent: Shri Anurag Naik, MPPMCL

### <u>ORDER</u>

The present petition has been filed by Power Grid Corporation of India Ltd. ("the Petitioner") for determination of tariff for **Asset-I**: 1X125 MVAR 400 kV Bus reactor along with associated bays at Cuddapah Substation, 1X240 MVAR 765 kV Bus reactor along with associated bays at Kurnool Sub-station, 1X240 MVAR 765 kV Bus reactor along with associated bays at Nellore PS Sub-station, 1X240 MVAR 765 kV Bus reactor along with associated bays at Raichur Sub-station, **Asset II**:



2X240 MVAR 765 kV Bus Reactors along with associated bays at Thiruvalam Substation under "Installation of Bus reactors at Cuddapah, Nellore PS, Kurnool, Raichur and Thiruvalam" in Southern Region 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:
  - *i.* Approve the Transmission Tariff for the tariff block 2014-19 for the assets covered under this Petition.
  - ii. Admit the capital cost as claimed in the Petition and approve the Additional Capitalization incurred/ projected to be incurred.
- iii. 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.
- iv. Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff Regulations 2014.
- v. Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure ( if any) in relation to the filing of petition.
- vi. Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff)



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Regulations, 2014.

- vii. Allow the Petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents.
- viii. Allow the Petitioner to bill and recover GST on Transmission charges separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further any taxes and duties including cess, etc. imposed by any Statutory/Govt./Municipal Authorities shall be allowed to be recovered from the beneficiaries.
- Allow tariff up to 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the POC charges.
- x. Allow the Petitioner to bill Tariff from anticipated DOCO and also the Petitioner may be allowed to submit revised Certificate and tariff Forms (as per the Relevant Regulation) based on actual DOCO.

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

## **Background**

3. The Investment Approval (hereinafter referred to as "IA") for implementation of assets under "Installation of Bus reactors at Cuddapah, Nellore PS, Kurnool, Raichur and Thiruvalam" in Southern Region was accorded by the Board of Directors of the Petitioner in 338<sup>th</sup> meeting held on 10.3.2017 for ₹25160 lakh including IDC of ₹1565 lakh based on October, 2016 price level (communicated vide Memorandum No. C/CP/PA 1617-03-0AC-IA028 dated 11.4.2017).



4. The scope of the scheme was discussed and agreed upon in 39<sup>th</sup> Standing Committee Meeting (SCM) of Southern Region (SR) held on 28.12.2015 & 29.12.2015 and 29<sup>th</sup> meeting of SRPC held on 5.3.2016 at Vishakhapatnam. The scheme was further ratified in 36<sup>th</sup> Empowered committee meeting dated 26.07.2016, wherein the Petitioner was entrusted to execute the scheme.

5. The scope of work covered under the project "Installation of Bus reactors at Cuddapah, Nellore, Kurnool, Raichur and Thiruvalam" in Southern Region is as follows:-

### **Reactive Compensation**

- (i) Cuddapah 400/220 kV (PGCIL) Substation (Extension):
  - 400 kV Bus Reactor Bay : 1 no.
  - 400kV Bus Reactor : 1 no. of 125 MVAR bus reactor
- (ii) Kurnool 765/400 kV (PGCIL) Substation (Extension):
  - 765 kV Bus Reactor Bay : 1 no.
  - 765 kV Bus Reactor : 1 no. of 240 MVAR bus reactor
- (iii) Nellore PS 765/400 kV (PGCIL) Substation (Extension):
  - 765 kV Bus Reactor Bay : 1 no.
  - 765 kV Bus Reactor : 1 no. of 240 MVAR bus reactor
- (iv) Raichur 765/400 kV (PGCIL) Substation (Extension):
  - 765 kV Bus Reactor Bay : 1 no.
  - 765 kV Bus Reactor : 1 no. of 240 MVAR bus reactor
- (v) Thiruvalam 765/400 kV (PGCIL) Substation (Extension):
  - 765 kV Bus Reactor Bays : 2 nos.



• 765 kV Bus Reactors : 2 no. of 240 MVAR bus reactors

6. Details of the assets covered in the project scope under various petitions is summarized below:-

S.N.	Asset	Petition no.
1	<b>Asset-I</b> : 1X125 MVAR 400 kV Bus reactor along with associated bays at Cuddapah Substation, 1X240 MVAR 765 kV Bus reactor along with associated bays at Kurnool Sub-station, 1X240 MVAR 765 kV Bus reactor along with associated bays at Nellore PS Sub-station, 1X240 MVAR 765 kV Bus reactor along with associated bays at Raichur S/S.	Covered under instant
2	<b>Asset II</b> : 2X240 MVAR 765 kV Bus Reactors along with associated bays at Thiruvalam Substation.	petition

7. The Petitioner has filed affidavit dated 13.6.2019 and submitted that the actual COD of the Asset-II is 7.6.2019. The Commission vide order dated 25.6.2019 has held as under:-

### *"2. xxxxxxxx xxxx*

xxxx. The petitioner submitted that Asset-I was put into commercial operation on 31.10.2018 and Asset-II was successfully charged on 5.6.2019. There is no time overrun in case of Asset-I. However, in case of Asset-II, the COD is beyond the current tariff period. Therefore, the tariff for Asset-II has to be determined under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019. Accordingly, the petitioner is directed to file a fresh petition for determination of tariff as per the 2019, Tariff Regulation. In this petition, tariff for Asset-I only is considered."

8. Accordingly, the tariff is being determined in respect of Asset-I and Petitioner is directed to file separate petition for Asset-II under 2019 Tariff Regulations.

9. The details of the Annual Transmission Charges claimed by the Petitioner submitted vide affidavit dated 10.7.2019 are as under:-



	(₹ in lakh)
Particulars	Asset-I
	2018-19
	(Pro-rata)
Depreciation	217.16
Interest on Loan	230.41
Return on Equity	241.96
Interest on Working Capital	21.77
O & M Expenses	149.83
Total	861.13

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

	(₹ in lakh)
Particulars	2016-17
	(Pro-rata)
Maintenance Spares	53.59
O&M expenses	29.77
Receivables	342.25
Total	425.61
Rate of Interest	12.20%
Interest on working capital	21.77

11. The Petitioner has served a copy of the petition upon the respondents and notice of this tariff application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the notices published by the Petitioner under Section 64 of the Electricity Act, 2003. No reply to the petition has been filed by any Respondent, in the matter.

12. The Commission vide Order dated 25.6.2019 allowed the interim Annual Transmission Charges under the proviso (i) to Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the POC charges in respect of Asset-I.



13. The Petition was heard on 18.11.2019 and the Commission reserved the order in the Petition.

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

15. This order has been issued after considering the main petition dated 22.11.2018 and Petitioner's affidavits dated 13.6.2019, 10.7.2019 and 4.12.2019.

### Analysis and Decision

## Date of Commercial Operation (COD)

16. The Petitioner has filed the petition on the basis of anticipated COD in respect of the Asset-I. However, the Petitioner has submitted actual COD vide affidavit dated 13.6.2019 as under:-

Asset Details	COD as per petition	COD as per affidavit dated 13.6.2019
Asset-I: 1X125 MVAR 400 kV Bus reactor along with associated bays at Cuddapah Substation, 1X240 MVAR 765 kV Bus reactor along with associated bays at Kurnool Sub-station, 1X240 MVAR 765 kV Bus reactor along with associated bays at Nellore PS Sub- station, 1X240 MVAR 765 kV Bus reactor along with associated bays at Raichur S/S.	1.12.2018 (Anticipated)	31.10.2018 (Actual)

17. In support of the actual COD of the Asset-I, the Petitioner vide affidavit dated 13.6.2019 has submitted CEA certificate dated 25.9.2018, 27.9.2018, 27.9.2018 and 23.10.2018 under Regulation 43 of CEA (measures relating to Safety and Electric Supply) Regulations, 2010, SRLDC charging certificates dated 8.11.2018 (4)



nos.) certifying that 240 MVAR Bus reactor at Kurnool, 125 MVAR Bus reactor at Cuddapah, 240 MVAR Bus reactor at Raichur and 240 MVAR Bus reactor at Nellore have successfully completed trial operation on 25.10.2018, 26.10.2018, 27.10.2018 and 30.10.2018, respectively. The petitioner has combined all the reactors and claimed the COD of the Asset-I as 31.10.2018.

18. Taking into consideration of CEA energisation certificate, RLDC charging certificate and CMD certificate as required under Grid Code, the COD of the Asset-I is approved as 31.10.2018.

### **Capital Cost**

19. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provide as

follows:-

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

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

- (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
- (c) Increase in cost in contract packages as approved by the Commission;
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
- (e) Capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
- (h) Adjustment of any revenue earned by the transmission licensee by using the assets before COD."



20. The Petitioner has submitted Auditor's Certificate dated 1.7.2019 along with revised tariff forms vide affidavit dated 10.7.2019 for the Asset-I. The capital cost incurred as on COD and additional capitalization projected to be incurred, is as follows:-

						(₹ in lakh)
Asset	Apportione	Estimated	Estimated	Projected	Projected	Estimated
	d Approved Cost (FR)	Exp. Up to COD	Exp. for FY 2018-19	Exp. for FY 2019-20	Exp. for FY 2020-21	Completion Cost
	0031 (111)		11201013	2013 20	2020 21	0031
Asset-1	14218.49	8021.37	3609.93	1159.60	775.43	13566.33

#### Cost Over-run

21. The Petitioner has submitted that, there is no cost overrun for the subject asset as compared to FR cost. However, there is a decrease of ₹652.16 lakh in the estimated completion cost of ₹13566.33 of ₹ Asset-I as compared to apportioned approved cost (FR) of ₹14218.49 lakh. The reasons for item wise cost variation are mainly attributable to variation in IDC/IEDC. The said variation in IDC/IEDC is based on actual/Anticipated phasing of funds and commissioning schedule. The item wise cost variation between apportioned approved cost and estimated completion cost are explained in Form-5 of the petition.

22. In regard to item wise cost variation mentioned in form-5, Petitioner has submitted that, being a Government enterprise, the company has been following a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. Through this process, lowest possible market prices for required product/services/as per detailed designing is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost



estimate depending upon prevailing market forces, design and site requirements. Whereas, the estimates, are prepared by the petitioner as per well-defined procedures. The FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts/general practice.

23. Further, regarding variation in cost of individual item in substation packages, Petitioner has submitted that the packages under subject scope of works comprise of a large number of items and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, lowest bidder can be arrived at/ evaluated on overall basis only. Hence, item-wise unit prices in contracts and its variation over unit rate considered in FR estimates are beyond the control of the Petitioner.

24. We have considered the submissions of the Petitioner. The estimated completion cost of the Asset-I is within the apportioned approved cost as per FR. Accordingly, the capital cost claimed by the Petitioner as on COD and additional capitalization upto 31.3.2019 has been considered for tariff calculation, subject to scrutiny of IDC/ IEDC and Initial spares, hereinafter.

#### Time over-run

25. As per the Investment Approval (IA), the transmission scheme was scheduled to be commissioned within 27 months from the date of investment approval i.e. 10.3.2017. Accordingly, the Commissioning Schedule comes to 10.6.2019 against which the Asset-I has achieved COD on 31.10.2018. Therefore, there is no time



over-run.

26. The Commission vide ROP of hearing dated 18.11.2019 directed the Petitioner to submit the justification for early commissioning of Asset-I along with supporting documents regarding the consent of the beneficiaries and approvals, if any.

27. In response, the Petitioner vide affidavit dated 4.12.2019 has submitted that early commissioning of Asset-I was discussed in the 42<sup>nd</sup> meeting of SCM of Power System of SR held on 27.4.2018 and 34<sup>th</sup> meeting of SRPC held on 11.8.2018, wherein the Petitioner was requested to expedite the commissioning of all the approved Bus Reactors, since high voltage was being observed on sustained basis. Further, the Petitioner vide affidavit dated 4.12.2019 has submitted relevant extract of the minutes of 42<sup>nd</sup> meeting of SCM of Power System of SR held on 27.4.2018 and 34<sup>th</sup> meeting of SRPC held on 11.8.2018 as supporting documents regarding the consent and approval of the beneficiaries.

28. We have considered the submission of the Petitioner regarding early commissioning of Asset-I and agree to the same.

#### Interest During Construction (IDC)

29. The Petitioner has claimed Interest During Construction (IDC) for the instant asset and submitted Auditor's Certificate dated 1.7.2019 vide affidavit dated 10.7.2019 in support of the same. The allowable IDC has been worked out considering the information submitted by the Petitioner. The loan details submitted in Form-9C for period 2014-19 and date of drawl submitted in IDC statement has



been perused for the purpose of calculating IDC for the asset. The Petitioner has not made any default in the payment of interest.

30. The statement showing IDC consist of the name of the loan, drawl date, loan amount, interest rate and Interest claimed. While going through these documents certain discrepancies have been observed such as the petitioner has not specified the interest rate for SBI loans, HDFC loans and ICICI loans instead mentioned as floating rate. The Petitioner has not furnished the computation of floating interest rate. Therefore, for the purpose of working out of IDC, the interest rate, as mentioned in Form 9C against these loans have been considered. Further, the loan portfolio as mentioned in IDC statements and as mentioned in Form 9C are not matching. Hence, for the purpose of work out of IDC, the loan amount as mentioned in Form 9C has been considered. The Petitioner is directed to submit the detailed IDC statement by rectifying the above mentioned deviation, at the time of true up of 2014-19.

31. Based on the available information, IDC is being worked out for the purpose of tariff determination, subject to revision at the time of true up, as below:-

_					(₹ in lakh)
IDC	IDC Disallowed	IDC	IDC	Un-	IDC liability
Claimed	due to Excess claim & Time overrun not allowed, if any.	Allowed on accrual basis	Allowed on cash basis as on COD	discharged IDC liability as on COD	allowable as ACE during 2018-19
1	2	3=(1-2)	4	5=(3-4)	6
126.57	0.00	126.57	89.35	37.22	37.22

### Incidental Expenditure During Construction (IEDC)

32. The Petitioner has claimed IEDC for instant assets and submitted Auditor's Certificate in support of the same. The percentage of IEDC on Hard Cost as



indicated in the Abstract Cost Estimate as per original investment approval i.e. 10.75% in the current petition has been considered as the maximum limit for allowing IEDC. This line of action was approved by the Commission vide order dated 20.05.2015 in petition no. 109/TT/2013.

33. The worked out IEDC is subject to reconsideration 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 against Commission's orders dated 29.7.2016 and 5.10.2017 in Petition Nos. 46/TT/2014 and 2/RP/2017 respectively, at the time of truing up.

34. Therefore, the IEDC claimed by the Petitioner for instant asset is allowed subject to excess claim/ time over-run issues, for the purpose of tariff calculations, as per following details:-

			(₹ in lakh)
Asset	IEDC Claimed	IEDC disallowed (On account of Excess Claim / Time Overrun not condoned, if any)	IEDC Allowed (as on COD)
Asset-1	226.96	0.00	226.96

### **Initial Spares**

35. This has been dealt in line with Regulation 13 of the 2014 Tariff Regulations. The Petitioner has claimed the Initial Spares corresponding to Sub-Station for Asset-I and has submitted Auditor Cost Certificate in support of the same. Further, the Petitioner has not submitted the discharge statement of Initial Spare. Hence, it is assumed that the entire amount of initial spare has been discharged as on COD. However, the Petitioner is directed to submit the details of year-wise discharge of



initial spare at the time of truing up. Therefore, no adjustment of COD cost in respect of discharge of initial spare is done.

36. The initial spares allowed for the purpose of tariff calculation after considering the Plant and Machinery cost excluding IDC, IEDC and Land expenses up to available cut- off date, subject to true-up are as under:-

(₹ in lakh)

Asset	Total Capital Cost (Plant and machinery Cost excluding IDC, IEDC, Land cost and cost of Civil works) up to available Cut- off date (31.03.2019)	Initial Spares against Capital Cost Claimed	Ceiling Limit as per Regulation, 2014	Initial Spares worked out	Excess Initial Spares disallowed
	(a)	(b)	(C)	(d)	(e)
Asset-1 (Sub- station)	11631.30	393.83	4%	534.12	0.00

## Capital cost as on COD

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

### (₹ in lakh)

Asset	Capital Cost as on COD As per Auditor Cost Certificate	IDC Disallowed as on COD	IEDC Excess Disallowed as Initial on COD Spares disallow as on CO		Capital Cost as on COD Considered after scrutiny of IDC/IEDC and Initial Spares
	(a)	(b)	(c)	(d)	(e=a-b-c-d)
Asset-1	8021.37	37.22	0.00	0.00	7984.15

## Additional Capital Expenditure (ACE)

38. As per Clause (13) of Regulation 3 of the 2014 Tariff Regulations, the cut-off date for instant assets is 31.3.2021. The Petitioner has submitted Auditor's



Certificates in support of the additional capitalisation. In addition, the Petitioner has also claimed the discharge of IDC liability as ACE. The Petitioner vide form 7 has claimed both these cost as ACE under Regulation 14(1)(i) and 14(1)(ii), which has been summarized upto 31.3.2019 as under:-

		₹ in lakh)
Asset	Additional Capital Expenditure claimed for FY 2018-19	Total
Asset-1	3609.93	3609.93

39. The Petitioner has claimed additional capital expenditure towards Balance and Retention payments. The admissible un-discharged IDC liability as on COD has been allowed as ACE during the year of its discharge. The Petitioner has claimed additional capital expenditure for FY 2019-20 and FY 2020-21 and the same has not been allowed and will be dealt as per 2019 Tariff Regulations. The allowed Additional Capital expenditure are summarized below which is subject to true up:-

		(₹ in lakh)
Particulars	Regulation	Asset-1
		2018-19
ACE to the extent of Balance & Retention Payment &	14 (1)(i) &	3609.93
ACE to the extent of unexecuted work	14 (1)(ii)	
IDC Discharged	14 (1)(i)	37.22
Total Add-Cap allowed for tariff		3647.15

## Capital cost for the tariff period 2014-19

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

			(₹ in lakh)
Asset	Expenditure allowed as on COD	Add Cap allowed during 2018-19	Total Estimated Completion Cost up to 31.03.2019
Asset-1	7984.15	3647.15	11631.30



### **Debt-Equity Ratio**

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

				(₹ in lakh)
Asset-1	As on (	COD	As on 31	.03.2019
Debt	5588.91	70.00%	8141.91	70.00%
Equity	2395.25	30.00%	3489.39	30.00%
Total	7984.15	100.00%	11631.30	100.00%

## Return on Equity (ROE)

42. The Petitioner has submitted that ROE has been calculated at the rate of 19.61% after grossing up the ROE with MAT rate of 20.961% as per the above Regulations. The Petitioner has further submitted that the grossed up ROE is subject to truing up based on the effective tax rate of respective financial year applicable to the Petitioner Company.

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



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applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations.

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

	(₹ in lakh)
	Asset-1
Particulars	2018-19
	(Pro-rata)
Opening Equity	2395.25
Addition due to Additional	1094.15
Capitalization	
Closing Equity	3489.39
Average Equity	2942.32
Return on Equity (Base Rate)	15.50%
MAT rate for the FY 2013-14	20.961%
Rate of Return on Equity (Pre-tax)	19.610%
Return on Equity (Pre-tax)	240.28

# Interest on Loan (IOL)

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

- 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.

46. The Petitioner has submitted that the IOL has been claimed on the basis of rate prevailing as on COD and the change in interest due to floating rate of interest



applicable, if any, needs to be claimed/ adjusted over the tariff block 2014-19. We have calculated IOL on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing-up. The IOL is allowed considering all the loans submitted in Form-9C. The Petitioner is directed to reconcile the total Gross Loan for the calculation of weighted average Rate of Interest and for the calculation of IDC, which would be reviewed at the time of truing-up.

- (₹ in lakh) Asset-1 **Particulars** 2018-19 (Pro-rata) **Gross Normative Loan** 5588.91 Cumulative Repayment upto previous Year 0.00 Net Loan-Opening 5588.91 2553.01 Addition due to Additional Capitalization Repayment during the year 215.65 Net Loan-Closing 7926.26 6757.58 Average Loan Weighted Average Rate of Interest on Loan 8.1315% Interest on Loan 228.83
- 47. The details of IOL calculated are as follows:-

### Depreciation

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



	(₹ in lakh)
	Asset-1
Particulars	2018-19
	(Pro-rata)
Opening Gross Block	7984.15
Additional Capital expenditure	3647.15
Closing Gross Block	11631.30
Average Gross Block	9807.73
Rate of Depreciation	5.2800%
Depreciable Value	8826.95
Remaining Depreciable Value	8826.95
Depreciation	215.65

### **Operation and Maintenance Expenses (O&M Expenses)**

49. The Petitioner has claimed the O&M expenses for Asset-I as per following details:-

		(₹ in lakh)
Asset	Particulars	2018-19 (Pro-rata)
Asset-1	O&M Expenses	149.83

50. The Petitioner in the instant petition has submitted that, O&M rates 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.

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



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

52. We have considered the submissions of Petitioner. 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 sub-clause (a) of clause (4) of Regulation 29 of the 2014 tariff regulations. Accordingly, the allowed O&M Expenses for the year 2018-19 is given below:-

	(₹ in lakh)
Asset-1	2018-19
Details	(Pro-rata)
1 no. of 400 kV Bus Reactor bay at Cuddapah	28.43
3 nos. of 765 kV Bus Reactor bays at Kurnool, Nellore and Raichur S/S	119.39
Total O&M Expenses Allowed	147.82

### Interest on Working Capital (IWC)

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

### a) Maintenance spares:

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

## b) O & M expenses:

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



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## 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.

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

	(₹ in lakh)
	Asset-1
Particulars	2018-19
	(Pro-rata)
Maintenance Spares	53.24
O&M expenses	29.58
Receivables	341.85
Total	424.67
Rate of Interest	12.20%
Interest on working capital	21.58

# Annual Transmission charges

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

	(₹ in lakh)
	Asset-1
Particulars	2018-19
	(Pro-rata)
Depreciation	215.65
Interest on Loan	228.83
Return on Equity	240.28
Interest on Working Capital	21.58
O & M Expenses	147.82
Total	854.16



### Filing fee and the publication expenses

56. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The Petitioner 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

57. 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

58. 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

59. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission



(Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time and as provided in Regulation 43 of the 2014 Tariff Regulations.

60. This order disposes of Petition No.29/TT/2019.

Sd/-

Sd/-

Sd/-

(I. S. Jha) Member (Dr. M. K. Iyer) Member (P. K. Pujari) Chairperson

