

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 208/TT/2017

Coram:

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

Date of Order : 20.09.2018

In the matter of:

Approval of transmission tariff for “(i) Hyderabad (Maheshwaram)-Nizamabad 765kV D/C Line and (ii) 2 nos 765kV bays along with 1 no. 240 MVAR switchable line reactor each at Hyderabad (Maheshwaram) &Nizamabad substation each for both circuits of Hyderabad-Nizamabad 765kV D/C Line” with Anticipated DOCO as 01.08.2017 under “Wardha – Hyderabad 765 kV Link” in Southern Region from COD to 31.3.2019 under Regulation 86 of Central Electricity Regulatory Commission (Conduct of business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

And in the matter of:

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

....Petitioner

Vs

1. Karnataka Power Transmission Corporation Ltd.,
Kaveri Bhavan,
Bangalore – 560 009
2. Transmission Corporation of Andhra Pradesh Ltd.,
VidyutSoudha,
Hyderabad– 500082



3. Kerala State Electricity Board (KSEB),
VaidyuthiBhavanam, Pattom,
Thiruvananthapuram – 695 004
4. Tamilnadu Electricity Board (TNEB),
NPKRR Maaligai, 800, Anna Salai,
Chennai – 600 002
5. Electricity Department,
Government of Goa,
VidyutiBhawan, Panaji,
Goa 403001
6. Electricity Department,
Govt of Pondicherry,
Pondicherry - 605001
7. Eastern Power Distribution Company of Andhra Pradesh Limited,
P&T Colony, Seethmmadhara, Vishakhapatnam,
Andhra Pradesh
8. Southern Power Distribution Company of Andhra Pradesh Limited,
SrinivasasaKalyanaMandapam Backside,
Tiruchanoor Road, KesavayanaGunta,
Tirupati-517 501, Chittoor District,
Andhra Pradesh
9. Central Power Distribution Company of Andhra Pradesh limited,
Corporate Office, Mint Compound, Hyderabad – 500 063,
Andhra Pradesh
10. Northern Power Distribution Company of Andhra Pradesh Limited,
Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet,
WARANGAL – 506 004, Andhra Pradesh
11. Bangalore Electricity Supply Company Ltd.,
Corporate Office, K.R. Circle,
BANGALORE – 560 001, Karnataka
12. Gulbarga Electricity Supply Company Ltd.,
Station Main Road, GULBURGA, Karnataka
13. Hubli Electricity Supply Company Ltd.,
Navanagar, PB Road , HUBLI, Karnataka
14. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle,
Mangalore – 575 001, Karnataka



15. Chamundeswari Electricity Supply Corporation Ltd.,
(CESC) , # 927,L J Avenue
Ground Floor, New KantharajUrs Road
Saraswatipuram, Mysore – 570 009, Karnataka
16. Transmission Corporation of Telangana Limited,
VidhyutSudha, Khairatabad,
Hyderabad, 500082

..Respondents

For Petitioner :

Shri S.S. Raju, PGCIL
Shri B Dash, PGCIL
Shri Rakesh Prasad, PGCIL
Shri Abhay Choudhary, PGCIL
Shri Mohd Mohsin, PGCIL

For Respondents:

Shri Vallinayagam, TANGEDCO
Ms E. Shyamala, TANGEDCO
Ms. K.S. Indra Kumari, TANGEDCO

ORDER

1. The present petition has been filed by the petitioner, Power Grid Corporation of India Ltd. (“PGCIL”) seeking approval of transmission tariff for **Asset-1**:“(i) Hyderabad (Maheshwaram)-Nizamabad 765kV D/C Line and (ii) 2 nos 765kV bays along with 1 no. 240 MVAR switchable line reactor each at Hyderabad (Maheshwaram) & Nizamabad substation each for both circuits of Hyderabad-Nizamabad 765kV D/C Line” with Anticipated DOCO as 01.08.2017 under “Wardha – Hyderabad 765 kV Link” in Southern Region (hereinafter referred to as “transmission system”) for 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”).
2. The petitioner has made the following prayer:
 - (i) “Approve the Transmission Tariff for the tariff block 2014-19 block for



the assets covered under this petition, as per para –9.2 above.

- (ii) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation 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) Approve the Additional ROE as claimed in the Petition.
- (v) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff regulations 2014.
- (vi) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition.
- (vii) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.
- (viii) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents.
- (ix) Allow the petitioner to 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.



- (x) 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.
- (xi) 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.”
3. The Investment Approval (IA) for implementation of “Wardha – Hyderabad 765 kV Link” was accorded by the Board of Directors of the petitioner vide the Memorandum Ref: C/CP/Wardha-Hyderabad dated 03.02.2015, at an estimated cost of ₹ 3662.02 crore including IDC of ₹ 283.26 crore, based on October 2014 price level.
4. The scope of the scheme was discussed and agreed in the 34th, 35th, 36th & 37th SCM of Southern Region Constituents held on 16.04.2012, 04.01.2013, 04.09.2013 & 31.07.2014, respectively, which further has been discussed and ratified by SRPC in the 22nd, 23rd, 24th, 26th & 30th SRPC meetings held on 18.05.2013, 26.10.2013, 15.03.2014, 20.12.2014 & 27.08.2016.
5. The scope of work covered under “Wardha – Hyderabad 765 kV Link” in Southern Region is as follows:

Transmission Line

- a) Wardha – Hyderabad (Maheshwaram) 765 kV D/C line with anchoring at Nizamabad 765/400 kV Sub-Station.
- b) Nizamabad – Dichpalli 400 kV D/C line.

Substation

- a) **Establishment of 765/400 kV GIS station at Nizamabad with 2x1500 MVA, transformers**
- i. 4 nos. 765 kV bays at Nizamabad for anchoring of Wardha – Hyderabad (Maheshwaram) 765 kV D/C line.



- ii. 2 number 765 kV transformer bays for 2x1500 MVA transformers.
- iii. 1 number 765 kV reactor bay for 1x240 MVA Bus Reactor.
- iv. 2 number 400 kV transformer bays for 2x1500 MVA transformers.
- v. 2 number 400 kV line bays for terminating Nizamabad – Dichpalli 400 kV D/C line.

b) Extension of Hyderabad (Maheshwaram) 765/400 kV Substation

2 nos. 765 kV bays for terminating Wardha – Hyderabad (Maheshwaram) 765 kV D/C line with anchoring at Nizamabad.

c) Extension of Wardha 765/400 kV Substation

2 nos. 765 kV bays for terminating Wardha – Hyderabad (Maheshwaram) 765 kV D/C line with anchoring at Nizamabad.

d) Extension of Dichpalli 400 kV Substation of APTRANSCO

2 nos. 400 kV bays for terminating Nizamabad – Dichpalli 400 kV D/C line.

Reactive Compensation

Bus Reactors

- 1 no. 240 MVA 765 kV Bus Reactor at Nizamabad 765/400 kV Substation.

Line Reactors (765 kV)

- 1 no. 240 MVA switchable line reactor each at Hyderabad (Maheshwaram) for both circuits of Nizamabad – Hyderabad (Maheshwaram) 765 kV D/C line.
- 1 no. 240 MVA switchable line reactor each at Nizamabad for both circuits of Nizamabad – Hyderabad (Maheshwaram) 765 kV D/C line.
- 1 no. 240 MVA switchable line reactor each at Wardha for both circuits of Wardha- Nizamabad 765 kV D/C line.
- 1 no. 240 MVA switchable line reactor each at Nizamabad for both circuits of Wardha- Nizamabad 765 kV D/C line.

6. The details of the assets covered in the instant transmission system is given below:-



Name of Asset	Anticipated/ Actual DOCO	Covered under Petition
(i) Wardha – Nizamabad 765 kV D/C line along with associated bays,(ii)Nizamabad – Dichpalli 400 kV D/C line along with associated bays,(iii) Establishment of 765/400 kV GIS at Nizamabad with 2x1500 MVA transformers, 1x240 MVA Bus Reactor, 2x240 MVA Switchable Line Reactors along with associated bays, (iv) Extension of 765/400 kV Wardha Sub-station with 2x240 MVA Switchable Line Reactors along with associated bays &(v) Extension of Dichpalli 400 kV Sub-station of TSTRANSCO	24.04.2017 (Actual)	39/TT/20 17
(i) Hyderabad (Maheshwaram)-Nizamabad 765kV D/C Line and(ii) 2 nos 765kV bays along with 1 no. 240 MVAR switchable line reactor each at Hyderabad (Maheshwaram) & Nizamabad substation each for both circuits of Hyderabad-Nizamabad 765kV D/C Line - Asset-I	31.08.2017 (Actual)	Covered under Current Petition

7. The petitioner submitted that with the commissioning of instant assets covered under current petition, the entire Scope of the Project Wardha - Nizamabad – Hyderabad (Maheshwaram) 765 kV D/C has been completed.
8. Annual Fixed Cost was granted for the instant transmission asset vide order dated 12.06.2017 under the first proviso to Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC charges.
9. The petitioner has claimed the following transmission charges for the instant asset:-

(Rs. in lakh)

Particulars	Asset-I	
	2017-18	2018-19
Depreciation	3271.27	6051.87



Interest on Loan	3476.89	6054.74
Return on Equity	3706.89	6957.79
Interest on Working Capital	260.64	471.22
O&M Expenses	603.29	1063.67
Total	11372.98	20599.29

10. The petitioner has served the petition to the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003(the Act). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. Tamil Nadu Generation and Distribution Corporation Ltd (TANGEDCO), Respondent No. 4, has filed reply vide affidavit dated 03.11.2017. The petitioner has filed its rejoinder to the reply vide affidavit dated 21.08.2018. The issues raised by TANGEDCO and the clarifications given by the petitioner are dealt in relevant paragraphs of the order. The hearing in this matter was held on 28.08.2018.
11. This order has been issued after considering the petitioner's affidavits dated 14.09.2017, 15.09.2017, 21.09.2017, 30.11.2017, 20.08.2018, 21.08.2018 and 07.09.2018 and reply filed by the respondent no. 4 dated 03.11.2017.
12. Having heard the petitioner and perused the material on record, we proceed to dispose of the petition.

Date of Commercial Operation ("COD")

13. As per Clause (3) of Regulation 4 of the 2014 Tariff Regulations, the petitioner has submitted that the COD of the instant Asset-I is 31.08.2017. The petitioner has submitted RLDC trial run operation certificate dated 09.08.2017, CMD certificate as required under grid code, CEA Certificate dated 21.06.2017 under Regulation 43 of CEA (Measures Related to Safety & Electricity Supply) Regulations, 2010 and the self-declaration COD certificate dated 30.08.2017 vide affidavit dated 15.09.2017 in respect of the claim of commercial operation date.



14. The petitioner has submitted that the instant assets have been commissioned earlier than the scheduled COD. The justification submitted by the petitioner for early commissioning is that the early commissioning of the subject Asset has been discussed in 26th SRPC wherein, it has been mentioned that “KSEB vide their letter dated 08.12.2014 had suggested early commissioning for the enhancement of Inter-Regional transmission capacity.”
15. Taking into consideration the RLDC certificate, CEA certificate and CMD certificate and final implemented arrangement, the COD of the Asset-I is approved as 31.08.2017 and considered for the purpose of tariff computation. The tariff is worked out from COD to 31.03.2019.

Capital Cost

16. The petitioner has claimed capital cost as per Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations.
17. The petitioner vide affidavit dated 30.11.2017 has submitted the Auditor Certificate dated 08.11.2017 along with revised tariff forms for Assets I. The details of approved apportioned cost, capital cost as on the date of commercial operation and estimated additional capital expenditure incurred or projected to be incurred during 2017-18 and 2018-19 along with estimated completion cost for the instant asset covered in the petition and considered for the purpose of computation of tariff are as under:

(Rs. in lakh)

Asset	Apportioned Approved Cost	Cost as on COD	Estimated additional capital expenditure			Total Estimated Completion Cost
			2016-17	2017-18	2018-19	
Asset-I	145289.39	101046.26	-	10893.03	5463.34	117402.63

Cost under-Run/Variation

18. Petitioner has submitted that as compared to apportioned approved cost of Rs.145289.39 lakh, the estimated completion cost of Asset-1 is Rs.117402.63 lakh. So there is cost under run of about Rs.27886.76 lakh (19.19 per cent).



- 19.** TANGEDCO vide its reply dated 03.11.2017 has submitted that petitioner has stated in para 7.1 of the petition that there is no cost overrun as per the approved cost. This is a wrong statement as from the cursory view of the comparative statement it appears that there is cost under run of 12.21%. The difference in estimated completion cost and approved cost is Rs. 133031.65 lakh. Analysis of detailed cost estimation would reveal and establish the irregularity and negligence of the petitioner on account of steep variation in individual element cost. TANGEDCO further submitted that the breakup of the project cost furnished in Form 5 exhibits that the estimates are vague and unrealistic. TANGEDCO submitted that the description of the equipment /elements is different in different petitions. The petitioner has not followed common / standard nomenclature of equipment details in all the cost estimates. TANGEDCO has asked the Commission to direct the petitioner to place on record the cost estimation procedure followed by the petitioner and the tendering process so as to ensure transparency in costing of the transmission projects and to submit the justification for cost under-run for the instant asset and balance and retention details. TANGEDCO further submitted that the petitioner has not furnished Form 12A detailing the statement of IEDC. TANGEDCO has also raised queries on revision of O&M expenses and recovery of License fees from respondents.
- 20.** In response, the petitioner has submitted the rejoinder to the reply filed by TANGEDCO vide affidavit dated 21.08.2018. The petitioner submitted that the head wise variation of the cost with respect FR & actual expenditure incurred is submitted in Form-5 along with the petition. The petitioner also submitted that the cost under-run in the instant asset is mainly on account of the lower rates received during competitive bidding. With regard to revision in O&M expense and recovery of license fee, the petitioner has submitted that these claims are made as per the provisions of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.
- i. With regard to cost variation it may be submitted that the cost estimate is prepared based on SOR and the actual cost is obtained through competitive bidding process. Being extension package for



an already existing GIS substation, most of the systems are established and therefore could be completed ahead of schedule utilizing the already existing man power leading to lesser IDC & IEDC. The difference in Custom duty is also due to reduction in the GIS equipment cost obtained during competitive bidding process and also due to charging of reduced CD. Further, it is submitted that the Petitioner follows a robust and time-tested system of preparing cost estimates before obtaining Investment Approval. After Investment Approval, the award letters are placed on the executing agencies on the basis of a tendering process as per best industry practices and due diligence including justification of bid prices vis-à-vis estimated cost before placing the awards. Further, cost control measures are taken during execution of the project and only under unavoidable situations caused by the actual soil/terrain conditions, crossing requirements (river, Power line, Railway line, forest stretches and any other compelling technical reason), the cost may undergo changes.

- ii. Further with regard to description of the item, it is submitted that different projects have different item requirement. Further, description of equipment/elements is generally in line with LOA and thus description provided in the LOA is considered for a particular project. Further, escalation in the cost of certain items mentioned at para 5 is on account of the awarded rates received through competitive bidding. With regard to Form-5 submitted by the petitioner, it is submitted that the Form-5 has been prepared based on the standard format as specified under CERC (Terms and Conditions of Tariff) Regulations '2014
- iii. Form-12A along with Auditor Certificates and revised Tariff Forms are already submitted vide affidavit dated 30.11.2017

21. With regard to balance and retention details, the petitioner has submitted the same along with the rejoinder dated 21.08.2018.



22. Vide RoP dated 04.09.2018, the petitioner was directed to submit the justification regarding cost under run in certain heads as per Form-5. The petitioner vide affidavit dated 07.09.2018 submitted the following major reasons for cost under run:
- (i) Due to Softening of steel prices during the execution of the project, the prices discovered during competitive bidding and negative price variation encountered during execution of the contract, the average executed cost under subject head decreased substantially w.r.t. FR. Also there is a negative PV which led to further under run in cost and reduction in IEDC.
 - (ii) Due to early commissioning of the assets i.e. 09 months ahead of schedule.
23. The petitioner also submitted the initial spares discharge details and reconciled Form-4a and Form-7 vide RoP reply dated 07.09.2018. After considering the submissions of the petitioner and the respondent, cost variations are allowed for the purpose of tariff computations.

Time over-run

24. As per the investment approval dated 29.01.2015, the instant asset was scheduled to be commissioned within 40 months in a progressive manner from the date of approval by the Board of Directors of the petitioner. Accordingly, the scheduled date of commercial operation comes to 29.05.2018 against which instant asset was put under commercial operation on 31.08.2017. Hence, there is no time over-run in commissioning of the instant asset.

Interest During Construction (IDC)

25. The petitioner has claimed IDC of Rs.6069.83 lakh for the instant asset. The IDC on cash basis up to allowable dates has been worked out on the basis of the loan details given in Form-9C. It is submitted that petitioner has not made any default in the payment of interest. Further, the petitioner has submitted the statement showing discharged IDC liability as on COD and thereafter.



26. The IDC considered as on COD for the purpose of tariff determination is as below:-

(Rs. in lakh)

Asset	IDC as per IA	IDC claimed	IDC disallowed (on account of time overrun not condoned)	IDC disallowed (Un-discharged liability)	IDC allowed (As on COD)
Asset-I	12746.70	6069.83	0.00	1962.43	4107.40

27. The petitioner has further submitted the statement showing IDC discharged up to COD for the asset in which the loan wise drawl date has also been mentioned. For the purpose of determining the IDC, the loan wise drawl date as provided by the petitioner has been assumed as date of infusion of debt fund for the concerned loan. IDC amounting to Rs. 4107.40 lakh have been worked out and allowed as on COD on cash basis. The balance IDC discharged after COD (i.e. in 2017-18 and 2018-19) is included in the add cap expenditure for FY 2017-18 and 2018-19.

Incidental Expenditure During Construction (IEDC)

28. The petitioner has claimed IEDC of Rs.2402.50 lakh for the instant asset. The petitioner has claimed IEDC as on COD, which is within the percentage of hard cost as indicated in the abstract cost estimate. In the instant petition, 5% of hard cost is indicated as IEDC in the abstract cost estimate. Hence, no adjustment of IEDC is required in the case of instant assets. Year wise details of actual amount of IEDC discharged i.e. Form-12A is also submitted by the petitioner. The petitioner vide affidavit dated 30.11.2017 has submitted that entire IEDC claimed in Auditor Certificate is on cash basis and is paid up to COD of the assets. Hence, the entire amount of IEDC has been allowed.
29. The IEDC claimed and allowed are as follows:-

(Rs. in lakh)

Asset	IEDC Claimed	IEDC disallowed (on account of time over-run not	IEDC Allowed (as on COD)
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		condoned)	
Asset-I.	2402.50	0.00	2402.50

Initial spares

30. The petitioner has claimed the Initial Spares for instant asset which are within the ceiling limit specified under Regulation 13(d) of the 2014 Tariff Regulations and hence the same has been allowed for the purpose of tariff in this order.

(Rs. in lakh)

Asset	P & M Cost		Spares	
	Sub-station	Transmission line	Sub-station	Transmission line
Asset- I	23111.90	80525.90	1132.87 (4.90%)	789.84 (0.99%)

*Plant & machinery cost excluding IDC, IEDC, Land Cost & Cost of Civil works

Capital Cost allowed as on COD

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

(Rs. in lakh)

Assets	Capital Cost as on COD (A)	IDC disallowed as on COD (B)	IEDC Disallowed as on COD (C)	Excess Initial Spares disallowed as on COD (D)	Capital Cost as on COD considered for tariff calculation (E)=(A)-(B+C+D)
Asset-I	101046.26	1962.43	0.00	0.00	99083.83

Additional Capital Expenditure (ACE)

32. The cut-off date for the instant assets is 31.3.2020.
33. The petitioner has claimed ACE as per as per Clause (1) of Regulation 14 of the 2014 Tariff Regulations and Auditor certificate dated 08.11.2017. In addition, the petitioner has also claimed the discharge of IDC liability for 2017-18 and 2018-19 in respect of Asset 1 as ACE. The additional capital expenditure claimed by the petitioner for the instant assets for the period



2017-18 and 2018-19 is within the cut- off date and is on account of balance and retention payments and accordingly it is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations. The ACE claimed by the petitioner is summarized in the table below:-

(Rs. in lakh)

Assets	2016-17	2017-18	2018-19
Asset-I	0.00	12125.04	5662.96

34. Based on the information submitted by the petitioner the allowable ACE has been summarized as under:-

(Rs. in lakh)

Assets	2016-17	2017-18	2018-19
Asset-I	0.00	12125.04	5644.87

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

(Rs. in lakh)

Asset	Expenditure up to COD	2016-17	2017-18	2018-19	Total Estimated Completion Cost up to 31.3.2019
Asset-I	99083.83	-	12125.04	5644.87	116853.74

Debt-Equity Ratio

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

(Rs. in lakh)

Particular	Asset-I			
	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	69358.68	70.00	81797.62	70.00
Equity	29725.15	30.00	35056.12	30.00
Total	99083.83	100.00	116853.74	100.00



Return on Equity

37. The petitioner has submitted that it is liable to pay income tax at MAT rate, the RoE has been calculated @ 20.243% after grossing up the RoE with MAT rate of 20.961% as provided under Regulation 25(2)(i) of the 2014 Tariff Regulations. As per Regulation 25(3) of the 2014 Tariff Regulations, the grossed up rate of RoE at the end of the financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2014-19 period on actual gross income of any financial year.

Additional Return on Equity

38. The petitioner has further submitted that the assets covered in the instant petition were put into commercial operation within the time line specified in the 2014 Tariff Regulations and has prayed for grant of additional RoE of 0.5%. The timeline specified in Appendix-II of the 2014 Tariff Regulations for grant of additional RoE of 0.5% in case of the instant asset is 40 months against which the subject asset has been commissioned in 32 months. The petitioner has further submitted the RPC certificate dated 26.12.2017 for additional RoE in terms of Regulation 24(2) (iii). Accordingly additional RoE as claimed by the petitioner has been allowed.
39. We have considered the submissions made by the petitioner and respondent. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the RoE allowed is as follows:-

(Rs. in lakh)

Particulars	Asset-I	
	2017-18	2018-19
Opening Equity	29725.15	33362.66
Addition due to Additional Capitalization	3637.51	1693.46
Closing Equity	33362.66	35056.12
Average Equity	31543.90	34209.39
Return on Equity (Base Rate)	16.00%	16.00%
MAT rate for the Financial year	20.961	20.961
Rate of Return on Equity (Pre-tax)	20.243%	20.243%
Return on Equity (Pre-tax)	3726.29	6925.01

Interest on loan (IOL)

40. The petitioner's entitlement to 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 average loan have been considered as per the petition;

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

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

41. The petitioner has submitted that the IoL has been claimed on the basis of rate prevailing as on COD i.e.31.08.2017 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.



42. Detailed calculations in support of IOL are given in the Annexure I.

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

(Rs. in lakh)

Particulars	Asset-I	
	2017-18	2018-19
Gross Normative Loan	69358.68	77846.21
Cumulative Repayment upto previous Year	0	3241.18
Net Loan-Opening	69358.68	74605.02
Addition due to Additional Capitalization	8487.53	3951.41
Repayment during the year	3241.18	6023.35
Net Loan-Closing	74605.02	72533.09
Average Loan	71981.85	73569.06
Weighted Average Rate of Interest on Loan	8.2018%	8.1929%
Interest on Loan	3445.23	6027.42

Depreciation

44. The petitioner has claimed depreciation as per Regulation 27 of the 2014 Tariff Regulations. The instant transmission asset was put under commercial operation on 31.08.2017. Accordingly, it will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

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

(Rs. in lakh)

Particulars	Asset-I	
	2017-18	2018-19
Opening Gross Block	99083.83	111208.87
Additional Capital expenditure	12125.04	5644.87
Closing Gross Block	111208.87	116853.74
Average Gross Block	105146.35	114031.30
Rate of Depreciation	5.2823%	5.2822%
Depreciable Value	94631.71	102628.17

Remaining Depreciable Value	94631.71	99386.99
Depreciation	3241.18	6023.36

Operation and Maintenance Expenses (O&M Expenses)

46. The petitioner vide affidavit dated 30.11.2017 has claimed the O&M Expenses for 2014-19 period as per Regulation 29(4)(a) of the 2014 Tariff Regulations.
47. We have considered the submissions of the petitioner. The O&M Expenses have been allowed as under:-

(Rs. in lakh)

Element	2017-18	2018-19
Asset-I	600.76	1063.67
Total	600.76	1063.67

48. The petitioner has submitted that O&M Expenses for the tariff period 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.
49. TANGEDCO in its reply has submitted that there is no provision in 2014 Tariff Regulations for revising the normative O&M charges based on the actuals. TANGEDCO has submitted that the O&M rates are arrived based on past five years actual O&M Expenses which include the wage hikes during the previous five years and 10% margin over and above the effective CAGR of O&M Expenses have been allowed. The beneficiaries are over-burdened due to the exorbitant O&M rates when compared to the rates of State Transmission Utilities. Therefore, the request for revision of O&M rates should not be allowed.



50. In response, the petitioner has submitted that being a CPSU, the scheme of wage revision is binding on the petitioner. However the actual impact of wage hike (due w.e.f. 1.1.2017) has not been factored in fixation of the normative O&M rates prescribed for the 2014-19 tariff block. In line with the Regulation 19(f)(ii) of the 2014 Tariff Regulations, norms for O&M Expenses for the year 2009-10 were derived considering the impact of wage hike of the employees under PSUs. The petitioner has prayed for suitable revision in the norms for O&M Expenses for claiming the impact of wage hike during 2014-19 periods.
51. We have considered the submissions of the petitioner and TANGEDCO. The O&M Expenses have been worked out as per the norms specified in the 2014 Tariff Regulations and are thus allowed. 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.

Interest on Working Capital (IWC)

52. As per proviso Regulation 28(1)(c) and Regulation 3(5) of the 2014 Tariff Regulations, the petitioner is entitled to claim IWC as per Regulation 28(1)(c) and Regulation 3(5) of the 2014 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

a. Receivables

Receivables as a component of working capital will be equivalent to two months fixed cost. The petitioner has claimed the receivables on the basis of 2 months' annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

b. Maintenance spares

Regulation 28 of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M expenses. The value of maintenance spares has accordingly been worked out.



c. O & M Expenses

O&M Expenses have been considered for one month as a component of working capital. The petitioner has claimed O&M Expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

d. Rate of IWC

As provided under Regulation 28(3) of the 2014 Tariff Regulations, SBI Base rate 9.30% as on 1.4.2016 plus 350 BPS i.e. 12.80% has been considered as the rate of IWC.

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

(Rs. in lakh)

Particulars	Asset-I	
	2017-18	2018-19
Maintenance Spares	154.42	159.55
O & M expenses	85.79	88.64
Receivables	3218.10	3416.87
Total	3458.31	3665.06
Interest	254.28	461.80

Annual Transmission charges

54. The annual transmission charges allowed for the instant assets are summarized hereunder:-

(Rs. in lakh)

Particulars	Asset-I	
	2017-18 (pro-rata)	2018-19
Depreciation	3241.18	6023.35
Interest on Loan	3445.23	6027.42
Return on Equity	3726.29	6925.01
Interest on Working Capital	254.28	461.80
O&M Expenses	600.76	1063.67
Total	11267.75	20501.24

55. The petitioner has submitted that the claim for transmission charges and other charges is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess and charges or any other kind of impositions etc. The same if imposed shall be borne and additionally paid by the respondents.

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.

Licence Fee and RLDC fees and Charges

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

Goods and Services Tax

58. The petitioner has prayed for reimbursement of tax, if any, on account of proposed implementation of GST. The petitioner has submitted that the Commission should allow to recover GST from the beneficiaries, if imposed on transmission charges under the proposed GST when implemented by Government of India. We are of the view that petitioner's prayer is premature.

Sharing of Transmission Charges

59. The Tariff for Transmission of Electricity (Annual Fixed Cost shall be shared as per Regulation-43 of CERC (Terms and Conditions of Tariff) Regulations, 2014. These charges shall be recovered under the billing collection and



disbursement of Transmission Charges and shall be governed by provision of CERC (sharing of interstate Transmission Charges and Losses) Regulations, 2010.

60. This order disposes of Petition No. 208/TT/2017.

Sd/-
(Dr. M. K. Iyer)
Member

Sd/-
(A. K. Singhal)
Member

Sd/-
(P. K. Pujari)
Chairperson



Annexure-I
(Rs. in lakh)

Particulars	2016-17	2017-18	2018-19
SBI Loan 1			
Gross Loan Opening		10,345.51	10,345.51
Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening		10,345.51	10,345.51
Add: Drawal(s) during the year			
Less: Repayment (s) of Loans during the year			
Net Loan Closing		10,345.51	10,345.51
Average Net Loan		10,345.51	10,345.51
Rate of Interest on Loan		8.90%	8.90%
Interest on Loan		920.75	920.75
Bond L			
Gross Loan Opening		6,000.00	6,000.00
Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening		6,000.00	6,000.00
Add: Drawal(s) during the year			
Less: Repayment (s) of Loans during the year			
Net Loan Closing		6,000.00	6,000.00
Average Net Loan		6,000.00	6,000.00
Rate of Interest on Loan		8.40%	8.40%
Interest on Loan		504.00	504.00
BOND LI			
Gross Loan Opening		1,361.30	1,361.30
Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening		1,361.30	1,361.30
Add: Drawal (s) during the year			
Less: Repayment (s) of Loans during the year			
Net Loan Closing		1,361.30	1,361.30
Average Net Loan		1,361.30	1,361.30
Rate of Interest on Loan		8.40%	8.40%
Interest on Loan		114.35	114.35
Bond LVII			
Gross Loan Opening		3,247.00	3,247.00
Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening		3,247.00	3,247.00
Add: Drawal(s) during the year			
Less: Repayment (s) of Loans during the year			
Net Loan Closing		3,247.00	3,247.00
Average Net Loan		3,247.00	3,247.00
Rate of Interest on Loan		7.20%	7.20%
Interest on Loan		233.78	233.78



Bond LVIII			
Gross Loan Opening		19,160.55	19,160.55
Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening		19,160.55	19,160.55
Add: Drawal(s) during the year			
Less: Repayment (s) of Loans during the year			
Net Loan Closing		19,160.55	19,160.55
Average Net Loan		19,160.55	19,160.55
Rate of Interest on Loan		7.89%	7.89%
Interest on Loan		1,511.77	1,511.77
SBI Loan 2			
Gross Loan Opening		14,580.00	14,580.00
Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening		14,580.00	14,580.00
Add: Drawal(s) during the year			
Less: Repayment (s) of Loans during the year			
Net Loan Closing		14,580.00	14,580.00
Average Net Loan		14,580.00	14,580.00
Rate of Interest on Loan		8.90%	8.90%
Interest on Loan		1,297.62	1,297.62
SBI Loan 3			
Gross Loan Opening		1,722.59	1,722.59
Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening		1,722.59	1,722.59
Add: Drawal(s) during the year			
Less: Repayment (s) of Loans during the year			
Net Loan Closing		1,722.59	1,722.59
Average Net Loan		1,722.59	1,722.59
Rate of Interest on Loan		7.95%	7.95%
Interest on Loan		136.95	136.95
HDFC			
Gross Loan Opening		5,871.59	5,871.59
Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening		5,871.59	5,871.59
Add: Drawal(s) during the year			
Less: Repayment (s) of Loans during the year			
Net Loan Closing		5,871.59	5,871.59
Average Net Loan		5,871.59	5,871.59
Rate of Interest on Loan		7.95%	7.95%
Interest on Loan		466.79	466.79
Bond LIX			
Gross Loan Opening		2,931.00	2,931.00



Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening		2,931.00	2,931.00
Add: Drawal(s) during the year			
Less: Repayment (s) of Loans during the year			
Net Loan Closing		2,931.00	2,931.00
Average Net Loan		2,931.00	2,931.00
Rate of Interest on Loan		7.30%	7.30%
Interest on Loan		213.96	213.96
BOND LX			
Gross Loan Opening		4,510.70	4,510.70
Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening		4,510.70	4,510.70
Add: Drawal(s) during the year			
Less: Repayment (s) of Loans during the year			
Net Loan Closing		4,510.70	4,510.70
Average Net Loan		4,510.70	4,510.70
Rate of Interest on Loan		7.20%	7.20%
Interest on Loan		324.77	324.77
BOND LX			
Gross Loan Opening			1,122.00
Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening			1,122.00
Add: Drawal(s) during the year		1,122.00	
Less: Repayment (s) of Loans during the year			
Net Loan Closing		1,122.00	1,122.00
Average Net Loan		561.00	1,122.00
Rate of Interest on Loan		7.20%	7.20%
Interest on Loan		40.39	80.78
BOND LX			
Gross Loan Opening			
Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening			
Add: Drawal(s) during the year			139.74
Less: Repayment (s) of Loans during the year			
Net Loan Closing			139.74
Average Net Loan			69.87
Rate of Interest on Loan			7.20%
Interest on Loan			5.03
Total Loan			
Gross Loan Opening		69,730.24	70,852.24
Cumulative Repayments of Loans upto Previous Year			
Net Loans Opening		69,730.24	70,852.24



Add: Drawal(s) during the year		1,122.00	139.74
Less: Repayment (s) of Loans during the year			
Net Loan Closing		70,852.24	70,991.98
Average Net Loan		70,291.24	70,922.11
Interest on Loan		5,765.13	5,810.56
Weighted Average Rate of Interest on Loan		8.20%	8.19%

