

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 505/TT/2020

Coram:

**Shri I. S. Jha, Member
Shri Arun Goyal, Member**

Date of Order: 06.02.2021

In the matter of

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for determination of transmission tariff from COD to 31.3.2019 of **Asset-1:** Replacement of 3x167 MVA, 400/220 kV ICTs with 1X500 MVA ICT at Somanhalli Sub-station, **Asset-2:** Replacement of 4x167 MVA, 400/220 kV ICTs with 1X500 MVA ICT at Somanhalli Sub-station, **Asset-3:** Replacement of 1x50 MVAr Bus reactor with 1x125 MVAr Bus reactor at 400/220 kV Narendra Sub-station, **Asset-4:** 01 No. 500 MVA, 765/400 kV Regional Spare ICTs at Thiruvallur Sub-station and **Asset-5:** 01 No. 500 MVA, 765/400 kV Regional Spare ICTs at Raichur Sub-station under "System Strengthening-XXIII in Southern Region".

And in the matter of

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

.... Petitioner

Vs

1. Karnataka Power Transmission Corporation Ltd. (KPTCL),
Kaveri Bhawan, Bangalore-560009.
2. Transmission Corporation of Andhra Pradesh Ltd. (APTRANSCO),
Vidyut Soudha,
Hyderabad-500082.
3. Kerala State Electricity Board (KSEB),
Vaidyuthi Bhavanam,
Pattom, Thiruvananthapuram-695004.
4. Tamil Nadu Generation and Distribution Corporation Ltd.,
(Formerly Tamil Nadu Electricity Board-TNEB),
NPKRR Maaligai, 800, Anna Salai,
Chennai-600002.
5. Electricity Department,



Government of Goa,
Vidyuti Bhawan, Panaji,
Goa-403001.

6. Electricity Department,
Government of Pondicherry,
Pondicherry-605001.
7. Eastern Power Distribution Company of Andhra Pradesh Ltd. (APEPDCL),
P&T Colony, Seethmmadhara,
Vishakhapatnam, Andhra Pradesh.
8. Southern Power Distribution Company of Telangana Ltd. (TSSPDCL),
Corporate Office, Mint Compound,
Hyderabad- 500063, Telangana
9. Central Power Distribution Company of Andhra Pradesh Ltd. (APCPDCL),
Corporate Office, Mint Compound,
Hyderabad-500063, Andhra Pradesh.
10. Northern Power Distribution Company of Telangana Ltd. (TSNPDCL),
Opp. NIT Petrol Pump,
Chaitanyapuri, Kazipet, Warangal-506004, Telangana.
11. Bangalore Electricity Supply Company Ltd. (BESCOM),
Corporate Office, K.R. Circle,
Bangalore-560001, Karnataka.
12. Gulbarga Electricity Supply Company Ltd. (GESCOM),
Station Main Road,
Gulbarga, Karnataka.
13. Hubli Electricity Supply Company Ltd. (HESCOM),
Navanagar, PB Road,
Hubli, Karnataka.
14. MESCOM, Corporate Office,
Paradigm Plaza, AB Shetty Circle,
Mangalore-575001, Karnataka.
15. Chamundeswari Electricity Supply Corporation Ltd. (CESC),
927, L J Avenue Ground Floor,
New Kantharaj Urs Road, Saraswatipuram,
Mysore-570 009, Karnataka.
16. Transmission Corporation of Telangana Ltd.,
Vidhyut Sudha, Khairatabad,
Hyderabad-500082

...Respondents



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

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

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd. (hereinafter referred to as “the Petitioner”), a deemed transmission licensee, for determination of transmission tariff for the period 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”) in respect of the following assets under “System Strengthening-XXIII in Southern Region” (hereinafter referred to as “the transmission project”):

Asset-1: Replacement of 3x167 MVA, 400/220 kV ICTs with 1X500 MVA ICT at Somanhalli Sub-station;

Asset-2: Replacement of 4x167 MVA, 400/220 kV ICTs with 1X500 MVA ICT at Somanhalli Sub-station;

Asset-3: Replacement of 1x50 MVAr Bus reactor with 1x125 MVAr Bus reactor at 400/220 kV Narendra Sub-station;

Asset-4: 01 No. 500 MVA, 765/400 kV Regional Spare ICT at Thiruvallam Sub-station; and

Asset-5: 01 No. 500 MVA, 765/400 kV Regional Spare ICT at Raichur Sub-station.

2. The Petitioner has made the following prayers in this petition:

“1) Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition, as per para – 10.3 above.”



- 2) *Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred/ projected to be incurred.*
- 3) *Allow the Petitioner to approach 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.*
- 4) *Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff Regulations, 2014.*
- 5) *Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition.*
- 6) *Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.*
- 7) *Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents.*
- 8) *Allow the Petitioner to bill and recover GST on Transmission charges separately from the respondents, if GST on Transmission 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.*
- 9) *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.*
- 10) *Allow the Petitioner to bill Tariff from 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 (IA) for the transmission project was accorded by Board of Directors of the Petitioner in 309th meeting held on 29.1.2015 vide Memorandum No. C/CP/SRSS-XXIII, dated 3.2.2015 with an estimated cost of ₹20328 lakh including IDC of ₹1246 lakh based on October 2014 price level.



4. The Board of Directors of the Petitioner have accorded approval for the Revised Cost Estimate (RCE) for the transmission project vide Memorandum No. C/CP/PA-1617-03-0X-RCE-012, dated 31.3.2017 with an estimated cost of ₹26003 lakh including IDC of ₹1330 lakh based on August 2016 price level.

5. The scope of the scheme was discussed and agreed in the 35th & 36th SCM of Southern Region Constituents held on 4.1.2013 and 4.9.2013 respectively. This was ratified by SRPC in the 21st, 22nd and 23rd SRPC meetings held on 2.2.2013, 18.5.2013 and 26.10.2013 respectively. The Petitioner has been entrusted with the implementation of “System Strengthening-XXIII in Southern Region”.

6. The scope of the transmission project as per Investment Approval is as follows:

Sub-station

- a. Extension of 400/220 kV Sub-station at Madurai
 - i. Provision of 400/220 kV, 1x 500 MVA transformer
 - ii. 1 number 400 kV transformer bay for 1x 500MVA transformer
 - iii. 1 number 230 kV transformer bay for 1x 500MVA transformer
- b. Extension of 400/220 KV Sub-station at Somanhalli
Replacement of 7X 167 MVA, 400/220 kV ICTs with 2 X 500 MVA ICTs (The replaced ICTs shall be maintained as a regional spare)
- c. Procurement of 2 Nos. 500 MVA, 765/400 kV Regional spare ICTs

Reactive Compensation

Bus Reactors (400 kV)

- 1x125 MVAR 400 kV Bus reactor at Gooty, Hassan, Khammam, Trivandrum, Nellore (existing), Narendra (New) and Nagarjunasagar Sub-station.
- 2X63 MVAR bus reactors at Yelahanka Sub-station.



- Replacement of 1x50 MVAR bus Reactor with 1X125 MVAR bus reactor at 400/220 kV Narendra Sub-station (The replaced bus reactor shall be maintained as a regional spare).

Line Reactors (400 kV)

- 1X63 MVAR Switchable line reactors at Nellore pooling station on each circuit of Nellore pooling Station –Gooty 400 kV Quad D/C line.

7. The scope of the work covered in the Investment Approval is covered in two petitions and the details are as follows:

Name of Asset	Scheduled COD	Actual COD	Petition No.
1X 125 MVAR 400 kV Bus reactor at Hassan along with associated bays and equipment's	29.7.2017	18.12.2016	58/TT/2017
400/220 kV,1X500 MVA transformer at Madurai Sub-station along with associated bays and equipment's	29.7.2017	31.12.2016	
1x125 MVAR 400 kV Bus reactor at Trivandrum along with associated bays and equipment's	29.7.2017	26.1.2017	
1x 125 MVAR 400 kV Bus reactor at Narendra (New) along with associated bays and equipment's	29.7.2017	30.12.2016	
1X 125 MVAR 400 kV Bus reactor at Gooty along with associated bays and equipment's	29.7.2017	28.3.2017	
1X 125 MVAR 400 kV Bus reactor at Khammam along with associated bays and equipment's	29.7.2017	28.3.2017	
1X 125 MVAR 400 kV Bus reactor at Nellore (existing) along with associated bays and equipment's	29.7.2017	28.3.2017	
1X 125 MVAR 400 kV Bus reactor at Nagarjunasagar along with associated bays and equipment's	29.7.2017	28.3.2017	
1x63 MVAr Switchable Line reactors at Nellore Pooling Station on each ckt of Nellore pooling station-Gooty 400 kV Quad D/C Line.	29.7.2017	28.3.2017	
Replacement of 3X167 MVA, 400/220 kV ICTs with 1X500 MVA ICT at Somanhalli Sub-station	29.7.2017	16.3.2017	
Replacement of 4X167 MVA, 400/220 kV ICTs with 1X500 MVA ICT at Somanhalli Sub-station	29.7.2017	31.3.2017	
Replacement of 1x50 MVAr Bus reactor with 1x125 MVAr Bus reactor at 400/220 kV Narendra Sub-station	29.7.2017	25.1.2017	



01 Nos. 500 MVA, 765/400 kV Regional Spare ICTs at Thiruvallur Sub-station	29.7.2017	28.3.2017	
01 Nos. 500 MVA, 765/400 kV Regional Spare ICTs at Raichur Sub-station	29.7.2017	6.2.2019	

8. The tariff for the instant transmission assets from their COD to 31.3.2019 was claimed in Petition No. 58/TT/2017 (therein referred as “Asset-V(a), Asset-V(b), Asset-VI, Asset-XIII and Asset-XII”). However, the tariff was not allowed and the Commission vide order dated 5.7.2018 in Petition No.58/TT/2017 directed the Petitioner to file a separate petition. The relevant portion of the order dated 5.7.2018 is extracted hereunder:

“7. The petitioner has submitted the CEA inspection certificate, WRLDC certificate, COD letter and CMD certificate for the said assets. Accordingly, the commercial operation date of the transmission assets has been considered as in the above table. The Commission during the hearing of Petition No. 38/TT/2017 filed by the petitioner for approval of transmission tariff from COD to 31.3.2019 for Assets (10 nos.) of ERSS IX Project in Eastern Region on 18.1.2018 directed as under:-

“2. Since the petitioner has not submitted proper reply regarding requirement of regional spares vis a vis their current availability, the Commission directed to submit a proper reply. The Commission further directed to set up a Committee consisting of representatives from PGCIL, NLDC and CEA under the Chairmanship of the Chief (Engineering) of the Commission to assess the requirement of regional spares including bus reactors, line reactors, ICTs, etc., present availability and other related issues and submit a comprehensive report on the requirement of spare bus reactors, line reactors, ICTs and related equipment in different regions of the country to the Commission by 9.3.2018. The Commission also observed that final tariff in the matter would be allowed only after consideration of the Report to be submitted by the Chief (Engineering) of the Commission.”

8. The matter is pending. In view of this, the transmission tariff of Asset V (a), Asset V (b), Asset-VI, Asset-XII and Asset-XIII has been excluded from the scope of the petition. The petitioner is, however, granted liberty to approach the Commission for fixation of tariff of these assets after determination of tariff in Petition No. 38/TT/2017, after considering the report of the said committee. In the meanwhile, we direct the Committee to finalize the report and submit the same to the Commission within two months of this order.”

9. The Petitioner has submitted that the remaining elements under the transmission project are under different stages of implementation and application for tariff determination for the same will be submitted on their COD.



10. In the instant petition, the Petitioner has claimed the tariff in respect of the five assets which were earlier covered under Petition No. 58/TT/2017:

Asset name in the instant petition	Asset nomenclature in Petition No. 58/TT/2017	COD Claimed
Asset-1	Asset-V(a)	16.3.2017
Asset-2	Asset-V(b)	31.3.2017
Asset-3	Asset-VI	25.1.2017
Asset-4	Asset-XIII	28.3.2017
Asset-5	Asset-XII	6.2.2019

11. The Petitioner has submitted that the Committee constituted by the Commission has submitted its report and as per the report, the replaced transformer/reactor on approval of the RPC can be utilized as part of regional spares. The Petitioner has submitted that accordingly tariff for the 5 (five) transmission assets, which were replaced, are claimed in the instant petition. The Petitioner has submitted the following asset-wise justification in the instant petition:

a) Requirement of ICTs at Somanhalli Sub-station:

(i) The loading on the existing ICTs at Somanhalli Sub-station exceeded 400 MW on number of occasions and touched 425 MW in August, 2012. Moreover, there was also an increase in fault gases in some of the units. In view of the increased loading pattern and rise in fault gases and to meet any eventuality in the event of failure of any one of the ICTs at the above Sub-station, replacement of both the ICTs at Somanhalli (7x167 MVA, 400/220 kV) by 2x500 MVA (3-phase unit) was proposed. Accordingly, it was planned to replace these old and ageing 7x167 MVA ICTs at Somanhalli Sub-station with 2x500 MVA (3-phase unit) ICTs.

b) Requirement of Spare Reactor at Narendra Sub-station:

(i) Due to high voltage problems, replacement of 1x50 MVAR bus reactor with 1x125 MVAR bus reactor at 400/220 kV Narendra sub-station was approved in the 35th SCM meeting of Southern Region Constituents held on 4.1.2013. Further, the proposal was approved in the 21st SRPC dated 2.2.2013. 01 no. of 50 MVAR bus reactor was put into commercial operation on 1.1.2008 and life of this bus reactor was 9 years on the date of replacement i.e. on COD



(25.1.2017) of Asset-3. In the same meeting, it was also decided that the existing reactor at Narendra Sub-station would be maintained as Regional Spare after refurbishment.

c) Requirement of Regional Spare ICTs at Thiruvallam and Raichur Sub-stations

(i) It was approved in the 22nd and 26th meetings of SRPC held on 18.5.2013 and 20.12.2014, respectively, that 2 nos. of 500 MVA, 765/400 kV ICTs are to be kept as Regional spare in Southern Region (01 no. each at SR-I and SR-II). Accordingly, Petition No. 58/TT/2017 was filed by the Petitioner for 02 Nos. 500 MVA, 765/400 kV ICTs as Regional spare at Thiruvallam (SR-II) and Raichur (SR-I) Sub-stations. The Commission vide order dated 5.7.2018 in Petition No. 58/TT/2017 held as under:

“...Further, we are not inclined to grant AFC for Assets XII and XIII, i.e. Regional Spare ICTs at Raichur and Thiruvallam, at this stage. The petitioner is directed to submit a comprehensive list of Regional Spare ICTs, including Bus Reactors, line reactors, etc. their gross value, year of purchase and petition number in which tariff was granted/claimed....”

12. In view of the above, the Petitioner has submitted that 07 nos. of old 167 MVA ICTs at Somanhalli Sub-station have been replaced with 02 nos. of 500 MVA ICTs (Asset-1 and Asset-2) and 1x50 MVAR Bus reactor has been replaced with 1x125 MVAR bus reactor (Asset-3) at 400/220 kV Narendra Sub-station. The replacement of assets has been done as per SCM/SRPC approval. Further, 02 Nos. 500 MVA, 765/400 kV Regional Spare ICTs (Asset-4 and Asset-5) were procured for Thiruvallam and Raichur Sub-station. The Petitioner has further submitted that in view of the recommendations of the Committee constituted by the Commission and the approval of the RPC and SCM to use of old ICTs and reactors as regional spare in regional pool, de-capitalisation is not applicable to the instant transmission assets.

13. The details of the replaced asset and RPC/SCM approval of instant transmission assets are as follows:

Details of original transmission	Details of new transmission	COD original	of replaced	Useful life	RPC/CM approval	as
----------------------------------	-----------------------------	--------------	-------------	-------------	-----------------	----



asset	assets after replacement	transmission asset	transmission asset	regional spare
(i) 4X167 MVA ICT at Somanhalli Sub-station	1X 500 MVA ICT-I	2.7.1986	Useful life of 25 years completed	35 th SCM meeting held on 4.1.2013 and 22 nd SRPC meeting held on 18.5.2013
(ii) 3X167 MVA ICT at Somanhalli Sub-station	1X 500 MVA ICT-II	28.2.1990		
1x50 MVAR Bus Reactor at Narendra Sub-station	1X125 MVAR Bus-Reactor at Narendra Sub-station		Useful life is not completed	35 th SCM meeting of Southern Region Constituents held on 4.1.2013 and 21st SRPC dated 2.2.2013.
(iii) Regional Spare ICTs at Thiruvallam Sub-station	-	500 MVA ICT	-	
(iv) Regional Spare ICT at Raichur Sub-station	-	500 MVA ICT	-	36 th SCM dated 4.9.2013.

14. We have considered the submissions of the Petitioner. It is observed that the Petitioner has replaced 4X167 MVA ICT-I and 3X167 MVA ICT-II with 1X 500 MVA ICT-1 (Asset-1) and 1X500 MVA ICT-II (Asset-2) respectively at Somanhalli Sub-station. The petitioner has submitted that the replaced ICTS are approved as Regional Spares and therefore de-capitalisation is not applicable for these ICTs. The replaced assets have already completed useful life of 25 years as on the date of replacement i.e. 16.3.2017 (COD of Asset-1) and 31.3.2017 (COD of Asset-2). APTEL in judgement dated 25.4.2016 in Appeal No. 98 of 2015 has held that there is no provision in the Regulations for retaining and allowing tariff for the assets which have completed their useful life and not in use. The relevant portion of APTEL's judgement dated 25.4.2016 is as follows:

“17. It is to be noted that all the three Assets i.e. three of 1x50 MVA transformers have completed their useful life of 25 years and their capital costs were included by the Central Commission for tariff determination upto 31.03.2014 vide its Order dated 06.08.2013 in Petition No. 331/2010. Cost of new assets i.e. 3x160 MVA transformers



replacing 3x50 MVA transformers has been allowed to be capitalized and as such, the replaced assets have to be de-capitalised by reducing the net value of replaced assets from the capital cost of new assets.

18. The Appellant has argued that when the transformers are used as spare transformers, it cannot be said that they are not in use and therefore, its claim for retention of capital cost of the replaced 3x50 MVA transformers with the consent of the beneficiaries does not violate the Regulations of the Central Commission as these replaced assets are to be considered as 'asset in use'. This submission of the Appellant does not have any merit in light of the fact that these 3x50 MVA transformers stand replaced and till the time they are requisitioned by any beneficiary State, they would remain as spare transformers and hence, it could be treated as spare transformers but 'asset not in use'. This Tribunal in its earlier judgment dated 08.05.2014 in Appeal No. 173/2013 (NTPC Ltd. Vs. Central Electricity Regulatory Commission & Ors.) and judgment dated 01.05.2015 in Appeal No. 97/2013 (NTPC Ltd. Vs. Central Electricity Regulatory Commission & Ors.) disallowed capitalization of spare/additional transformers. In judgment dated 01.05.2015, this Tribunal observed that unless there is a specific provision in the Regulations permitting capitalization of the cost of spare assets, such assets cannot be included in the capital base.

19. Since there is no provision in the statutory Regulations of the Central Commission in support of the Appellant's claim to permit retention of replaced assets not in use, in the capital cost of the new assets, we are of the considered view that the Appellant's claim in this regard is untenable. We are in agreement with the findings of the Central Commission in this regard in its Impugned Order dated 06.01.2015. As such, both these issues are decided against the Appellant"

15. We note that, for the replaced assets, the Petitioner has already filed Petition No. 154/TT/2020 for true up of tariff for 2014-19 period and determination of tariff for 2019-24 period. The tariff with respect to replaced ICTs i.e. 4X167 MVA ICT-I and 3X167 MVA ICT-II at Somanhalli Sub-station and De-capitalisation of the issues will be dealt in Petition No. 154/TT/2020.

16. The Petitioner has replaced the 1x50 MVAR bus reactor at Narendra Sub-station (which had its COD on 1.1.2008). Thus, the replaced bus reactor has completed 9 years on the date of replacement i.e. 25.1.2017 (COD of the new 1x125 MVAR bus reactor i.e. Asset-3). The 35th SCM of Southern Region Constituents held on 4.1.2013 and 21st meeting of SRPC dated 2.2.2013 has approved the use of 50 MVAR bus reactor as regional spare. The relevant extracts of the minutes of the 21st meeting of SRPC held on 2.2.2013 is as follows:

"20. PROGRESS OF BUS/LINE REACTORS TO BE COMMISSIONED IN SR



20.1 Bus/line reactors are to be commissioned by the SR constituents as identified in the 22nd Standing Committee Meeting on Power System Planning of Southern Region, and as approved in the 4th SRPC meeting held on 7th June, 2007.

20.5. Summary of deliberations of TCC meeting held the previous day

- After deliberations, TCC had recommended installation of bus reactors at the following locations

Vemagiri	Nagarjuna Sagar	Narendra*	Hyderabad*
----------	-----------------	-----------	------------

Replacement of existing 63 MVAR by 125 MVAR (fixed) reactor. The existing 63 MVAR Reactors at Hyderabad & Narendra would be maintained as Regional Spare after refurbishment.

17. As the replaced 1x50 MVAR bus reactor from Narendra sub-station has completed only 9 years of life and SR constituents have consented to use it as a regional spare, tariff shall be granted for the replaced 1x50 MVAR bus reactor at Narendra Sub-station as regional spare.

18. The Petitioner has claimed tariff for two numbers of 500 MVA ICTs as regional spares at Thiruvalam Sub-station and Raichur Sub-station which are Asset-4 and Asset-5 respectively in this petition. The relevant portion of the Minutes of 36th SCM is extracted as under:

“19.0 Provision of Spare 765/400 kV Transformers in Southern Region.

19.1 COO (CTU), PGCIL stated that to cater to the increasing load demand and import requirement Southern Region is going to have substantial 765 kV grid. In the near future 7 nos. of 765 kV Sub-stations are likely to be available which include Nellore pooling station, Raichur, Kurnool, Tiruvallem, Srikakulam, Vemagiri & Hyderabad. Further, in the present meeting 3 more new 765/400 kV stations are proposed at Chilakluripeta, Cudddapha, Nizamabad. 765 kV system are bulk capacity systems which shall have very adverse effects in case of outage of 765/400 kV transformers requiring long time for repair and replacement. Therefore, POWERGRID had proposed to procure 2 number of 500 MVA transformers as spare and kept at suitable location to meet any exigencies at the earliest.

*19.2 After discussion, the proposal of procurement of 2 number of single phase 500 MVA transformer units as spare was agreed.**

19. Taking into account the technical requirements and the approval in the 36th SCM, we approve the tariff for Asset-4 and Asset-5 as regional spare ICTs at Thiruvalam and Raichur Sub-stations. However, as the instant transmission assets



are spares ICT/ reactors, the Petitioner is directed to submit the confirmation from the SRPC at the time of truing up that these ICTs/Reactors have been used as Regional Spares. The Petitioner is also directed to submit the complete list of Regional Spares available at the time of truing up.

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

(₹ in lakh)

Particulars	Asset-1		
	2016-17 (Pro-rata) (16 days)	2017-18	2018-19
Depreciation	3.81	100.68	113.30
Interest on Loan	3.79	96.04	100.39
Return on Equity	4.27	112.72	127.19
Interest on Working Capital	0.26	6.75	7.43
O&M Expenses	0.00	0.00	0.00
Total	12.13	316.19	348.31

(₹ in lakh)

Particulars	Asset-2		
	2016-17 (Pro-rata) (1 days)	2017-18	2018-19
Depreciation	0.18	82.66	97.28
Interest on Loan	0.19	80.68	88.22
Return on Equity	0.21	92.55	109.21
Interest on Working Capital	0.01	5.58	6.42
O&M Expenses	0.00	0.00	0.00
Total	0.59	261.47	301.13

(₹ in lakh)

Particulars	Asset-3		
	2016-17 (Pro-rata) (66 days)	2017-18	2018-19
Depreciation	6.05	38.36	41.37
Interest on Loan	6.89	39.41	38.47
Return on Equity	6.77	42.95	46.44
Interest on Working Capital	0.43	2.63	2.75
O&M Expenses	0.00	0.00	0.00
Total	20.14	123.35	129.03

(₹ in lakh)

Particulars	Asset-4			Asset-5
	2016-17 (Pro-rata) (4 days)	2017-18	2018-19	2018-19 (Pro-rata) (54 days)
Depreciation	0.46	50.77	62.05	7.39
Interest on Loan	0.46	48.84	56.34	1.17
Return on Equity	0.52	56.84	69.65	8.30
Interest on Working Capital	0.03	3.41	4.10	0.35
O&M Expenses	0.00	0.00	0.00	0.00
Total	1.47	159.86	192.14	17.21

21. The details of the Interest on Working Capital (IWC) claimed by the Petitioner are as under:

(₹ in lakh)

Particulars	Asset-1		
	2016-17 (Pro-rata) (16 days)	2017-18	2018-19
Maintenance Spares	0.00	0.00	0.00
O&M Expenses	0.00	0.00	0.00
Receivables	47.00	52.70	58.05
Total	47.00	52.70	58.05
Rate of Interest (%)	12.80	12.80	12.80
Interest on working Capital	0.26	6.75	7.43

(₹ in lakh)

Particulars	Asset-2		
	2016-17 (Pro-rata) (1 days)	2017-18	2018-19
Maintenance Spares	0.00	0.00	0.00
O&M Expenses	0.00	0.00	0.00
Receivables	36.74	43.58	50.19
Total	36.74	43.58	50.19
Rate of Interest (%)	12.80	12.80	12.80
Interest on working Capital	0.01	5.58	6.42

(₹ in lakh)

Particulars	Asset-3		
	2016-17 (Pro-rata) (66 days)	2017-18	2018-19
Maintenance Spares	0.00	0.00	0.00
O&M Expenses	0.00	0.00	0.00
Receivables	18.10	20.56	21.51
Total	18.10	20.56	21.51
Rate of Interest (%)	12.80	12.80	12.80
Interest on working Capital	0.43	2.63	2.75



Particulars	Asset-4			Asset-5
	2016-17 (Pro-rata) (4 days)	2017-18	2018-19	2018-19 (Pro-rata) (54 days)
Maintenance Spares	0.00	0.00	0.00	0.00
O&M Expenses	0.00	0.00	0.00	0.00
Receivables	22.81	26.64	32.02	19.39
Total	22.81	26.64	32.02	19.39
Rate of Interest (%)	12.80	12.80	12.80	12.20
Interest on working Capital	0.03	3.41	4.10	0.35

22. The Petitioner has served a copy of the petition upon the Respondents and notice of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No suggestions or objections have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. None of the respondents have filed any reply in the matter.

23. The hearing in this matter was held on 13.7.2020 through video conference and the Commission reserved the order in the Petition.

24. This order is issued considering the submissions made by the Petitioner in the petition dated 27.1.2020 and additional information submitted by the Petitioner vide affidavit dated 11.8.2020.

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

Date of Commercial Operation (COD)

26. The Petitioner has claimed the COD of Assets-1, 2, 3, 4 and 5 as 16.3.2017, 31.3.2017, 25.1.2017, 28.3.2017 and 6.2.2019 respectively. The Commission vide Record of Proceedings (RoP) of the hearing dated 13.7.2020 directed the Petitioner



to submit CMD Certificate for all the assets covered under the instant petition; CEA energisation certificate under Regulation 43 of CEA (Measures Related to Safety & Electricity Supply) Regulations, 2010; and RLDC charging certificate for Asset-4 and Asset-5 as per the 2014 Tariff Regulations.

27. In support of COD, the Petitioner has submitted CEA certificates, RLDC certificates and COD letters as under:

Asset	CEA	RLDC	COD	Remarks
Asset-1	10.3.2017	19.4.2017	16.3.2017	-
Asset-2	27.3.2017	19.4.2017	31.3.2017	-
Asset-3	20.1.2017	17.2.2017	25.1.2017	-
Asset-4	-	-	28.3.2017	The Petitioner has not submitted CEA and RLDC certificates as the assets are cold spares
Asset-5	-	-	6.2.2019	

28. The Petitioner vide affidavit dated 11.8.2020 has submitted CMD certificates for Asset-1, Asset-2 and Asset-3. Further, the Petitioner has submitted that Asset-4 and Asset-5 are cold spares, hence, CEA clearance letter and RLDC certificate is not applicable for Asset-4 and Asset-5.

29. We have considered the submission of Petitioner and taking into consideration of CEA Certificate, RLDC Certificate and CMD Certificate as required under Grid Code, the COD of Asset-1, Asset-2 and Asset-3 is approved as 16.3.2017, 31.3.2017 and 25.1.2017 respectively. Further, the Petitioner has submitted that Asset-4 and Asset-5 are regional cold spares and in support of approval of their COD, the Petitioner has submitted self-declaration COD certificate and CMD Certificate as required under Grid Code, hence COD of Asset-4 and Asset-5 is approved as 28.3.2017 and 6.2.2019 respectively.

Capital Cost

30. 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.”

31. The Petitioner has claimed the following capital cost incurred as on COD and additional capital expenditure (ACE) actual/ projected for the instant transmission assets and submitted Auditor’s Certificates in support of the same:

Asset	Apportioned Approved Cost (FR)	Apportioned Approved Cost (RCE)	Expenditure up to COD	Actual/ Projected ACE				Estimated completion cost
				2016-17	2017-18	2018-19	2019-20	
Asset-1	1941.86	2573.66	1685.60	24.50	411.37	48.66	21.05	2191.18
Asset-2	1941.86	2435.52	1331.33	-	505.28	11.67	21.40	1869.68
Asset-3	947.13	1234.19	546.64	145.24	70.91	41.52	0.00	804.31
Asset-4	1699.22	1715.53	830.12	-	276.71	136.54	39.64	1283.01
Asset-5	1699.21	1658.77	921.66	-	-	49.88	371.26	1342.80

Cost Over-run

32. The Petitioner has submitted that the capital cost of instant transmission assets, except Asset-1, is within the FR apportioned approved cost. However, the estimated completion cost of all the assets, including Asset-1, is within the apportioned approved cost as per Revised Cost Estimates (RCE). The Petitioner has submitted that the cost variation is due to award cost discovered in bidding process and has submitted detailed item-wise variation between apportioned approved cost



and actual cost in Form-5 and prayed to allow the tariff from actual COD based on estimated completion cost of the instant transmission assets.

33. We have considered the submissions of the Petitioner. The estimated completion cost including ACE (additional capital expenditure) is within the RCE approved apportioned cost.

Time over-run

34. As per the Investment Approval dated 29.1.2015, the scheduled date of commercial operation of the transmission project was 30 months, i.e. 29.7.2017, against which the instant transmission assets were put under commercial operation as per the following details:

Asset	SCOD as per IA	COD	Time over-run
Asset-1	29.7.2017	16.3.2017	No time over-run
Asset-2		31.3.2017	
Asset-3		25.1.2017	
Asset-4		28.3.2017	
Asset-5		6.2.2019	18 month 7 days (557 days)

35. There is no time over-run in case of the instant transmission assets except for Asset-5. The Petitioner has submitted that the Award for Procurement for Asset-5 was placed within one month of Investment Approval. However, it was delayed due to deferment in supply of ICT by the Contractor. The package for the subject element was placed along with elements in System Strengthening-XXIII and other schemes such as ERSS-XII and Spare ICTs in NR. In spite of timely inputs from the Petitioner, the contractor had taken a lot of time (> 500 days) for submission and approval of drawings. This had led to inordinate delay of around 18 months. The Petitioner has



submitted that the contractor attributed the delay due to demonetization and implementation of GST.

36. The Petitioner has submitted that the infusion of fund started only from 24.1.2019 and thus the time over-run would not impose any additional burden of IDC on the beneficiaries. The Petitioner has further submitted that the time over-run was beyond the control of the Petitioner and hence prayed to condone the time over-run.

37. The Commission vide ROP of the hearing dated 13.7.2020 directed the Petitioner to submit information along with CPM and PERT chart and detailed reasons for time over-run of Asset-5.

38. In response, the Petitioner vide affidavit dated 11.8.2020 has submitted the CPM and PERT chart and has also submitted the following details of time over-run and chronology of activities:

Activity	Period of Activity				Time over-run	Reasons for time over-run
	Planned		Achieved			
	From	To	From	To		
Land Acquisition	Not applicable as the ICT is located inside the existing Sub-station					
LOA	28.7.2015		30.3.2015			
Supplies (Structures, equipment, etc.)	29.2.2016	26.4.2017	30.9.2016	25.7.2018	18 months 7 days	Deferment in supply of ICT by the Contractor due to Demonetization and GST implementation
Foundation/Civil Works & Erection	29.3.2015	29.5.2017	1.2.2017	29.9.2018		
Testing and Commissioning	28.3.2017	29.7.2017	29.9.2018	6.2.2019		

39. We have considered the submissions of the Petitioner. There is a time over-run of about 18 months and 7 days (557 days) in commercial operation of Asset-5. The Petitioner has attributed the time over-run in case of Asset-5 to deferment in supply of ICT by the contractor, demonetization and implementation of GST. Regulation 12(1)(c) of the 2014 Tariff Regulations provides as follows:

“12. Controllable and Uncontrollable factors:

The following shall be considered as controllable and uncontrollable factors leading to cost escalation impacting Contract Prices, IDC and IEDC of the project :



(1) The “controllable factors” shall include but shall not be limited to the following:

(a) Variations in capital expenditure on account of time and/or cost over-runs on account of land acquisition issues;

(b) Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or force majeure events; and

(c) Delay in execution of the project on account of contractor, supplier or agency of the generating company or transmission licensee”

40. As per Regulation 12(1)(c) of the 2014 Tariff Regulations, the delay in execution of the project due to the contractor is considered as a “controllable factor” and, therefore, the delay by the contractor of the Petitioner is attributable to the Petitioner. Therefore, we are not inclined to condone the time over-run in case of Asset-5.

Interest During Construction (IDC)

41. The Petitioner has claimed Interest During Construction (IDC) for instant transmission assets and submitted the Auditor Certificates dated 30.7.2019 in support of the same. The Petitioner has submitted asset-wise IDC computation statements along with the year-wise details of the IDC discharged.

42. The loan details submitted in Form-9C for the 2014-19 tariff period and the IDC computation statements for the instant assets have been considered for the purpose of IDC calculation on cash and accrued basis. However, while going through the IDC computation statements, certain discrepancies such as incorrect loan drawl date has been observed in respect of Asset-2. In addition, with regard to Asset-3, amount of debt mentioned in the IDC computation statement is not in line with the amount of debt as mentioned in Form-6 and Form-9C. The Petitioner has not provided date of drawl of loan/ loan allocation in respect of foreign loan i.e. “SUMITOMO MITSUI JPY” deployed in respect of Asset-5. Thus, the IDC claimed has been disallowed.



43. In the absence of adequate information/ details, for time being, IDC claimed vide Auditors Certificates by the Petitioner have been considered for the instant assets except for Asset-5 and the Petitioner is directed to submit the asset-wise IDC statement (indicating date of drawl and amount of drawl of debt) after rectifying above discrepancies along with other relevant details at the time of true up.

44. Accordingly, the IDC considered, subject to true up, is as under:-

(₹ in lakh)

Asset	IDC as per Auditor certificate dated 30.7.2019	IDC Admissible	IDC disallowed due to Computational difference	IDC Discharged as on COD	IDC Un-discharged as on COD	IDC Discharged in 2017-18
A	B	C	D=B-C	E	F=C-E	G
Asset-1	28.08	28.07	0.01	9.96	18.11	18.11
Asset-2	52.74	52.23	0.51	15.67	36.56	36.56
Asset-3	5.34	5.34	0.00	3.68	1.66	1.66
Asset-4	22.62	22.44	0.18	8.81	13.63	13.63
Asset-5	0.45		0.45	-	-	-

Incidental Expenditure During Construction (IEDC)

45. The Petitioner has claimed IEDC in respect of the instant transmission assets and submitted Auditors Certificates in support of the same. Further, the Petitioner has submitted that IEDC was fully discharged as on respective dates. IEDC claimed is within the percentage of hard cost as indicated in the abstract cost estimate. Hence, IEDC claimed by the Petitioner for the instant transmission assets is allowed. IEDC of ₹1.85 lakh has been disallowed in respect of Asset-5 on account of time over-run not having been condoned.

46. Details of IEDC considered for tariff computation, subject to revision at the time of true up is as below:-

(₹ in lakh)

Assets	IEDC claimed	IEDC allowed
Asset-1	63.72	63.72
Asset-2	56.69	56.69
Asset-3	22.76	22.76
Asset-4	38.78	38.78



Asset-5	4.87	3.02
---------	------	------

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

Initial Spares

48. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of initial spares in respect of transmission system as under:-

“13. Initial Spares

Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:

(d) Transmission system

(i) Transmission line - 1.00%

(ii) Transmission Sub-station (Green Field) - 4.00%

(iii) Transmission Sub-station (Brown Field) - 6.00%

(iv) Series Compensation devices and HVDC Station - 4.00%

(v) Gas Insulated Sub-station (GIS)-5.00%

(vi) Communication system-3.5%

Provided that:

(i) where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:

(ii) -----

(iii) Once the transmission project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the transmission project at the time of truing up:

(iv) for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the breakup of head wise IDC & IEDC in its tariff application.”

49. The Petitioner has claimed initial spares corresponding to Brown Field Sub-station for instant transmission assets and has submitted Auditor Certificates in support of the same. The Petitioner has not claimed initial spares for Asset-2. The Petitioner, vide affidavit dated 11.8.2020, has submitted details of year-wise capitalisation and initial spares discharged up to COD. The Petitioner has further submitted that the expenditure incurred towards initial spares up to COD have been



considered in COD cost. The amount towards balance initial spares liabilities have been considered in ACE of the respective year.

50. We have considered the submissions made by the Petitioner. The initial spares are allowed for the purpose of tariff calculation after considering the Plant and Machinery cost excluding IDC, IEDC and land expenses up to 31.3.2019. The initial spares claimed by the petitioner for the Asset-1 and Asset-3 are within norms specified in the 2014 Tariff Regulations. The excess initial spares claimed by the petition for Asset-4 and Asset-5 is restricted to norms specified in the 2014 Tariff Regulations. Accordingly, the initial spares allowed are as under:

(₹ in lakh)						
Element	Plant and Machinery Cost excluding IDC, IEDC and Land expenditure up to cut-off date (31.3.2019)	Initial spares claimed	prescribed in 2014 Tariff Regulations	Initial spares allowable	Excess Initial Spares (disallowed as on COD)	Excess Initial Spares (disallowed in 2017-18)
Sub-station (Brown Field)						
Asset-1	2078.33	62.65	6%	62.65	0.00	0.00
Asset-2	1738.85	0.00	6%	0.00	0.00	0.00
Asset-3	776.21	40.35	6%	40.35	0.00	0.00
Asset-4	1181.97	71.22	6%	70.90	0.00	0.32
Asset-5	966.22	74.04	6%	64.35	9.69	0.00

Capital cost as on COD

51. 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 Certificate	IDC disallowed as on COD due to		IEDC disallowed due to Time overrun not condoned	Excess initial spares disallowed as on COD	Capital Cost considered as on COD
		Computational difference	Un-discharged			
		1	2			
Asset-1	1685.60	0.01	18.11	-	0.00	1667.48
Asset-2	1331.33	0.51	36.56	-	0.00	1294.26
Asset-3	546.64	0.00	1.66	-	0.00	544.98
Asset-4	830.12	0.18	13.63	-	0.00	816.31
Asset-5	921.66	0.45	-	1.85	9.69	909.67



Additional Capital Expenditure (ACE)

52. Regulation 14(1) of the 2014 Tariff Regulations provides as under:

“(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(i) Undischarged liabilities recognised to be payable at a future date;

(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;

(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(v) Change in Law or compliance of any existing law:

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.”

53. Regulation 3(13) of the 2014 Tariff Regulations defines “cut-off date” as under:

“cut-off date” means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation”

54. The Petitioner has claimed ACE for the instant transmission assets and submitted Auditors Certificates in support of the same. We have considered the submissions made by the Petitioner. As per Regulation 3(13) of the 2014 Tariff Regulations, the cut-off date for Asset-1, Asset-2, Asset-3 and Asset-4 is 31.3.2020 whereas the cut-off date for Asset-5 is 31.3.2022. However, IDC of instant transmission assets discharged between respective CODs to 31.3.2019 has been claimed as ACE during the year of discharge in Tariff Forms submitted by the Petitioner. Accordingly, the un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.



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

55. Accordingly, ACE allowed is summarized below which is subject to true up:

(₹ in lakh)

Particulars	Regulation	Asset-1		
		2016-17	2017-18	2018-19
ACE to the extent of Balance & Retention Payment	14 (1)(i)	24.50	286.18	4.73
ACE to the extent of works deferred for execution	14(1)(ii)	0.00	125.19	43.93
Add: IDC discharged during the FY	14 (1)(i)	0.00	18.11	0.00
Total		24.50	429.48	48.66

(₹ in lakh)

Particulars	Regulation	Asset-2	
		2017-18	2018-19
ACE to the extent of Balance & Retention Payment	14 (1)(i)	375.03	0.42
ACE to the extent of works deferred for execution	14(1)(ii)	130.25	11.25
Add: IDC discharged during the FY	14 (1)(i)	36.56	0.00
Total		541.84	11.67

(₹ in lakh)

Particulars	Regulation	Asset-3		
		2016-17	2017-18	2018-19
ACE to the extent of Balance & Retention Payment	14 (1)(i)	145.24	64.82	40.78
ACE to the extent of works deferred for execution	14(1)(ii)	0.00	6.09	0.74
Add: IDC discharged during the FY	14 (1)(i)	0.00	1.66	0.00
Total		145.24	72.57	41.52

(₹ in lakh)

Particulars	Regulation	Asset-4	
		2017-18	2018-19
ACE to the extent of Balance & Retention Payment	14 (1)(i)	229.99	136.27
ACE to the extent of works deferred for execution	14(1)(ii)	46.72	0.27
Add: IDC discharged during the FY	14 (1)(i)	13.63	0.00
Less: Excess initial spares during the FY	14 (1)(i)	0.32	0.00
Total		290.02	136.54



(₹ in lakh)

Particulars	Regulation	Asset-5	
		2017-18	2018-19
ACE to the extent of Balance & Retention Payment	14 (1)(i)	-	49.88

Capital Cost for the tariff period 2014-19

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

(₹ in lakh)

Asset	Capital Cost allowed as on COD	ACE allowed in FY			Capital Cost allowed as on 31.3.2019
		2016-17	2017-18	2018-19	
1	1667.48	24.50	429.48	48.66	2170.12
2	1294.26	0.00	541.84	11.67	1847.77
3	544.98	145.24	72.57	41.52	804.31
4	816.31	0.00	290.02	136.54	1242.87
5	909.67	0.00	0.00	49.88	959.55

57. Based on the above, the tariff in respect of instant transmission assets along with no. of days in the respective years of 2014-19 tariff period for which tariff is determined is as under:

Asset	COD	2016-17	2017-18	2018-19
1	16.3.2017	COD to 31.3.2017 (16 days)	Full year	Full year
2	31.3.2017	COD to 31.3.2017 (1 day)	Full year	Full year
3	25.1.2017	COD to 31.3.2017 (66 days)	Full year	Full year
4	28.3.2017	COD to 31.3.2017 (4 days)	Full year	Full year
5	6.2.2019	-	-	COD to 31.3.2019 (54 days)

Debt-Equity Ratio

58. Clauses 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specify as follows:

“(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:



Provided that:

i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:

ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

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

Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system."

"(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."

59. The Petitioner has considered debt-equity ratio of 70:30 as on COD and for ACE post COD for instant transmission assets. 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 same has been summarised as under:-

Particulars (Asset-1)	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1167.24	70.00	1519.09	70.00
Equity	500.24	30.00	651.03	30.00
Total	1667.48	100.00	2170.12	100.00
Particulars (Asset-2)	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	905.98	70.00	1293.44	70.00
Equity	388.28	30.00	554.33	30.00
Total	1294.26	100.00	1847.77	100.00
Particulars (Asset-3)	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	381.49	70.00	563.02	70.00
Equity	163.49	30.00	241.29	30.00
Total	544.98	100.00	804.31	100.00
Particulars (Asset-4)	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	571.42	70.00	870.01	70.00
Equity	244.89	30.00	372.86	30.00
Total	816.31	100.00	1242.87	100.00

Particulars (Asset-5)	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	636.77	70.00	671.69	70.00
Equity	272.90	30.00	287.86	30.00
Total	909.67	100.00	959.55	100.00

Return on Equity (ROE)

60. Clauses (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:

“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

(i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in **Appendix-I:**

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometres.

“25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non-



generation or non-transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

61. The Petitioner has submitted that it is required to adjust the yearly impact of MAT as per Regulation 25(3) of the 2014 Tariff Regulations in the truing up petition for 2014-19 tariff block and has claimed ROE at the rate of 19.705%, 19.704% and 19.758% after grossing up ROE with MAT rate of 21.3384%, 21.3371% and 21.5488% for 2016-17, 2017-18 and 2018-19 respectively. However, the Petitioner vide Form-8 of the respective assets has claimed ROE at the rate of 19.705%, 19.705% and 19.758% after grossing up ROE with MAT rate of 21.34%, 21.34% and 21.55% for 2016-17, 2017-18 and 2018-19 respectively.

62. 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 the respective financial year 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.

63. Accordingly, ROE allowed for the transmission assets is as follows:



(₹ in lakh)

Particulars	Asset-1		
	2016-17 (Pro-rata) (16 days)	2017-18	2018-19
Net Opening Equity	500.24	507.59	636.43
Increase in Equity due to addition during the year	7.35	128.84	14.60
Closing Equity	507.59	636.43	651.03
Average Equity	503.92	572.01	643.73
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%
Tax Rate applicable (%)	21.342%	21.342%	21.549%
Applicable ROE Rate (%)	19.705%	19.705%	19.758%
Return on Equity for the year	4.35	112.72	127.19

(₹ in lakh)

Particulars	Asset-2		
	2016-17 (Pro-rata) (1 day)	2017-18	2018-19
Net Opening Equity	388.28	388.28	550.83
Increase in Equity due to addition during the year	0.00	162.55	3.50
Closing Equity	388.28	550.83	554.33
Average Equity	388.28	469.55	552.58
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%
Tax Rate applicable (%)	21.342%	21.342%	21.549%
Applicable ROE Rate (%)	19.705%	19.705%	19.758%
Return on Equity for the year	0.21	92.53	109.18

(₹ in lakh)

Particulars	Asset-3		
	2016-17 (Pro-rata) (66 days)	2017-18	2018-19
Net Opening Equity	163.49	207.06	228.83
Increase in Equity due to addition during the year	43.57	21.77	12.46
Closing Equity	207.06	228.83	241.29
Average Equity	185.28	217.95	235.06
Return on Equity (Base Rate) (%)	15.50	15.50	15.50
Tax Rate applicable (%)	21.342	21.342	21.549
Applicable ROE Rate (%)	19.705	19.705	19.758
Return on Equity for the year	6.60	42.95	46.44

(₹ in lakh)

Particulars	Asset-4			Asset-5
	2016-17 (Pro-rata) (4 days)	2017-18	2018-19	2018-19 (Pro-rata) (54 days)
Net Opening Equity	244.89	244.89	331.90	272.90
Increase in Equity due to addition during the year	0.00	87.01	40.96	14.96



Particulars	Asset-4			Asset-5
	2016-17 (Pro-rata) (4 days)	2017-18	2018-19	2018-19 (Pro-rata) (54 days)
Closing Equity	244.89	331.90	372.86	287.86
Average Equity	244.89	288.39	352.38	280.38
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50
Tax Rate applicable (%)	21.342%	21.342%	21.549%	21.549
Applicable ROE Rate (%)	19.705%	19.705%	19.758%	19.758
Return on Equity for the year	0.53	56.83	69.62	8.20

Interest on Loan (IOL)

64. Regulation 26 of the 2014 Tariff Regulations are provides as under:

“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of decapitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.”

65. 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. 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.

66. 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.

67. The details of IoL allowed for the instant transmission assets are as follows:-

Particulars	Asset-1		
	2016-17 (Pro-rata)	2017-18	2018-19
	(16 days)		
Gross Normative Loan	1167.24	1184.39	1485.03
Cumulative Repayment up to previous Year	0.00	3.89	104.56
Net Loan-Opening	1167.24	1180.50	1380.46
Addition due to ACE	17.15	300.64	34.06
Repayment during the year	3.89	100.67	113.30
Net Loan-Closing	1180.50	1380.46	1301.23
Average Loan	1173.87	1280.48	1340.85
Weighted Average Rate of Interest on Loan (%)	7.4980%	7.4997%	7.4863%
Interest on Loan	3.86	96.03	100.38

Particulars	Asset-2		
	2016-17 (Pro-rata)	2017-18	2018-19
	(1 day)		
Gross Normative Loan	905.98	905.98	1285.27



Cumulative Repayment up to previous Year	0.00	0.19	82.83
Net Loan-Opening	905.98	905.80	1202.44
Addition due to ACE	0.00	379.29	8.17
Repayment during the year	0.19	82.64	97.25
Net Loan-Closing	905.80	1202.44	1113.36
Average Loan	905.89	1054.12	1157.90
Weighted Average Rate of Interest on Loan (%)	7.6764%	7.6517%	7.6168%
Interest on Loan	0.19	80.66	88.20

(₹ in lakh)

Particulars	Asset-3		
	2016-17 (Pro-rata) (66 days)	2017-18	2018-19
Gross Normative Loan	381.49	483.16	533.96
Cumulative Repayment up to previous Year	0.00	5.90	44.26
Net Loan-Opening	381.49	477.26	489.70
Addition due to ACE	101.67	50.80	29.06
Repayment during the year	5.90	38.36	41.37
Net Loan-Closing	477.26	489.70	477.39
Average Loan	429.38	483.48	483.55
Weighted Average Rate of Interest on Loan (%)	8.5097%	8.1544%	7.9581%
Interest on Loan	6.61	39.43	38.48

(₹ in lakh)

Particulars	Asset-4			Asset-5
	2016-17 (Pro-rata) (4 days)	2017-18	2018-19	2018-19 (Pro-rata) (54 days)
Gross Normative Loan	571.42	571.42	774.44	636.77
Cumulative Repayment up to previous Year	0.00	0.47	51.23	0.00
Net Loan-Opening	571.42	570.95	723.21	636.77
Addition due to ACE	0.00	203.02	95.58	34.92
Repayment during the year	0.47	50.76	62.02	7.30
Net Loan-Closing	570.95	723.21	756.77	664.39
Average Loan	571.18	647.08	739.99	650.58
Weighted Average Rate of Interest on Loan (%)	7.4198%	7.5452%	7.6094%	1.1886
Interest on Loan	0.46	48.82	56.31	1.14

Depreciation

68. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation specifies as follows:

"27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or



all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-II to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2014 from the gross depreciable value of the assets."

69. The depreciation has been dealt in line with Regulation 27 of 2014 Tariff Regulations. The Gross Block during 2016-17, 2017-18 and 2018-19 has been depreciated at weighted average rate of depreciation (WAROD) (as placed in asset-wise Annexure-1 to 5). 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	Asset-1		
	2016-17 (pro-rata) (16 days)	2017-18	2018-19
Opening Gross Block	1667.48	1691.98	2121.46
Additional Capitalisation	24.50	429.48	48.66
Closing Gross Block	1691.98	2121.46	2170.12
Average Gross Block	1679.73	1906.72	2145.79
Value of Freehold Land included above	0.00	0.00	0.00
Aggregated Depreciable Value	1511.76	1716.05	1931.21
Remaining Aggregate Depreciable Value at the beginning of the year	1511.76	1712.16	1826.65
No. of completed years at the beginning of the year	0	0	1
Balance useful life of the asset at the beginning of the year	25	25	24
Weighted Average Rate of Depreciation (WAROD) (%)	5.2800	5.2800	5.2800
Combined Depreciation during the Year	3.89	100.67	113.30
Cumulative Depreciation at the end of the year	3.89	104.56	217.86

(₹ in lakh)

Particulars	Asset-2		
	2016-17 (pro-rata) (1 day)	2017-18	2018-19
Opening Gross Block	1294.26	1294.26	1836.10
Additional Capitalisation	0.00	541.84	11.67
Closing Gross Block	1294.26	1836.10	1847.77
Average Gross Block	1294.26	1565.18	1841.93
Value of Freehold Land included above	0.00	0.00	0.00
Aggregated Depreciable Value	1164.83	1408.66	1657.74
Remaining Aggregate Depreciable Value at the beginning of the year	1164.83	1408.47	1574.91
No. of completed years at the beginning of the year	0	0	1
Balance useful life of the asset at the beginning of the year	25	25	24
Weighted Average Rate of Depreciation (WAROD) (%)	5.2800	5.2800	5.2800
Combined Depreciation during the Year	0.19	82.64	97.24
Cumulative Depreciation at the end of the year	0.19	82.83	180.08

(₹ in lakh)

Particulars	Asset-3		
	2016-17 (pro-rata) (66 days)	2017-18	2018-19
Opening Gross Block	544.98	690.22	762.79
Additional Capitalisation	145.24	72.57	41.52
Closing Gross Block	690.22	762.79	804.31
Average Gross Block	617.60	726.51	783.55
Value of Freehold Land included above	0.00	0.00	0.00
Aggregated Depreciable Value	555.84	653.85	705.20
Remaining Aggregate Depreciable Value at the beginning of the year	555.84	647.96	660.94



No. of completed years at the beginning of the year	0	0	1
Balance useful life of the asset at the beginning of the year	25	25	24
Weighted Average Rate of Depreciation (WAROD) (%)	5.2800	5.2800	5.2800
Combined Depreciation during the Year	5.90	38.36	41.37
Cumulative Depreciation at the end of the year	5.90	44.26	85.63

Particulars	Asset-4			Asset-5
	2016-17 (pro-rata) (4 days)	2017-18	2018-19	2018-19 (pro-rata) (54 days)
Opening Gross Block	816.31	816.31	1106.33	909.67
Additional Capitalisation	0.00	290.02	136.54	49.88
Closing Gross Block	816.31	1106.33	1242.87	959.55
Average Gross Block	816.31	961.32	1174.60	934.61
Value of Freehold Land included above	0.00	0.00	0.00	0.00
Aggregated Depreciable Value	734.68	865.19	1057.14	841.15
Remaining Aggregate Depreciable Value at the beginning of the year	734.68	864.72	1005.91	841.15
No. of completed years at the beginning of the year	0	0	1	0
Balance useful life of the asset at the beginning of the year	25	25	24	25
Weighted Average Rate of Depreciation (WAROD) (%)	5.2800	5.2800	5.2800	5.2800
Combined Depreciation during the Year	0.47	50.76	62.02	7.30
Cumulative Depreciation at the end of the year	0.47	51.23	113.25	7.30

Operation and Maintenance Expenses (O&M Expenses)

70. The Petitioner has not claimed any O&M expenses for the instant transmission assets. . Therefore, no O&M Expenses has been considered for the instant transmission assets.

Interest on Working Capital (IWC)

71. Regulation 28(1)(c) and Regulation 3(5) of the 2014 Tariff Regulations specify as follows:

“28. Interest on Working Capital

(1) The working capital shall cover:

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

(i) Receivables equivalent to two months of fixed cost;



(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and

(iii) Operation and maintenance expenses for one month”

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the 72 transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.

“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

72. 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 the 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 1.4.2016 (9.30%) plus 350 bps i.e. 12.80% has been considered as the rate of interest on working capital for the instant assets except for Asset-5 for which SBI Base Rate as on 1.4.2017 (8.70%) plus 350 bps i.e. 12.20% has been considered.

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

(₹ in lakh)

Particulars	Asset-1		
	2016-17 (Pro-rata) (16 days)	2017-18	2018-19
Maintenance Spares	0.00	0.00	0.00
O&M Expenses	0.00	0.00	0.00
Receivables	47.00	52.69	58.05
Total	47.00	52.69	58.05



Rate of Interest (%)	12.80	12.80	12.80
Interest on working Capital	0.26	6.74	7.43

(₹ in lakh)

Particulars	Asset-2		
	2016-17 (Pro-rata) (1 day)	2017-18	2018-19
Maintenance Spares	0.00	0.00	0.00
O&M Expenses	0.00	0.00	0.00
Receivables	36.51	43.57	50.18
Total	36.51	43.57	50.18
Rate of Interest (%)	12.80	12.80	12.80
Interest on working Capital	0.01	5.58	6.42

(₹ in lakh)

Particulars	Asset-3		
	2016-17 (Pro-rata) (66 days)	2017-18	2018-19
Maintenance Spares	0.00	0.00	0.00
O&M Expenses	0.00	0.00	0.00
Receivables	17.99	20.56	21.51
Total	17.99	20.56	21.51
Rate of Interest (%)	12.80	12.80	12.80
Interest on working Capital	0.42	2.63	2.75

(₹ in lakh)

Particulars	Asset-4			Asset-5
	2016-17 (Pro-rata) (4 days)	2017-18	2018-19	2018-19 (Pro-rata) (54 days)
Maintenance Spares	0.00	0.00	0.00	0.00
O&M Expenses	0.00	0.00	0.00	0.00
Receivables	22.78	26.64	32.01	19.14
Total	22.78	26.64	32.01	19.14
Rate of Interest (%)	12.80	12.80	12.80	12.20
Interest on working Capital	0.03	3.41	4.10	0.35

Annual Transmission charges

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



(₹ in lakh)

Particulars	Asset-1		
	2016-17 (Pro-rata) (16 days)	18-2017	2018-19
Depreciation	3.89	100.67	113.30
Interest on Loan	3.86	96.03	100.38
Return on Equity	4.35	112.72	127.19
Interest on Working Capital	0.26	6.74	7.43
O&M Expenses	0.00	0.00	0.00
Total	12.36	316.17	348.30

(₹ in lakh)

Particulars	Asset-2		
	2016-17 (Pro-rata) (1 day)	18-2017	2018-19
Depreciation	0.19	82.64	97.25
Interest on Loan	0.19	80.66	88.20
Return on Equity	0.21	92.53	109.18
Interest on Working Capital	0.01	5.58	6.42
O&M Expenses	0.00	0.00	0.00
Total	0.60	261.40	301.05

(₹ in lakh)

Particulars	Asset-3		
	2016-17 (Pro-rata) (66 days)	18-2017	2018-19
Depreciation	5.90	38.36	41.37
Interest on Loan	6.61	39.43	38.48
Return on Equity	6.60	42.95	46.44
Interest on Working Capital	0.42	2.63	2.75
O&M Expenses	0.00	0.00	0.00
Total	19.52	123.36	129.05

(₹ in lakh)

Particulars	Asset-4			Asset-5
	2016-17 (Pro-rata) (4 days)	18-2017	2018-19	2018-19 (Pro-rata) (54 days)
Depreciation	0.47	50.76	62.02	7.30
Interest on Loan	0.46	48.82	56.31	1.14
Return on Equity	0.53	56.83	69.62	8.20
Interest on Working Capital	0.03	3.41	4.10	0.35
O&M Expenses	0.00	0.00	0.00	0.00
Total	1.50	159.82	192.05	16.99

Filing fee and the publication expenses



75. 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

76. 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

77. 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

78. The billing, collection and disbursement of the transmission charges approved in this order 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, 2020, as applicable, as provided in Regulation 43 of 2014 Tariff Regulations for the 2014-19 tariff period.



79. This order disposes of Petition No. 505/TT/2020.

Sd/
(Arun Goyal)
Member

Sd/
(I. S. Jha)
Member



**DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION (WAROD)
FOR THE 2014-19 TARIFF PERIOD****Asset-1**

Asset-1 (2014-19) Capital Expenditure	Admissible Capital Cost as on COD for tariff purpose (₹ In lakh)	Projected Additional Capitalisation during tariff period 2014-19 (₹ In lakh)	Admitted Capital Cost as on 31.3.2019 (₹ In lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ In lakh)		
					2016-17	2017-18	2018-19
Sub-station	1667.48	502.64	2170.12	5.28%	88.69	100.67	113.30
Total	1667.48	502.64	2170.12	Total	88.69	100.67	113.30
Average Gross Block (₹ in lakh)					1679.73	1906.72	2145.79
Weighted Average Rate of Depreciation (WAROD)					5.2800%	5.2800%	5.2800%

**DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION (WAROD)
FOR THE 2014-19 TARIFF PERIOD****Asset-2**

Asset-2 (2014-19) Capital Expenditure	Admissible Capital Cost as on COD for tariff purpose (₹ In lakh)	Projected Additional Capitalisation during tariff period 2014-19 (₹ In lakh)	Admitted Capital Cost as on 31.3.2019 (₹ In lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ In lakh)		
					2016-17	2017-18	2018-19
Sub-station	1294.26	553.51	1847.77	5.28%	68.34	82.64	97.25
Total	1294.26	553.51	1847.77	Total	68.34	82.64	97.25
Average Gross Block (₹ in lakh)					1294.26	1565.18	1841.94
Weighted Average Rate of Depreciation (WAROD)					5.2800%	5.2800%	5.2800%

**DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION (WAROD)
FOR THE 2014-19 TARIFF PERIOD****Asset-3**

Asset-3 (2014-19)	Admissible Capital Cost as on COD for tariff purpose (₹ In lakh)	Projected Additional Capitalisation during tariff period 2014-19 (₹ In lakh)	Admitted Capital Cost as on 31.3.2019 (₹ In lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ In lakh)		
					2016-17	2017-18	2018-19
Sub-station	544.98	259.33	804.31	5.28%	32.61	38.36	41.37
Total	544.98	259.33	804.31	Total	32.61	38.36	41.37
Average Gross Block (₹ in lakh)					617.60	726.50	783.55
Weighted Average Rate of Depreciation (WAROD)					5.2800%	5.2800%	5.2800%

**DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION (WAROD)
FOR THE 2014-19 TARIFF PERIOD****Asset-4**

Asset-4 (2014-19)	Admissible Capital Cost as on COD for tariff purpose (₹ In lakh)	Projected Additional Capitalisation during tariff period 2014-19 (₹ In lakh)	Admitted Capital Cost as on 31.3.2019 (₹ In lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ In lakh)		
					2016-17	2017-18	2018-19
Sub-station	816.31	426.56	1242.87	5.28%	43.10	50.76	62.02
Total	816.31	426.56	1242.87	Total	43.10	50.76	62.02
Average Gross Block (₹ in lakh)					816.31	961.32	1174.60
Weighted Average Rate of Depreciation (WAROD)					5.2800%	5.2800%	5.2800%

**DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION (WAROD)
FOR THE 2014-19 TARIFF PERIOD****Asset-5**

Asset-5 (2014-19)	Admissible Capital Cost as on COD for tariff purpose (₹ In lakh)	Projected Additional Capitalisation during tariff period 2014-19 (₹ In lakh)	Admitted Capital Cost as on 31.3.2019 (₹ In lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations 2018-19 (₹ In lakh)
Capital Expenditure					
Sub-station	909.67	49.88	959.55	5.28%	49.35
Total	909.67	49.88	959.55	Total	49.35
Average Gross Block (₹ in lakh)					934.61
Weighted Average Rate of Depreciation (WAROD)					5.2800%

