

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No.143/TT/2019**

**Coram:**

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

**Date of Order: 13.02.2021**

**In the matter of**

Approval under Regulation-86 of CERC (Conduct of Business) Regulations, 1999 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of Transmission tariff from COD to 31.3.2019 for the **Asset:** Neelamangla- Yelahanka (39.006 km) OPGW Fibre Communication link of Central Sector along with Associated Communication Equipment under "Fibre Optic Communication system in lieu of existing Unified Load Despatch and Communication (ULDC) Microwave links in Southern Region."

**And in the matter of**

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

**.... Petitioner**

**Versus**

**Users under the category of Generating Stations and Sellers**

1. National Thermal Power Corporation Ltd.  
(NTPC Ltd.), NTPC Bhawan, Core-7, Scope Complex,  
7, Institutional Area, Lodhi Road,  
New Delhi – 110003.
2. National Thermal Power Corporation Ltd.  
Ramagundam STPS, RSTPS, JyothiNagar,  
Distt. KarimNagar, A.P.-505215.
3. National Thermal Power Corporation Ltd.  
Talcher STPS, Kaniha, P.O. Deepshikha,  
Dist. Angul, Orissa PIN: 759147.



4. National Thermal Power Corporation Ltd.  
Simhadri Super Thermal Power Project,  
Post: NTPC Simhadri – 531020,  
District Vishakhapatnam (A.P.)
5. Neyveli Lignite Corporation Ltd.  
P.O.Neyveli-607801, District Cuddalore,  
Tamil Nadu.
6. Nuclear Power Corporation of India Ltd. (NPCIL),  
Nabhkiya Bhawan, Anu-Shakti Nagar,  
Mumbai-400094.
7. Nuclear Power Corporation of India Ltd. (NPCIL),  
Madras Atomic Power Station (MAPS),  
Kalpakkam-603102, Tamil Nadu.
8. Nuclear Power Corporation of India Ltd. (NPCIL)  
Kaiga Generating Station,  
P.O.Kaiga, Via Karwar,  
Karnataka-581400.
9. Nuclear Power Corporation of India Ltd. (NPCIL)  
Kudankulam Nuclear Power Project,  
P.O.Kudankulam, Radhapuram Taluk,  
District Tirunelveli, Tamil Nadu-627106.
10. Bharatiya Nabhikiya Vidyut Nigam Ltd.  
(BHAVINI), Department of Atomic Energy,  
Kalpakkam – 603102, District Kancheepuram,  
Tamil Nadu
11. NTPC Tamil Nadu Energy Company Ltd.  
(NTECL), (JV of NTPC & TNEB),  
G-Block, 123 & 123A, 12th Street,  
Anna Nagar (East), Chennai – 600102.
12. Meenakshi Energy Private Limited,  
Meenakshi Plot 119, Road No#10,  
Jubilee Hills, Hyderabad – 500033.
13. Simhapuri Energy Limited,  
6-3-866/2, 3<sup>rd</sup> Floor, Begumpet,  
Madhucon Green Lands, Hyderabad – 500016.
14. LANCO-Kondapalli Power Pvt. Ltd.  
Plot No.4, Software Units Layout, Hitech City,  
Madhapur, Hyderabad-5000 081.



## **Users under the category of Distribution Licensees and Buyers**

15. Andhra Pradesh Power Co-ordination Committee,  
APTRANSCO, Vidyut Soudha,  
Hyderabad - 500 082.
16. Power Company of Karnataka Ltd,  
Room No: 503, KPTCL Building, Kaveri Bhavan  
Bangalore – 560 009, Karnataka.
17. Kerala State Electricity Board  
Vaidyuthi Bhavanam, Pattom,  
Thiruvananthapuram-695 004.
18. Tamil Nadu Generation and Distribution Co. Ltd.  
(TANGEDCO, 7<sup>th</sup> Floor, Eastern Wing,  
144, Anna Salai, Chennai-600 002.
19. Electricity Department,  
Government of Puducherry  
Puducherry-605 001.
20. Electricity Department,  
Division No.3, Government of Goa,  
Curti- Ponda, Goa-403 401.

**...Respondents**

### **Parties present:**

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

**For Respondent:** None

### **ORDER**

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



Regulations”) in respect of “Neelamangla-Yelahanka (39.006 km) OPGW Fibre Optic Communication link of Central Sector along with associated communication equipment” (hereinafter referred to as “the asset”) under “Fibre Optic Communication system in lieu of existing Unified Load Despatch and Communication (ULDC) Microwave links in Southern Region” (hereinafter referred as “the transmission project”).

2. The Petitioner has made the following prayers:

- “1) Approve the Transmission Tariff for the tariff block 2014-19 for the assets covered under this petition, as per para-9.3 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 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.*
- 4) 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;*
- 5) 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.*
- 6) 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.*
- 7) 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.*
- 8) 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.*
- 9) 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 brief facts of the case are as follows:

a) The Petitioner has been entrusted with the implementation of the transmission project “Fibre Optic Communication system in lieu of existing Unified Load Despatch and Communication (ULDC) Microwave links in Southern Region.” It was decided in the 10<sup>th</sup> TCC/ 11<sup>th</sup> SRPC meeting dated 16.9.2009 and 17.9.2009 that 1695 km of Fibre Optic network (excluding TNEB portion) would be implemented.

b) The Investment Approval (IA) for the transmission project was accorded by Board of Directors of the Petitioner in its 248<sup>th</sup> meeting held on 8.2.2011 at an estimated cost of ₹4509 lakh including IDC of ₹264 lakh based on 3<sup>rd</sup> Quarter 2010 price level (notified *vide* Memorandum No. C/CP/Fibre Optic in SR, dated 15.2.2011).

c) The scope of the transmission project is as follows:

(i) Installation of OPGW Fibre Optic cable on the existing EHV transmission line of POWERGRID and constituents except TNEB portion, the estimated length of such cable is approximately 1575 km.

(ii) Installation of approximately 120 km underground fibre optic to provide last mile connectivity to the control room where transmission line connectivity is not available. It is also envisaged that portion of the network which involves installation of the underground cable would be provided with radio based communication which operates in free band to back up the underground cable link of the network. Five number of radio links are proposed.

(iii) The terminal equipment for communication based upon synchronous digital hierarchy (SDH) technology shall be installed in the substations of constituents and POWERGRID. The project would also involve installation of primary multiplexers at the new wide band nodes. To monitor the network, Network Management System (NMS) would also be required.

(iv) The constituent wise breakup of the scope of work is as follows:



S.N.	Utility	OPGW Cable (in km)	SDH (Nos.)	Underground FO Cable (in km)	Radio Links (Nos.)	DCPS (Nos.)
1	Central Sector	1070	19	0	0	19
2	APTRANSCO	155	08	75	3	0
3	KSEB	280	06	30	1	0
4	Electricity Deptt, Puducherry (PED)	70*	03	15	1	0
	<b>Total</b>	<b>1575</b>	<b>36</b>	<b>120</b>	<b>5</b>	<b>19</b>

(\*) The work of laying OPGW and providing communication equipment under the subject project for Puducherry have been executed under separate scheme known as "Wideband connectivity to Pondicherry SCC" on deposit basis vide letter dated 8.2.2011 from Electricity Department, Puducherry and hence scope of works under PED is not considered for capitalization under subject project.

d) The Unified Load Despatch & Communication (ULDC) Scheme in Southern Region was put under commercial operation w.e.f. 1.7.2002. The Commission vide order dated 27.1.2009 in Petition No.143/2005 and order dated 18.3.2011 in Petition No.36/2010 had approved the charges for the tariff period 2004-09 for the expenditure incurred up to 31.3.2009.

e) The Petitioner had filed Miscellaneous Petition under sub-section (4) of Section 28 of Electricity Act 2003 and Regulations 44 "Power to Relax" of the CERC (Terms and Conditions of Tariff) Regulations, 2009 for fixation of tariff norms for recovery of cost for the assets ("Communication system" and "SLDC System") to be retained/ to be installed by the petitioner after formation of POSOCO for the tariff period 2009-14, vide petition no. 68/2010. The Commission in paragraph 21 of its order dated 8.12.2011 in petition no. 68/2010 granted liberty to the Petitioner to approach the Commission for determination of tariff for fibre optic network being installed in lieu of microwave links for each region separately.

f) Accordingly, as per the directives of the Commission in order dated 8.12.2011 in petition no. 68/2010 and considering the Judgment dated 11.11.2011 delivered by the Appellate Tribunal for Electricity (APTEL) in Appeal No. 21 of 2010 filed by Haryana Vidyut Prasaran Nigam Limited (HVPNL), the Petitioner filed Petition No. 60/TT/2012 under sub-section (4) of Section 28 of the Electricity Act, 2003 for Unified Load Despatch & Communication Scheme (POWERGRID portion i.e. Communication system

portion and SLDC system retained by the petitioner after formation of POSOCO) in Southern Region for the 2009-14 period.

g) The present petition covers the Installation of the fibre Optic network in lieu of microwave links in Southern Region.

4. The details of petitions filed by the Petitioner under the Transmission Project is as under:

S.N.	Asset	Actual COD	Remarks
1	384.474 Km Optic Fibre	1.2.2013	Petition No. 181/TT/2013 (Order dt 15.1.2016)
2	937.841 Km Optic Fibre	1.4.2013	
3	171.719 Km Optic Fibre	1.1.2014	Petition No. 487/TT/2014 (Order dt 31.5.2016)
4	19.50 Km Optic Fibre (State Sector - TSTRANSCO- erstwhile APTRANSCO)	1.6.2015	Petition No. 255/TT/2015 (Order dt 29.7.2016)
5	0.697 Km Optic Fibre (State Sector - KSEBL- erstwhile KSEB)	1.6.2015	
6	39.006 Km Optic Fibre for Neelamangla-Yelahanka (Central Sector)	28.3.2018	Present petition
	Total Optic Fibre	1553.237 Km	

5. The SCOD/ COD of the instant asset is as under:

Asset Detail	SCOD	COD
Neelamangla-Yelahanka (39.006 km) OPGW Fibre Communication link of Central Sector along with associated communication Equipment.	8.8.2013	28.3.2018 (Actual)

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

Particulars	(₹ in lakh)	
	Asset-1	
	2017-18 (Pro-rata)	2018-19
Depreciation	0.06	6.09
Interest on Loan	0.06	5.58
Return on Equity	0.06	5.66
Interest on Working Capital	0.02	0.45
O&M Expenses	0.24	1.48
<b>Total</b>	<b>0.44</b>	<b>19.26</b>



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

(₹ in lakh)

Particulars	Asset-1	
	2017-18 (Pro-rata)	2018-19
Maintenance Spares	3.35	0.22
O&M Expenses	1.86	0.12
Receivables	6.89	3.21
<b>Total</b>	<b>12.10</b>	<b>3.56</b>
Rate of Interest (%)	12.60	12.60
<b>Interest on working Capital</b>	<b>0.02</b>	<b>0.45</b>

8. The Respondents are the generating companies, distribution companies, electricity departments and transmission licensees, which are procuring transmission services from the Petitioner and are mainly beneficiaries of the Southern Region.

9. The Petitioner has served the petition on 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. Notice dated 14.1.2020 directing the beneficiaries/ Respondents to file reply in the matter was also published on the Commission's website. None of the respondents have filed any reply in the matter.

10. The hearing in this matter was held on 29.6.2020 and the order was reserved. The Petitioner was directed to submit additional information during the hearings dated 11.2.2020 and the same was furnished by the Petitioner *vide* affidavit dated 9.3.2020. Further, reply to queries sought *vide* the technical validation letter dated 11.9.2020 was submitted by the Petitioner through affidavit dated 22.9.2020.





11. This order is issued considering the submissions made by the Petitioner in the petition dated 8.4.2019 and replies submitted by the Petitioner *vide* affidavits dated 9.3.2020 and 22.9.2020.

12. Having heard the representatives of the Petitioner and perusing the material on record, we proceed to dispose of the petition.

**Date of Commercial Operation (COD)**

13. The Petitioner has claimed the actual COD for the instant asset, as per the following details:

<b>S. N.</b>	<b>Name of Asset</b>	<b>Claimed COD</b>
1	Neelamangla-Yelahanka (39.006 Km) OPGW Fibre Communication link of Central Sector along with associated communication Equipment.	28.3.2018 (Actual)

14. In support of COD, the Petitioner has submitted RLDC Certificate dated 16.7.2018 stating that the instant asset (communication link) has been in continuous service since 28.3.2018. Further, the Petitioner has submitted COD letter dated 16.7.2018 in respect of instant asset.

15. The Petitioner, *vide* affidavit dated 22.9.2020, has clarified the mismatch in the name of the asset mentioned in the instant petition [*Neelamangla-Yelahanka (39.006 km)*], *vis-à-vis* that in the RLDC certificate [*Neelamangla-Yelahanka LIL O portion*]. The Petitioner has submitted that there is typographic error in the SRLDC certificate and that the name of asset to be considered is Neelamangla-Yelahanka.

16. The Communication System under ULDC projects comprising of Fibre Optic & Microwave systems was established for providing communication connectivity between Control Centres and from data concentrator nodes for handling large data volumes. The voltage for communication system operation is 24/48 Volt DC supply.



17. As per provisions of the CEA Regulations 2010, minimum voltage of 650 V is required for inspection. Further, Central government has specified that the notified voltage for the purpose of self-certification under Regulations 30 and 43 of the CEA Regulations 2010 is 11 kV. Accordingly, no inspection is required by CEA up to 11 kV. Hence, the CEA clearance letter is not applicable in case of communication system.

18. Further, the Commission at paragraph 9 of order dated 27.1.2017 in Petition No.53/TT/2016, has observed that CMD's approval is required only when the asset in question is ready for commissioning and that the corresponding upstream/downstream assets are not commissioned. This is not applicable in the case of OPGW links like instant assets.

19. Accordingly, taking into consideration the RLDC Certificate and COD letter of the Petitioner, the COD for Asset is approved as 28.3.2018.

### **Capital Cost**

20. 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.”

21. The Petitioner, in support of the claimed capital cost, has submitted Auditor’s Certificate dated 12.6.2018 for the instant asset. The details of apportioned approved cost, capital cost as on COD and additional capital expenditure incurred or projected to be incurred during 2017-18 and 2018-19 along with estimated completion cost as claimed by the Petitioner as per latest description of instant asset are as under:

(₹ in lakh)				
Apportioned Approved Cost (FR)	Expenditure up to COD	Actual/ Projected Exp. for FY		Estimated Completion Cost
		2017-18	2018-19	
103.00	97.55	0.00	0.00	97.55

22. The Petitioner has submitted the completed cost of the entire scope of the project as:

(₹ in lakh)			
Utility	Approved Cost	COD	Completed Cost
KSEB	575.00	1.2.2013	437.60
	150.00	1.1.2014	128.98
	10.18	1.6.2015	3.54
	79.00	Against total envisaged line length of 280km, the actual executed line length is 242.3km. Entire scope of the project has been completed with this and hence the balance apportioned cost cannot be utilised.	
<b>Total</b>	<b>814.18</b>		<b>570.12</b>
APTRANSCO	361.05	01.02.2013	305.61
	287.58	01.04.2013	561.11
	77.82	01.06.2015	61.49
	97.55	Against total envisaged line length of 230km (155+75), the actual executed line length is 197.47km. Entire scope of the project has been	



Utility	Approved Cost	COD	Completed Cost
		completed with this and hence the balance apportioned cost cannot be utilised.	
<b>Total</b>	<b>824</b>		<b>928.21</b>
Central Sector	2050	01.04.2013	1837.99
	420	01.01.2014	357.63
	<b>103</b>	<b>28.03.2018</b>	<b>97.55 (Instant Asset)</b>
<b>Total</b>	<b>2573</b>		<b>2293.17</b>
Puducherry	298	* Deleted from the scope	-
<b>Total</b>	<b>4509.18</b>		<b>3791.5</b>

### Cost Over-run

23. The Petitioner has submitted that the capital cost of the instant asset is ₹97.55 lakh, against the apportioned approved cost (FR) of ₹103.00 lakh. Hence, there is no cost overrun. The Petitioner has submitted detailed item-wise variation between FR cost and actual cost in the petition.

24. We have considered the submissions of Petitioner. As compared to apportioned approved cost (FR) cost of ₹103.00 lakh, the estimated completion cost is ₹97.55 lakh. Therefore, there is no cost overrun.

25. Accordingly, the capital cost allowed as on COD, subject to scrutiny of IDC, IEDC and Initial Spares is as follows:

(₹ in lakh)			
Asset	Apportioned Approved Cost (FR)	Expenditure up to COD	Capital Cost Allowed as on COD (subject to IDC, IEDC & Initial spares scrutiny)
1	103.00	97.55	97.55

### Time over-run

26. As per the Investment Approval dated 8.2.2011, the scheduled commissioning date of the instant asset under the Transmission Project was 30 months from the date of the Investment Approval. Accordingly, the Scheduled



Commercial Operation Date (SCOD) of the instant asset was 8.8.2013 against which it was put into commercial operation on 28.3.2018, with a delay of about 56 months (1693 days). The Petitioner has submitted that the delay is mainly on account of delay in commissioning of the LILO of 400kV S/C Neelamangla-Hoody Transmission Line at new 400/220 kV GIS Sub-station at Yelahanka due to severe RoW issues. The Petitioner has submitted that all the facilities of the project viz., OPGW & UGOFC links along with associated communication equipment were earlier commissioned progressively except for the subject asset i.e. Neelamangla-Yelahanka OPGW link as the same was held up due to non-commissioning of LILO of 400 kV S/C Neelamangla-Hoody Transmission Line at new 400/220kV GIS Sub-station at Yelahanka S/S. LILO of Neelamangla-Hoody Transmission Line at Yelahanka S/S has been charged on 22.3.2018. Subsequently, the subject OPGW link got commissioned on 28.3.2018.

27. *Vide* technical validation letter dated 11.9.2020, the Petitioner was asked to submit information in the context of time overrun of the instant asset. The Petitioner was directed to furnish the Single Line Diagram (SLD) clearly indicating OPGW links connected with Neelamangla, Hoody and Yelahanka Sub-stations. The Petitioner was also asked to indicate the tower locations where ROW issues occurred during laying of the OPGW communication link and to specify the ROW issues starting from Neelamangla sub-station up to the tower location where the OPGW work was completed. The Petitioner was directed to provide documentary evidence in support of the time envisaged for each activity at the planning stage and the actual time taken by it, in chronological order along with the reasons for time over-run.

28. In response, the Petitioner vide affidavit dated 22.9.2020 has submitted its reply. The Petitioner has also furnished SLD and has submitted that there were



ROW issue only from Yelahanka LILO to Yelahanka sub-station i.e., for 8.27 km from Tower Location 87. Petitioner has submitted that in line with the investment approval dated 15.02.2011, the Transmission Project was scheduled to be commissioned by 15.08.2013. All the facilities of the project; viz., OPGW along with associated communication equipment, were earlier put into commercial operation, whereas the subject Neelamangla-Yelahanka OPGW link has been declared under commercial operation w.e.f. 28.03.2018.

29. The Petitioner has submitted that delay in implementation of the instant asset is mainly attributable to the delay in commissioning of the LILO of 400 kV S/C Neelamangla-Hoody Transmission Line at new 400/220 kV GIS Substation at Yelahanka due to severe RoW issues. It was only after completion of the LILO portion that the Yelahanka-Neelamangla transmission line and Yelahanka-Hoody transmission line could be charged on 22.03.2018 and subsequently the OPGW link was operationalized on 28.3.2018. The Petitioner has stated that the details of time over-run in commercial operation of the LILO were submitted in the Petition No. 361/TT/2018 under SRSS XII.

30. The Petitioner was directed to clarify as to how the COD of LILO of Neelamangla-Hoody transmission line at Yelahanka that is about 8.27 km, affected the COD of the instant asset which is 39.006 km. The Petitioner has replied that Neelamangla-Hoody transmission line is the existing line of KPTCL on which OPGW was strung from Neelamangla station till LILO point whereas from LILO point to Yelahanka station line was under construction by the Petitioner. Neelamangla-Yelahanka OPGW (30.73 km) was strung on 18.12.2013. However, due to non-readiness of LILO portion, the complete asset of 39 km could not be put to commercial operation. After completion of LILO portion, the Yelahanka-



Neelamangla and Yelahanka-Hoody transmission lines were charged on 22.03.2018 and subsequently the commercial operation of the OPGW link was started on 28.03.2018.

31. The SCOD of the instant asset and that of the assets covered in Petition No. 361/TT/2018 did not match and the Petitioner was asked to explain the reasons for mismatch in planning the system. The Petitioner has submitted that as per the Investment Approval (IA) dated 25.2.2010 for Project "System Strengthening XII in Southern Region", LILO of Neelamangla-Hoody at Yelahanka was scheduled for commercial operation within 28 months from the date of investment approval. Accordingly, the scheduled COD was 25.6.2012 against which the asset was charged on 22.3.2018, and the delay in commercial operation of LILO of Neelamangla-Hoody at Yelahanka was condoned vide order dated 8.11.2019 in Petition No. 361/TT/2018.

32. The Petitioner has further submitted that Investment Approval for the Transmission Project, "Fibre Optic Communication system in lieu of existing ULDC Microwave links in Southern Region" was accorded on 15.2.2011 and the commercial operation date was 14.8.2013 (COD as 1.9.2013). Thus, there was a time gap of around one year in the Investment approval as well between the SCOD of both the Projects. The instant Project was approved one year after the approval of the LILO of Neelamangla- Hoody transmission line at Yelahanka. Further, the instant Asset "Neelamangla-Yelahanka OPGW Fibre Communication link of Central Sector along with associated communication Equipment" was not the only asset in the instant project. The commissioning schedule is decided keeping in view all the assets of a Project.



33. We have considered the submissions of the Petitioner and perused the documents available on records. The asset was put into commercial operation w.e.f. from 28.3.2018. Hence, there is a time over-run of about 56 months (1693 days) from the scheduled COD i.e. 8.8.2013. As per the submissions of the Petitioner, COD of the Asset was delayed due to delay in commissioning of the LILO of 400 kV S/C Neelamangla-Hoody Transmission Line at new 400/220 kV Yelahanka GIS Substation due to severe RoW issues, which were beyond the control of Petitioner.

34. The Commission vide order dated 8.11.2019 in Petition No. 361/TT/2018 condoned the delay in commissioning of LILO of 400 kV S/C Neelamangla-Hoody Transmission Line at Yelahanka S/S, which was charged on 22.03.2018 and, thereafter, the subject OPGW link on the 400 kV Neelamangla-Yelahanka LILO portion was put to commercial operation on 28.03.18. The relevant para of the said Order is extracted here under:

*“34. As per the submissions of the petitioner, it is observed that the petitioner has faced RoW problems at various locations 3/0-4/0, 5/0-6/0, 8/0, 10/11, 12/0, 13/0-14/0,15/0. The last such RoW problem faced by the petitioner on 21.2.2018 and on 21.2.2018, AC issued demolition orders and directed for removal of structures under the corridor. Finally, the petitioner has been able to the charge the LILO of 400 kV S/C Neelamangla-Hoody transmission line along with 400 kV Substation at Yelahanka on 22.3.2018.*

*“35. The Petitioner has also submitted extensive details of correspondences with various authorities along with supporting documents. From the submission, ROW issues from 23.12.2011 to 21.2.2018 (2252 days) at various locations affected the commissioning of the instant assets. The time over run of 2252 days on account of ROW problems was beyond the control of the petitioner. However, the Petitioner has compressed the execution time and commissioned the instant assets with overall delay of 2106 days. Therefore, the overall time over run of 2106 days in commissioning of Asset-I, Asset-2A and Asset-2B is condoned.*

35. The Petitioner, vide additional information dated 22.9.2020, has submitted that OPGW link is connected with Neelamangla, Hoody and Yelahanka Sub-stations. The 400 kV S/C Neelamangla-Hoody transmission line is the existing line of KPTCL on which OPGW was strung from Neelamangla Sub-station up till LILO





point, whereas from LILO point to Yelahanka station, the line was under construction by the Petitioner on which OPGW was strung subsequent to clearing of ROW.

36. The Petitioner has submitted that there is a time over-run of 1693 days in commissioning of the asset covered under instant petition and major delay in implementation of the instant asset is attributable to the delay in commissioning of the LILO of 400 kV S/C Neelamangla-Hoody transmission Line at new 400/220 kV GIS Substation at Yelahanka due to severe RoW issues.

37. On perusal of the submissions of the Petitioner, it is observed that it faced RoW problems from Yelahanka LILO point to Yelahanka Sub-station i.e. for 8.27 km from Tower Location 87 to Yelahanka Sub-station (1/0 to 18/0). Due to non-readiness of LILO portion of 8.27 km, the complete asset of 39 km could not be commissioned.

38. Considering the facts stated in previous paragraphs, we are of the view that RoW issues in construction of LILO of 400kV S/C Neelamangla-Hoody Transmission Line at Yelahanka S/S affected the commissioning of the instant asset. We, therefore, hold that the delay of 1693 days on account of RoW issues was beyond the control of the Petitioner. Hence, in terms of Regulation 12(2)(i) of 2014 Tariff Regulations, the overall time over-run of 1693 days in COD of the asset is condoned.

39. In view of the above deliberations, the time overrun condoned/ not condoned in respect of the instant asset is summarised as below:

<b>S.N.</b>	<b>Asset</b>	<b>Total Time overrun**</b>	<b>Time overrun condoned</b>	<b>Time overrun Not condoned</b>
1	Neelamangla-Yelahanka OPGW Fibre Communication link	1693 days	1693 days	NIL

*\*\*Petitioner has reckoned the time line with reference to the date of letter of Investment Approval. We have considered the time line as per Regulation 3(36) of 2014 Regulations.*



### **Interest During Construction (IDC)**

40. The Petitioner has claimed Interest During Construction (IDC) for the asset and has submitted the Auditor's Certificate dated 12.6.2018 in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of IDC discharged.

41. IDC has been allowed considering the information submitted by the Petitioner for the asset on cash basis. The loan details submitted in Form-9C for the 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of IDC calculation on cash and accrual basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged. Accordingly, IDC considered is as under:

(₹ in lakh)

Asset	IDC as per Auditor's certificate dt 12.6.2018	IDC Admissible	IDC disallowed due to Time overrun not condoned/ Computational difference	IDC Discharged as on COD	IDC Un-discharged as on COD	IDC Discharged	
						2017-18	2018-19
A	B	C	D=B-C	E	F=C-E		
1	18.27	18.20	0.07	15.54	2.66	0.00	2.66

### **Incidental Expenditure During Construction (IEDC)**

42. The Petitioner has claimed IEDC and submitted Auditor Certificate dated 12.6.2018 in support of the same. Auditor Certificate dated 12.6.2018 shows the IEDC incurred as follows:

(₹ in lakh)

Claimed as per Auditor's Certificate dated 12.6.2018	IEDC
Up to 31.3.2017	4.51
1.4.2017 to 27.3.2018 (up to COD)	-
28.3.2018 to 31.3.2018	-
From 1.4.2018 to 31.3.2019	-
<b>Total IEDC claimed as on 28.3.2018 (COD)</b>	<b>4.51</b>



43. IEDC claimed is within the percentage of hard cost i.e. 13.75% (including contingency) as indicated in the abstract cost estimate. Hence, in line with the ceiling, IEDC claimed by the Petitioner for the instant asset is allowed. Further, the Petitioner has submitted that IEDC was fully discharged as on respective dates and no liquidated damages have been recovered for the instant asset.

44. We have considered the submission of the Petitioner. Details of IEDC considered for tariff computation, subject to revision during true up is as follows:

Particulars	(₹ in lakh)		
	Claimed	Disallowed	Allowed
Up to 31.3.2017	4.51	-	4.51
1.4.2017 to 27.3.2018 (up to COD)	-	-	-
<b>Total IEDC claimed as on 28.3.2018 (COD)</b>	<b>4.51</b>	<b>-</b>	<b>4.51</b>

45. IEDC allowed for the subject asset will be reconsidered in the light of the directions of Appellate Tribunal for Electricity (APTEL) in judgment dated 2.12.2019 in Appeal Nos. 95 of 2018 and 140 of 2018 as implemented vide the Commission's Order dated 4.2.2020 in petition no 1/TT/2019, at the time of truing up, after all the assets under the scope of the Transmission Project are put to commercial use and the actual quantum of IEDC is known. The Petitioner is directed to furnish the details of IEDC of all the assets of the Transmission Project at the time of true-up of capital cost.

### **Initial Spares**

46. The Petitioner has not claimed initial spares for instant asset.

### **Capital cost as on COD**

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



(₹in lakh)

Asset	Capital Cost as on COD as per Auditor's Certificate	Less: IDC disallowed as on COD due to		Less: IEDC disallowed due to excess claim/ Time overrun not condoned	Capital Cost considered as on COD
		Computational difference/ time overrun not condoned	Un-discharged		
		1	2		
1	97.55	0.07	2.66	-	94.82

### **Additional Capital Expenditure (ACE)**

48. Clause (1) of Regulation 14 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.”*

49. Clause (13) of Regulation 3 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”*

50. The Petitioner has not claimed any additional capitalisation for the Asset. As per Clause 13 of Regulation 3 of the 2014 Tariff Regulations, the cut-off date for instant asset is 31.3.2021. However, IDC of ₹2.66 lakh discharged during 2018-19



has been claimed as additional capital expenditure during the year of discharge in Tariff Forms submitted by the Petitioner.

51. Accordingly, the allowed Additional Capital Expenditure is summarized below which is subject to true up:

Particulars	Regulation	(₹ in lakh)	
		Asset-1	
		2017-18	2018-19
ACE to the extent of Balance & Retention Payment & works deferred for execution	14 (1)(i) & 14(1)(ii)	0.00	0.00
Add: IDC discharged during the FY	14 (1)(i)	0.00	2.66
<b>Total</b>		<b>0.00</b>	<b>2.66</b>

### **Capital cost for the tariff period 2014-19**

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

Asset	Apportioned Approved Cost (FR)	Capital Cost allowed as on COD	(₹ in lakh)	
			ACE allowed in 2018-19	Capital cost allowed as on 31.3.2019
1	103.00	94.82	2.66	97.48

53. Based on the above, the tariff in respect of the instant asset from COD (28.3.2018) to 31.3.2018 (period of 4 days in FY 2017-18 and period of 365 days in FY 2018-19) is determined in subsequent paragraphs.

### **Debt-Equity Ratio**

54. 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.”*

55. The Petitioner has considered debt-equity ratio of 70:30 as on COD and for ACE post-COD. The debt-equity ratio has been considered as provided under Regulation 19 of the 2014 Tariff Regulations for capital cost as on COD and ACE during the 2014-19 tariff period. The same has been summarised as under:

Asset-1	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	66.37	70.00	68.24	70.00
Equity	28.45	30.00	29.24	30.00
<b>Total</b>	<b>94.82</b>	<b>100.00</b>	<b>97.48</b>	<b>100.00</b>

### **Return on Equity (ROE)**

56. 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 kilometers.

**“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.”

57. The Petitioner has worked out ROE after grossing up the base rate of ROE with MAT rate of 20.961% for the FY 2017-18 as well as the FY 2018-19, as per provisions of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has further submitted that the grossed-up ROE is subject to truing up based on the effective tax rate of respective financial year applicable to the Petitioner Company.

58. 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.

59. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates for the Petitioner.

The relevant portion of the order dated 27.4.2020 is as under:

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

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

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

60. The MAT rates considered in the above order are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations, as under:

<b>Particulars</b>	<b>(₹ in lakh)</b>	
	<b>Asset-1 2017-18(Pro-rata)</b>	<b>2018-19</b>
Net Opening Equity	28.45	28.45





Particulars	Asset-1	
	2017-18(Pro-rata)	2018-19
Increase in Equity due to addition during the year	0.00	0.80
Closing Equity	28.45	29.24
Average Equity	28.45	28.85
Return on Equity (Base Rate) (%)	15.50	15.50
Tax Rate applicable (%)	21.342	21.549
Applicable ROE Rate (%)	19.705	19.758
<b>Return on Equity for the year</b>	<b>0.06</b>	<b>5.70</b>

### **Interest on Loan (IOL)**

61. Regulation 26 of the 2014 Tariff Regulations 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.”*

62. The Petitioner has submitted that IOL has been claimed on the basis of rate prevailing as on COD and the change in interest due to floating rate of interest applicable, if any, needs to be claimed/ adjusted over the tariff period 2014-19. We have calculated IOL on the basis of rate prevailing as on the date of commercial operation. 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.

63. IOL has been calculated as per the provisions of Regulation 26 of the 2014 Tariff Regulations. The methodology applied is 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.*

64. The details of IoL allowed for the transmission asset are as follows:-

Particulars	(₹ in lakh)	
	Asset-1	
	2017-18 (Pro-rata for 4 days)	2018-19
Gross Normative Loan	66.37	66.37
Cumulative Repayment upto previous Year	0.00	0.07
Net Loan-Opening	66.37	66.31
Addition due to ACE	0.00	1.86
Repayment during the year	0.07	6.09
Net Loan-Closing	66.31	62.08
Average Loan	66.34	64.20
Weighted Average Rate of Interest on Loan (%)	8.7133	8.6829
<b>Interest on Loan</b>	<b>0.06</b>	<b>5.57</b>

### **Depreciation**

65. 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.”*

66. Depreciation has been dealt with in line with Regulation 27 of the 2014 Tariff Regulations. The instant asset was put under commercial operation during 2017-18. The weighted average life of the Asset has been worked out at 15 years. The Gross Block during 2017-18 and 2018-19 has been depreciated at weighted average rate of depreciation (WAROD) (as placed in Annexure-1). WAROD has been worked out considering the depreciation rates of assets as prescribed in the 2014 Tariff



Regulations and accordingly, depreciation allowed during 2017-18 and 2018-19 are as under:

Particulars	Asset-1 (₹ in lakh)	
	2017-18 (pro-rata for 4 days)	2018-19
Opening Gross Block	94.82	94.82
Additional Capitalisation	0.00	2.66
Closing Gross Block	94.82	97.48
Average Gross Block	94.82	96.15
Value of Freehold Land included above	0.00	0.00
Aggregated Depreciable Value	85.34	86.54
Remaining Aggregated Depreciable Value at the beginning of the year	85.34	86.47
No. of completed years at the beginning of the year	0	0
Balance useful life of the asset at the beginning of the year	15	15
Weighted Average Rate of Depreciation (WAROD)(%)	6.3300	6.3300
<b>Depreciation during the Year</b>	<b>0.07</b>	<b>6.09</b>
Cumulative Depreciation at the end of the year	0.07	6.15

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

67. The Petitioner has claimed the O&M expenses for instant asset and submitted Auditor's Certificate dated 27.3.2019 in support of the same as per following details:

Asset	Particulars	₹ in lakh	
		From 28.3.2018 (COD) – 31.03.2018	For FY 2018-19 (1.4.2018 – 31.12.2018)
1	Employee Cost	0.05	0.49
	Advertisement (Others)		0.71
	Bandwidth & Lease Line Charges	0.00	0.00
	<b>Total Expenses</b>	<b>0.06</b>	<b>1.20</b>
	CC & RHQ Expenses	0.02	0.16
	Self-Insurance Reserve @ 0.12% of Gross Block	0.16	0.12
	<b>Grand Total</b>	<b>0.24</b>	<b>1.48</b>

68. We have considered the submission of Petitioner. We observe that for 2017-19, the Petitioner has claimed actual O&M expenses incurred up to 31.12.2018. The Petitioner is directed to furnish the actual O&M expenses incurred up to 31.3.2019, at the time of true up. The Petitioner has claimed ₹ 0.16 lakh and 0.12 lakh towards



self insurance as expenses under O&M Expenses. In a similar matter, the Commission vide order dated 29.7.2016 in petition No, 275/TT/2015 is held as under:

*“45. The petitioner was directed vide ROP dated 22.3.2016, to submit the actual O&M Expenses year wise along with details. In response, petitioner vide affidavit Order in Petition No. 275/TT/2015 has submitted that actual O&M Expenses for 2014-15 towards Asset-I and II are ₹5.75 lakh and ₹4.46 lakh respectively. Break up of O&M Expenses has also been provided vide Auditor's Certificate dated 15.6.2016. The petitioner has claimed self-insurance reserve as expenses under O&M Expenses which is not allowable as expenses”*

In line with above order, the O&M expenses ₹ 0.16 laks and 0.12 lakh is not allowable for *self-insurance reserve as expenses under O&M Expenses*.

69. As per the Clause 29(4)(a) of the 2014 Tariff Regulations, the O&M Expenses calculated and allowed for 2014-19 period is as follows:

(₹ in lakh) Asset	Particulars	From 28.3.2018 (COD) – 31.03.2018	2018-19
1	Employee Cost	0.05	0.49
	Advertisement (Others)		0.71
	Bandwidth & Lease Line Charges	0.00	0.00
	<b>Total Expenses</b>	<b>0.05</b>	<b>1.20</b>
	CC & RHQ Expenses	0.02	0.16
	Self-Insurance Reserve @ 0.12% of Gross Block	0.00	0.00
	<b>Grand Total</b>	<b>0.07</b>	<b>1.36</b>

\*Self-Insurance Reserve is not considered.

### **Interest on Working Capital (IWC)**

70. Clause 1(c) of Regulation 28 and Clause 5 of Regulation 3 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 hydroelectric 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 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;”

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

**a) Maintenance spares:**

Maintenance spares @15% Operation and maintenance expenses specified in Regulation 29.

**b) O & M expenses:**

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

**c) Receivables:**

The receivables have been worked out on the basis of 2 months of annual fixed cost as worked out above.

**d) Rate of interest on working capital:**

As per Clause 28 (3) of the 2014 Tariff Regulations, SBI Base Rate as on 1.4.2017 (9.10%) plus 350 bps i.e. 12.60% has been considered as the rate of interest on working capital.

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

(₹ in lakh)

Particulars	Asset-1	
	2017-18 (Pro-rata for 4 days)	2018-19
Maintenance Spares	0.96	0.20
O&M Expenses	0.53	0.11
Receivables	4.08	3.19
<b>Total</b>	<b>5.57</b>	<b>3.51</b>
Rate of Interest (%)	12.60	12.60
<b>Interest on working Capital</b>	<b>0.01</b>	<b>0.44</b>



### **Annual Transmission charges**

73. Accordingly, the annual transmission charges being allowed for the instant asset is as under:

(₹ in lakh)

Particulars	Asset-1	
	2017-18 (Pro-rata for 4 days)	2018-19
Depreciation	0.07	6.09
Interest on Loan	0.06	5.57
Return on Equity	0.06	5.70
Interest on Working Capital	0.01	0.44
O&M Expenses	0.07	1.36
<b>Total</b>	<b>0.27</b>	<b>19.16</b>

### **Filing fee and the publication expenses**

74. 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**

75. 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**

76. 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**

77. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time, as provided in Regulation 43 of the 2014 Tariff Regulations.

78. The annual transmission charges being allowed for the instant asset for the tariff period 2014-19 period are as under:

(₹ in lakh)	
2017-18 (Pro-rata for 4 days)	2018-19
0.27	19.16

79. This order disposes of Petition No.143/TT/2019.

Sd/  
**(Arun Goyal)**  
Member

Sd/  
**(I. S. Jha)**  
Member

Sd/  
**(P. K. Pujari)**  
Chairperson





**ANNEXURE-1**

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

Asset-1 (2014-19)  Capital Expenditure	Admitted Capital Cost as on COD	Projected Additional Capitalisation during tariff period 2014-19	Admitted Capital Cost as on 31.3.2019	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations				
					2014-15	2015-16	2016-17	2017-18	2018-19
Land- Freehold	0.00	0.00	0.00	0.00%	-	-	-	0.00	0.00
Land-Lease hold	0.00	0.00	0.00	3.34%	-	-	-	0.00	0.00
Building, Civil Works & Colony	0.00	0.00	0.00	3.34%	-	-	-	0.00	0.00
Transmission Line	0.00	0.00	0.00	5.28%	-	-	-	0.00	0.00
Substation	0.00	0.00	0.00	5.28%	-	-	-	0.00	0.00
PLCC	94.82	2.73	97.55	6.33%	-	-	-	6.00	6.09
IT Equipment (Incl. Software)	0.00	0.00	0.00	15.00%	-	-	-	0.00	0.00
<b>Total</b>	<b>94.82</b>	<b>2.73</b>	<b>97.55</b>	<b>Total</b>	-	-	-	<b>6.00</b>	<b>6.09</b>
<b>Average Gross Block (₹ in lakh)</b>					-	-	-	<b>94.82</b>	<b>96.19</b>
<b>Weighted Average Rate of Depreciation (WAROD)</b>					-	-	-	-	<b>6.3300%</b>

