

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No.: 233/TT/2018

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

Date of Order: 12.04.2019

IN THE MATTER OF

Approval under Regulation-86 of CERC (Conduct of Business) Regulations, 1999 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of Transmission Tariff from anticipated DOCO to 31-03-2019 for Transmission Asset-LILO of existing Neyveli TS-II – Pondicherry 400KV S/c at NNTPS generation switchyard under “Transmission system for evacuation of power from 2X500MW Neyveli Lignite Corporation Ltd. TS-1(Replacement) (NNTPS)” in Southern Region.

And in the matter of

Power Grid Corporation of India Ltd.
B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi. 110 016.
Corporate Centre: 'SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana)

....**Petitioner**

Versus

1. Karnataka Power Transmission Corporation Ltd.,
(KPTCL), Kaveri Bhavan, Bangalore - 560 009.
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 - 600 002



5. Electricity Department
Government of Goa
Vidyuti Bhawan, Panaji
Goa 403001
6. Electricity Department
Govt of Pondicherry,
Pondicherry - 605001
7. Eastern Power Distribution Company of Andhra Pradesh
Limited (APEPDCL)
APEPDCL, P&T Colony,
Seethmmadhara, Vishakhapatnam,
Andhra Pradesh,
8. Southern Power Distribution Company of Andhra
Pradesh Limited (APSPDCL)
Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta,
TIRUPATI-517 501, Chittoor District, Andhra Pradesh
9. Central Power Distribution Company of Andhra Pradesh
Limited (APCPDCL)
Corporate Office, Mint Compound,
HYDERABAD - 500 063, Andhra Pradesh
10. Northern Power Distribution Company of Andhra
Pradesh Limited (APNPDCL), Opp. NIT Petrol Pump
Chaitanyapuri, Kazipet, WARANGAL - 506 004
Andhra Pradesh
11. Bangalore Electricity Supply Company Ltd., (BESCOM),
Corporate Office, K.R.Circle
BANGALORE - 560 001, Karanataka
12. Gulbarga Electricity Supply Company Ltd., (GESCOM)
Station Main Road, GULBURGA, Karnataka
13. Hubli Electricity Supply Company Ltd., (HESCOM)
Navanagar, PB Road, HUBLI, Karnataka
14. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle
Mangalore - 575 001, Karnataka
15. Chamundeswari Electricity Supply Corporation Ltd.,(CESC)
927,L J Avenue, Ground Floor, New Kantharaj Urs Road
Saraswatipuram, Mysore - 570 009, Karnataka



16. Transmission Corporation of Telangana Limited,
Vidhyut Sudha, Khairatabad,
Hyderabad,500082
17. NLC India Ltd.
Corporate Office
Neyveli - 607801, Tamil Nadu

....Respondents

Parties Present: Shri S.S. Raju, PGCIL
Shri Vivek Kumar Singh, PGCIL
Shri S. K. Venkatesan, PGCIL
Shri Amit Yadav, PGCIL
Shri Zafrul Hasan, PGCIL

ORDER

The present petition has been filed by Powergrid Corporation of India Ltd. (PGCIL) for determination of tariff of LILO of existing Neyveli TS-II-Pondicherry 400 kV S/C at NNTPP (Neyveli New Thermal Power Project) generation switchyard under “transmission system for evacuation of power from 2X500 MW Neyveli Lignite Corp. Ltd TS-1 (Replacement) (NNTPS)” in Southern Region. The petitioner has prayed for determination of tariff under provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 hereinafter referred to as the 2014 Tariff Regulations

2. The petitioner has made the following prayers in this petition:
 - i. Approve the Transmission Tariff for the tariff block 2014-19 for the assets covered under this petition.
 - ii. Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.
 - iii. Allow the Petitioner to approach this Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19.



- iv. Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under Regulation 25 of the Tariff Regulations 2014.
- v. Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition.
- vi. Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.
- vii. Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents.
- viii. Allow the petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on Transmission of electricity is withdrawn from the exempted (negative) list at any time in future. Further any taxes and duties including cess, etc. imposed by any statutory /Government/Municipal Authorities shall be allowed to be recovered from the beneficiaries.
- ix. 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.
- x. Allow the petitioner to bill Tariff from anticipated DOCO and also the petitioner may be allowed to submit revised Certificate and tariff Forms (as per the Relevant Regulation) based on actual DOCO.

Background:

3. The investment approval of the project was accorded by Board of Directors of petitioner on 11.05.2017 and the same was issued vide Memorandum Ref.: C/CP/PA 1718-06-0A-IA006 dated 06.06.2017, at an estimated cost of ₹ 186.17 Cr. including IDC of ₹ 9.51 Cr. at Feb'17 price level.

4. The scope of the scheme was discussed and agreed in the 35th, 37th & 39th meeting of Standing Committee on Power System Planning in Southern Region held



on 04.01.2013, 31.07.2014 & 28.12.2015 respectively. Further, the transmission scheme has also been agreed in the 26th & 29th meeting of Southern Region Power Committee (SRPC) held on 20.12.2014 & 05.03.2016 respectively.

5. MoP vide letter dated 14th March, 2016 has approved the implementation of the scheme by POWERGRID under compressed time schedule through regulated tariff mechanism. The petitioner has submitted the Extracts of the MOMs of SCMs and RPCs and letter of MoP.

Scope of Work:

6. The scope of work covered under "Transmission system for evacuation of power from 2X500MW Neyveli Lignite Corp. Ltd TS-1 (Replacement) (NNTPS) " in Southern Region is as follows:

Transmission lines

- (i) LILO of existing Neyveli TS-II – Pondyicherry 400 kV S/c at NNTPS generation switchyard-4KMs (400KV D/C Twin-2KMs & 400KV M/C Twin-2KMs).
- (ii) NNTPS switchyard – Ariyalur (Villupuram) 400 kV D/c Twin line- 78KMs.

Substation

Ariyalur (Villupuram) 400kV substation of TANTRANSCO

- (i) 2 nos. of 400kV line bays at Ariyalur (Villupuram) substation for terminating NNTPS switchyard – Ariyalur (Villupuram) 400kV D/c line.

(Note: 400kV bays at NNTPS to be provided by NLC.)



7. The scope of the instant petition covered under the project is as under:

Name of Asset	Schedule Commissioning as per IA	Anticipated COD	Transmission Tariff approval prayed for
Asset-1: LILO of existing Neyveli TS-II –Pondicherry 400KV S/c at NNTPS generation switchyard	10.06.2018 to 10.07.2019	29.06.2018	Anticipated COD to 31.3.2019

8. The petition was heard on 13.12.2018 and 28.2.2019. The Commission vide order dated 13.12.2018 directed the petitioner to submit additional information on affidavit.

9. The petitioner has claimed the Annual Transmission Charges (ATC) for the Asset as follows:

Particulars	(₹ In lakh)	
	ATC Claimed (2018-19)	
Depreciation		68.47
Interest on Loan		67.74
Return on Equity		76.28
Interest on Working Capital		4.53
O&M Expenses		2.43
Total		219.45

10. The petitioner has claimed the Interest on Working Capital as follows:

Particulars	(₹ In lakh)	
	2018-19	
Maintenance Spares		0.48
O&M expenses		0.27
Receivables		47.88
Total		48.62
Rate of Interest		12.20%
Interest on Working Capital		5.93
Pro-rata Interest on Working Capital		4.53



11. The Commission observes that no comments have been received from the public in response to the notices, as per Section 64 of the Electricity Act, 2003, published by the petitioner in newspapers.

Submissions of the Petitioners in the pleadings and during the hearings

12. The petitioner has submitted that as per the Investment Approval dated 11.5.2017, the transmission system for evacuation of power from NLC TS-1 was scheduled to be put into commercial operation within 13-26 months progressively from the date of Investment Approval.

13. The petitioner has submitted that the proposed date of the commercial operation of the instant asset was 26.6.2018. As the associated bays at NNTPS Switchyard under the scope of NLC are not ready, the petitioner has sought the approval of COD of the instant asset under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations.

14. The petitioner has submitted that the transmission charges for the instant asset should be borne by NLC as NLC failed to complete the bays under its scope within time. The petitioner also submitted that the scheduled COD of the instant asset was 10.6.2018 and its COD was 29.6.2018 and there is a marginal time over-run in case of the instant asset and prayed to allow the tariff as claimed in the petition.

Submissions of the Respondents in the pleadings and during the hearings

15. The respondent, TANGEDCO, submitted that as the generating station of NLC has not been commissioned, the transmission charges should be borne by NLC and it should not be socialised through PoC.



16. As directed by this Commission in Record of Proceedings dated 13.12.2018, the respondent, NLC filed its reply vide affidavit dated 10.1.2019 in the instant petition. The respondent submitted that the Neyveli TS-II-Pondicherry 400 KV LILO has been charged by Power Grid Corporation of India Ltd. by providing temporary LILO jumpers at dead end tower at NNTPP switch yard on 26.6.2018. The above lines will be connected to NNTPP 400 KV Bus after readiness of 400 KV GIS.

17. Accordingly we proceed to dispose of the petition on the basis of the submissions made by the parties vide affidavits dated 27.6.2018, 2.8.2018, 30.8.2018, 8.10.2018, 5.12.2018, 10.12.2018, 31.12.2018 and 10.1.2019.

Date of Commercial Operation (COD)

18. The petitioner vide affidavit dated 5.12.2018 has claimed the actual COD of the Asset covered in the instant petition for tariff determination as under:

Name of Asset	Schedule Commissioning as per IA	Anticipated COD as filed in the petition	Proposed COD
Asset-1: LILO of existing Neyveli TS-II –Pondicherry 400KV S/c at NNTPS generation switchyard	10.06.2018 to 10.07.2019	29.06.2018	26.6.2018

19. We have considered the submission of the petitioner and respondents. The Petitioner has claimed the COD of the instant asset as 26.6.2018 under Proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as the Petitioner was not able to put the instant asset into regular service due to non-commissioning of the Associated generation under the control of NNTPS.



20. Regulation 4(3) of the 2014 Tariff Regulations provides as under:

“4. Date of Commercial Operation: The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

xxx

(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end:

xxx

Provided that:

(i) Where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations:

(ii) In case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof.

xxx

xxx”

21. In support of commercial operation, the petitioner has submitted the CMD Certificate, CEA Certificate, RLDC correspondence for charging by cross jumpering at dead end tower in NNTPP switchyard and Notification of readiness alongwith additional correspondence with respondent, NLC.

22. Agreeing with the request of the petitioner and based upon CMD Certificate and the CEA energisation certificate, the COD of the instant asset is approved on 26.6.2018 under Proviso (ii) of Regulation 4(3) of the Tariff Regulations, 2014. As the



associated generation under the control of NNTPP was not ready, therefore, the transmission charges from 26.6.2018 till COD of the generating station shall be borne by NNTPP.

Capital Cost:

23. The Petitioner has claimed capital cost as per Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations. The petitioner vide affidavit dated 31.12.2018 & Management Certificate dated 24.12.2018 has claimed the expenditure incurred up to anticipated COD and additional capitalization projected to be incurred from anticipated COD to 31.03.2019 for the instant asset which is as follows:

Asset Name	Apportioned Approved Cost as per FR	Cost as on Anticipated COD	Estimated Add-Cap		Estimated Completion Cost
			2018-19	2019-20	
Asset-1	1929.28	1415.47	594.60	138.00	2148.07

24. Regulation 9 (1) and 9(2) of the 2014 Tariff Regulations specify as follows:-

“9. Capital Cost: (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.”*

Cost Over-Run/Variation

25. The Estimated completion cost of the Asset based on the Management certificate works out to ₹ 21.48 Cr including IEDC & IDC. Therefore, there is Cost overrun as per Apportioned Approved Cost (FR).

Reason for Cost variation:

26. The petitioner has submitted the reasons for cost variation between approved cost (FR) and estimated completion cost as follows:

- i) There is reduction of around ₹ 1.77 Crore on accounts of Overheads and IDC with respect to FR.
- ii) IEDC (Overheads) – Decrease of ₹ 169.50 Lakhs- During estimation for FR, 3% and 10.75% of equipment cost and civil works has been considered for Contingency and IEDC respectively. The actual amount of IEDC, Establishment and contingency has been considered at the time of claim of Tariff.
- iii) IDC decrease of ₹ 7.81 Lakhs, during estimation for FR, IDC was considered based on the interest rate of 10.5% of Domestic loans. On actual the weighted average rate of interest of loans is around 7.62%. The



actual IDC accrued up to anticipated DOCO has been considered at the time of claim of tariff.

- iv) Increase of ₹ 102 Lakh on account of Taxes and Duties paid on actual.

27. The respondent, TANGEDCO has submitted that the petitioner in Form 4C of the petition has furnished the following details regarding Capital cost estimates:

(₹ In lakh)			
Sl. No.	Name of the Asset	Approved cost	Completed cost
1	Capital Cost excluding IDC, IEDC, FC, FERV & Hedging Cost	1655.00	1723.00
2	Total IDC, FC, FERV & Hedging Cost	274.28	96.98
3		1929.28	1820.22

28. A comparison of the estimated and actual cost claimed for certain items as per Form 5 in the tariff is tabulated below:

Item	As per estimate	Expenses claimed in tariff including liabilities	% increase
Tower steel (MT)	709.91	739.66	4.1907%
Conductor moose	150.63	190.50	26.4688%
Insulators	12.38	39.90	222.294%
Hardware fittings	24.34	38.20	56.9433%
Taxes and duties	130.53	232.86	78.3958%

29. The petitioner vide affidavit dated 10.12.2018 has submitted the rejoinder to the reply of TANGEDCO and stated that the overall estimated completion cost of the asset is within the apportioned approved cost. The packages under subject scope of works were awarded through open competitive bidding. The item-wise unit prices in contracts and its variation over unit rate considered in FR estimates is beyond the control of the petitioner. Through this process, lowest possible market prices for required product/services are obtained and contracts are awarded on the basis of



lowest evaluated eligible bidder. The estimates are prepared by the petitioner as per well-defined procedures. The FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts/general practice.

30. We have considered the submissions of the petitioner and respondent. It is observed that the apportioned approved cost (FR) for the instant asset is ₹ 1929.28 lakh and the estimated completion cost as per the management certificate is ₹ 2148.07 lakh. Therefore, there is Cost overrun as per Apportioned Approved Cost (FR). The estimated completion cost is restricted to apportioned approved cost (FR) and based on the above, the capital cost allowed as on COD under Regulation 9(2) of 2014 Tariff Regulation is summarized as under:-

(₹ In lakh)			
Asset Name	Apportioned Approved Cost as per FR	Capital cost as on COD claimed by Petitioner	Capital Cost as on COD considered
Asset-1	1929.28	1415.47	1384.93

31. The capital cost in case of the instant asset shall be reviewed at the time of truing-up, subject to the petitioner filing the RCE and justification for cost over-run.

Time Over Run

32. As per the approval, the transmission scheme was scheduled to be commissioned within 13-26 months progressively from the date of investment approval, i.e. May, 2017. The petitioner has stated that the commissioning schedule of the instant asset was 10.06.2018 against which COD of the instant asset has been approved as 26.06.2018. Hence there is time overrun of 16 days in commissioning of the instant asset. As stated in paragraph 14 of this order, the



petitioner has submitted that time over-run is marginal and that tariff as prayed may be allowed. Since the petitioner has not furnished any reasons for this delay of 16 days in COD, we are not inclined to condone this delay.

Interest During Construction (IDC)

33. The Petitioner has claimed IDC of ₹ 40.95lakh. Further, the Petitioner has submitted the statement showing discharge of IDC liability as on COD and thereafter is as follows:

(₹ In lakh)				
IDC claimed as per certificate	IDC considered as on COD	IDC discharged Up to COD	IDC discharged In 2018-19	IDC discharged in 2019-20*
40.95	37.84	10.59	27.25	0.18

*Disallowed as IDC discharged beyond tariff period 2014-19.

34. The IDC on cash basis up to allowable dates has been worked out on the basis of the loan details given in Form-9C. It is submitted that Petitioner has not made any default in the payment of interest. Therefore, the IDC being considered for tariff computation is minimum of worked out IDC and IDC claimed by the Petitioner.

Incidental Expenditure During Construction (IEDC)

35. The Petitioner has claimed IEDC of ₹ 63.82 lakh. The Petitioner has claimed IEDC as on COD, which is within the percentage of hard cost as indicated in the abstract cost estimate. Further, the Petitioner submitted that entire IEDC claimed in Auditor Certificate is on cash basis and is paid up to COD of the assets. Hence, the entire amount of IEDC has been allowed.



Initial Spares

36. The petitioner vide affidavit dated 31.12.2018 and Management Certificate dated 24.12.2018 has claimed the Initial spares for the subject Asset as under:

(₹ in Lakhs)			
Components of the Asset	Cost for calculation of initial spares	Initial spares being claimed	Initial spares being claimed (%)
Transmission Line	2043.30	14.33	0.70

37. Regulation 13(d) of the 2014 Tariff Regulations provides that initial spares shall be capitalized as a percentage of plant and machinery cost up to cut-off date, subject to following ceiling norms:-

“(d) Transmission System Transmission line: 1.00%
Transmission sub-station (Green Field): 4.00%
Transmission sub-station (Brown Field): 6.00%”

38. We have considered the submissions of the petitioner. The initial spares claimed by the Petitioner for the subject Asset are within the permissible limits and the same is allowed.

Capital Cost allowed as on COD

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

(₹ In lakh)				
Capital Cost claimed as on COD (a)	Un-discharged IDC as on COD & IDC disallowed (b)	Un-discharged IEDC (c)	Un-discharged Initial Spare as on COD (d)	Capital Cost allowed as on COD [e=[a-(b+c+d)]
1415.47	30.54	0.00	0.00	1384.93



Additional Capital Expenditure (ACE)

40. 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.”*

41. 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”.

42. Accordingly, the cut-off date for the instant asset is 31.3.2021.

43. The Petitioner has claimed ACE as per as per Clause (1) of Regulation 14 of the 2014 Tariff Regulations based on the cost certified by the Auditors. In addition, the Petitioner has also claimed the ACE towards discharge of IDC liability for 2017-18 and 2018-19. The additional capital expenditure claimed by the Petitioner for the instant assets for the period 2017-18 and 2018-19 is within the cut- off date and is on account of balance and retention payments and accordingly it is allowed under



Regulation 14(1) (i) of the 2014 Tariff Regulations. The ACE claimed by the Petitioner is summarized in the table below:-

(₹ In lakh)	
2018-19	2019-20
594.60	138.00

44. The un-discharged IDC as on COD has been allowed as Additional Capital Expenditure during the year of discharge. Accordingly, the Additional Capital expenditure allowed has been summarized as under, which shall be reviewed at the time of true up:-

Particulars	(₹ In lakh)	
	2018-19	Total Add Cap Allowed
Additional Capitalization Claimed	594.60	594.60
Add : IDC Discharged	27.25	27.25
Add : Initial Spare Discharged	0.00	0.00
Total Add Cap allowed	621.85	621.85

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

(₹ In lakh)				
Capital cost allowed as on COD	Add Cap for 2016-17	Add Cap for 2017-18	Add Cap for 2018-19	Total Estimated Completion Cost up to 31.3.2019
1384.93	0.00	0.00	621.85	2006.78

Debt-Equity Ratio

46. Clause 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specifies 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.”

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

(₹ In lakh)

Particulars	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	969.45	70.00	1404.75	70.00
Equity	415.48	30.00	602.03	30.00
Total	1384.93	100.00	2006.78	100.00

Return on Equity

48. Clause (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:

Rate of pre-tax return on equity = 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.”

49. The Petitioner has submitted that it is liable to pay income tax at MAT rate, the RoE has been calculated @ 19.610% after grossing up the RoE with MAT rate of 20.961% as provided under Regulation 25(2) (i) of the 2014 Tariff Regulations. As per Regulation 25(3) of the 2014 Tariff Regulations, the grossed up rate of RoE at the end of the financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2014-19 period on actual gross income of any financial year.

50. We have considered the submission made by the Petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of RoE with the effective tax rate for the purpose of RoE.

51. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the RoE allowed is as follows:-



Particulars	(₹ In lakh)
	2018.19 Pro-Rata
Opening Equity	415.48
Addition due to Additional Capitalization	186.56
Closing Equity	602.03
Average Equity	508.76
Return on Equity (Base Rate)	15.50%
MAT rate for the respective financial year	20.960%
Rate of Return on Equity (Pre-tax)	19.610%
Return on Equity (Pre-tax)	76.21

Interest on loan(IOL)

52. 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 upto 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.”

53. Accordingly the calculations of IOL have been worked out as under:-

- (i) Gross amount of loan, repayment of instalments and rate of interest on actual average loan have been considered as per the petition;*
- (ii) The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year; and*



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

54. Based on above, details of Interest on Loan considered and allowed for the subject Asset are as follows:-

(₹ In lakh)	
Particulars	2018-19 Pro-Rata
Gross Normative Loan	969.45
Cumulative Repayment up to previous Year	0.00
Net Loan-Opening	969.45
Addition due to Additional Capitalization	435.30
Repayment during the year	68.40
Net Loan-Closing	1336.35
Average Loan	1152.90
Weighted Average Rate of Interest on Loan	7.6844%
Interest on loan	67.68

Depreciation

55. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation specifies as below:-

"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 upto 31.3.2014 from the gross depreciable value of the assets.”

56. The instant transmission asset was put under commercial operation during 2017-18 and 2018-19. Accordingly, it will complete 12 years after 2018-19. As such, depreciation has been calculated annually, based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

57. In accordance with Regulation 27, the depreciation with respect to the subject Asset is as follows:



(₹ In lakh)	
Particulars	2018-19 Pro-Rata
Opening Gross Block	1384.93
Additional Capital expenditure	621.85
Closing Gross Block	2006.78
Average Gross Block	1695.86
Rate of Depreciation	5.2800%
Depreciable Value	1526.27
Remaining Depreciable Value	35
Depreciation	68.40

O & M Expenses:

58. The petitioner vide affidavit dated 31.12.2018 has submitted the O&M expenses as under:

(₹ In lakh)						
S. No.	Asset	2014-15	2015-16	2016-17	2017-18	2018-19
1.	Asset-I	0	0	0	0	2.43

Interest on Working Capital (IWC)

59. 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 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 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;"

60. As per 2014 Tariff Regulations the components of the working capital and the interest thereon is mentioned below:-

Maintenance spares:

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

O & M expenses:

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

Receivables:

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

Rate of interest on working capital:

As per Clause 28 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, SBI Base Rate 9.30% as on 01.04.2016 Plus 350 BPS i.e. 12.80% have been considered as the rate of interest on working capital for all the assets.

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

(₹ In lakh)	
Particulars	2018-19 Pro-Rata
Maintenance Spares	0.48
O & M expenses	0.27
Receivables	47.83
Total	48.58
Interest	4.53



Annual Transmission Charges

62. Accordingly, the annual transmission charges allowed for the instant asset is summarized as under:-

(₹ In lakh)	
Particulars	2018-19 Pro Rata
Depreciation	68.40
Interest on Loan	67.68
Return on Equity	76.21
Interest on Working Capital	4.53
O & M Expenses	2.43
Total	219.24

Filing Fee and the publication expenses

63. 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, RLDC Fees and Charges

64. The Petitioner has requested 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), respectively, of Regulation 52 of the 2014 Tariff Regulations.



Goods and Services Tax

65. 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

66. The Commission had earlier dealt with the issue of mismatch in commissioning of the transmission system by an ISTS licensee and upstream/downstream system of STU in order dated 24.2.2017 in Petition No. 85/TT/2015 and in order dated 20.09.2017 in Petition No. 278/TT/2015. Issues decided in these petitions being similar, the relevant portion of the order dated 20.09.2017 in Petition No. 278/TT/2015 is extracted hereunder:-

"76. The assets have been planned to cater to the drawal requirements of Odisha and Jharkhand Discoms. However, due to non-availability of downstream assets, the instant assets have not been put to regular use. Accordingly, we are of the view that the transmission charges of Asset 2, Asset 3, Asset 5 and Asset 6a from the COD till the commissioning of downstream network will be borne by JSEB and OPTCL."

67. We observe that the petitioner is not able to put the instant assets into commercial operation because of the non-readiness of the associated bays at NNTPP implemented by NLC. Accordingly, we are of the view that the transmission charges of the subject Asset from the COD till the commissioning of associated bays at NNTPP will be borne by NLC. After that the billing, collection and disbursement of the approved transmission charges shall be governed by the provisions of Central



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

68. This order disposes of Petition No. 233/TT/2018.

Sd/-
(I.S. Jha)
Member

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

Sd/-
(P.K. Pujari)
Chairperson

