

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No.361/TT/2018

Coram :

Shri P.K. Pujari, Chairperson

Dr. M. K. Iyer, Member

Shri I.S. Jha, Member

Date of Order: 8th of November, 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 DOCO to 31.3.2019 for Asset-1: LILO of 400 kV S/C Neelmangla-Hoody Transmission Line at new 400/220 kV GIS Substation at Yelahanka with 1X63 MVAR 420 kV Bus Reactor along with associated bays and equipments and Asset-2: 2X500MVA, 400/220kV ICT's along with associated bays and equipments at 400/220kV Yelahanka Substation under "System Strengthening XII 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

1. Tamil Nadu Generation and Distribution Corporation Ltd.(TANGEDCO)
NPKRR Maaligai, 800, Anna Salai
Chennai – 600 002
2. Karnataka Power Transmission Corporation Limited (KPTCL),
KaveriBhawan, Bangalore – 560009
3. Transmission Corporation Of Andhra Pradesh Limited,
(APTRANSCO), VidyutSoudha, Hyderabad- 500082



4. Kerala State Electricity Board (KSEB),
VaidyuthiBhavanam, Pattom,
Thiruvananthapuram - 695 004
5. Tamilnadu Electricity Board(TNEB)
NPKRR Maaligai, 800, Anna Salai,
Chennai-600002
6. ElectricityDepartment,
Government Of Goa,
VidyutiBhawan, 3rdFloor,
Panaji, Goa-403001
7. Electricity Department,
Government Of Pondicherry,
Pondicherry –605001
8. Eastern Power Distribution Company Of Andhra Pradesh Ltd.
(APEPDCL), P&T Colony, Seethmmadhara,
Vishakhapatnam, Andhra Pradesh
9. Southern Power Distribution Company Of Andhra Pradesh Limited,
(APSPDCL), SrinivasasaKalyanaMandapam Backside,
Tiruchanoor Road, KesavayanaGunta,
Tirupati-517 501, Andhra Pradesh
10. Central Power Distribution Company Of Andhra Pradesh Limited,
(APCPDCL), Corporate Office, MintCompound,
Hyderabad - 500 063, Andhra Pradesh
11. Northern Power Distribution Company Of Andhra Pradesh Limited,
(APNPDCL), Opp. NIT PetrolPump,Chaitanyapuri,
Kazipet, Warangal - 506 004, Andhra Pradesh
12. Bangalore Electricity Supply Company Ltd.
(BESCOM), Corporate Office,KR.Circle,
Bangalore - 560001, Karnataka
13. Gulbarga Electricity Supply Company Ltd,
(GESCOM),Station Main Road,
Gulbarga,Karnataka
14. Hubli Electricity Supply Company Ltd. (HESCOM),
Navanagar, PB Road,
Hubli, Karnataka
15. Mangalore Electricity Supply Company Limited,(MESCOM),
Corporate Office, Paradigm Plaza,ABShettyCircle,



Mangalore – 575001,Karnataka

16. Chamundeswari Electricity Supply Corporation Ltd.(CESC),
927,L J Avenue, GroundFloor, New KantharajUrs Road,
Saraswatipuram, Mysore - 570009,Karnataka

17. Transmission Corporation Of Telangana Limited,
VidhyutSudha, Khairatabad,
Hyderabad, 500082

...Respondents

Parties present:

For Petitioner: ShriB.D.Das, PGCIL
ShriZafrulHasan, PGCIL
ShriS. S. Raju, PGCIL

For Respondent: None

ORDER

The present petition has been filed by the Petitioner, Power Grid Corporation of India Ltd. ("PGCIL") seeking approval of transmission tariff for forAsset-1: LILO of 400 kV S/C Neelmangla-Hoody Transmission Line at new 400/220 kV GIS Substation at Yelahanka with 1X63 MVAR 420 kV Bus Reactor along with associated bays and equipments and Asset-2: 2X500MVA, 400/220kV ICT's along with associated bays and equipments at 400/220kV Yelahanka Substation (hereinafter referred as "transmission asset") under "System Strengthening XII in Southern Region"for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

2. The Petitioner has made the following prayers:

- (i) *Approve the Transmission Tariff for the tariff block 2014-19 for the assets covered under this petition.*
- (ii) *Admit the capital cost as claimed in the petition and approve the additional capitalization incurred / projected to be incurred.*
- (iii) *Tariff may be allowed on estimated completion cost.*



- (iv) *Allow the Petitioner to approach Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during tariff period 2014-19.*
- (v) *Allow actual IEDC considering the actual construction period of 97 months.*
- (vi) *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.*
- (vii) *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.*
- (viii) *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.*
- (ix) *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.*
- (x) *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.*
- (xi) *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.*
- and pass such other relief as Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.*



Background

3. The Investment Approval (hereinafter referred to as "IA") for the project "System Strengthening XII in Southern Region" was accorded by Board of Directors of the Petitioner in its meeting held on 25.2.2010 for ₹23234 lakh including an IDC of ₹1847 lakh based on 3rd Quarter, 2009 price level (communicated vide Memorandum No. C/CP/SR-XII dated 26.2.2010).

4. The administrative approval and expenditure sanction of Revised Cost Estimate (RCE) for the said project was accorded by the Board of Directors of Petitioner in its 349th meeting held on 1.2.2018 for ₹34077 lakh including an IDC of ₹9816 lakh based on April, 2017 price level (communicated vide Memorandum No. C/CP/SRSS-XII/PA1718-11-OG-RC007 dated 21.2.2018).

5. The scope of the scheme was discussed and agreed upon in 26th, 27th and 28th Standing Committee meetings held on 13.06.2008, 03.03.2009 and 15.06.2009 respectively. The scheme was also discussed and approved in the 9th and 10th SRPC meetings dated 06.03.2009 and 02.07.2009 respectively. The Petitioner has been entrusted with the implementation of the said scheme.

6. The scope of work covered under the project "System Strengthening XII in Southern Region (SRSS-XII)" is as follows:-

Transmission Line

- (i) LILO of 400 kV S/C Neelmangla - Hoody Line at Yelahanka 400/220 kV
Yelahanka Sub Station : 8.27 KM
- (ii) LILO of 400kV S/C Somanhally - Hoody Line at 400/220 kV Yelahanka
Sub Station : 7.87 KM



Sub Station

- a. Establishment of new 400/220 kV GIS Substation at Yelahanka with 2X500 MVA 400/220 kV transformers (400 kV portion as Gas Insulated Sub Station (GIS) and 220 kV portion as Air Insulated Sub Station (AIS)).

7. The Petitioner has submitted that subsequent to Investment Approval, due to ROW constraints around Yelahanka Substation, it was decided in the 35th meeting of Standing Committee on Power System Planning of Southern Region held on 04.01.2013 that the above said scheme needs to be modified. The modified scope of works for the project “System Strengthening XII in Southern Region (SRSS-XII)” as per RCE is given below:-

Transmission Line

LILO of one circuit on multi circuit tower in Bengaluru area of Neelamangla-Hoody 400 kV D/C line at Yelahanka (including multi circuit portion to be shared with 400 kV D/C Madhugiri –Yelahanka line being implemented under SRSS XIII).

Sub Station

Establishment of new 400/220 kV GIS Substation at Yelahanka with 2X500 MVA transformers (400 kV portion as Gas Insulated Sub Station (GIS) and 220 kV portion as Air Insulated Sub Station (AIS)).

Reactive Compensation

1X63 MVAR Bus Reactor at 400/220 kV GIS Substation at Yelahanka.

2 nos. 400k V GIS bays which became surplus at Yelahanka Substation due to scope change shall be utilized for 2X63 MV AR Bus Reactors at Yelahanka envisaged under SRSS XXIII which was agreed in 36th meeting of Standing Committee on Power System Planning of Southern Region held on 04.09.2013.



8. The Petitioner has filed the instant petition in respect of 2 assets initially claiming COD in accordance with Regulation 4(3)(ii) of the 2014 Tariff Regulations. However, vide affidavit dated 21.5.2019, the Petitioner has bifurcated the Asset-2 into Asset-2A and Asset-2B and claimed the COD under Regulation 4(3)(ii) of the 2014 Tariff Regulations for these 2 Assets. The same has been summarized as under:-

Asset claimed at the time of filing of instant petition	COD claimed at the time of filing of instant petition (under Regulation 4(3)(ii))	Assets revised vide affidavit dated 21.5.2019	COD claimed (under Regulation 4(3)(ii))
Asset-1: LILO of 400kV S/C Neelmangla-Hoody Transmission Line at new 400/220kV GIS Substation at Yelahanka with 1X63 MVAR 420kV Bus Reactor along with associated bays and equipment.	1.4.2018	Asset-1: LILO of 400kV S/C Neelmangla-Hoody Transmission Line at new 400/220kV GIS Substation at Yelahanka with 1X63 MVAR 420kV Bus Reactor along with associated bays and equipment.	1.4.2018
2X500MVA, 400/220kV ICT's along with associated bays and equipments at 400/220 kV Yelahanka Substation	1.4.2018	Asset-2A: 2X500MVA, 400/220kV ICT's along with associated bays and 02 No. 220 KV bays at 400/220kV Yelahanka Substation	1.4.2018
		Asset-2B: 04 No. 220 KV bays at 400/220kV Yelahanka Substation	1.4.2018

9. The petitioner has submitted that with the commercial operation of the instant assets, entire scope of the project has been completed.



10. The details of the annual transmission charges claimed by the Petitioner are as under:-

Particulars	(₹ in lakh)		
	Asset-1 2018-19	Asset-2A 2018-19	Asset-2B 2018-19
Depreciation	897.42	379.61	37.40
Interest on Loan	1297.59	415.75	40.95
Return on Equity	1272.77	422.96	41.67
Interest on Working Capital	81.13	40.72	12.07
O&M Expenses	183.78	309.86	192.40
Total	3732.69	1568.90	324.49

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

Particulars	(₹ in lakh)		
	Asset-1 2018-19	Asset-2A 2018-19	Asset-2B 2018-19
O&M expenses	15.32	25.82	16.03
Maintenance Spares	27.57	46.48	28.86
Receivables	622.12	261.48	54.08
Total	665.01	333.78	98.97
Rate of Interest	12.20%	12.20%	12.20%
Interest on working Capital	81.13	40.72	12.07

12. The Petitioner has served the copy of the petition upon the respondents and notice of this tariff application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the notices published by the Petitioner under Section 64 of the Electricity Act, 2003. Reply to the petition has been filed by TANGEDCO (Respondent no. 1) vide their affidavit dated 13.2.2019 and the Petitioner vide its affidavit dated 22.5.2019 filed its rejoinder.

13. The Petition was last heard on 8.8.2019 and the Commission reserved the order in the Petition.



Analysis and Decision

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

15. This order has been issued after considering the main petition dated 30.8.2018 and Petitioner's affidavits dated 12.11.2018, 26.11.2018, 21.5.2019, 22.5.2019, 20.6.2019, 21.6.2019, 5.9.2019 and reply dated 13.2.2019 of the respondent, TANGEDCO.

16. TANGEDCO vide affidavit dated 13.2.2019 has submitted that the Petitioner has claimed the transmission system was agreed in 26th, 27th and 28th Standing Committee meetings held on 13.6.2008, 3.3.2009 and 15.6.2009 respectively and was modified in 35th meeting of SCPSPSR held on 4.1.2013. TANGEDCO submitted that there is no approval in the said minutes of meeting for 1X 63 MVAR 420 kV Bus Reactor to be included in Asset-I and in the 36th Standing Committee, the approval is only available for 2 x 63 MVAR reactors under SRSS XIII scheme.

17. In response, the petitioner vide affidavit dated 23.5.2019 has submitted that 1X63 MVAR Bus Reactor was agreed as a part of 400/220 kV Yelahanka substation which was agreed in 27th Standing Committee meeting and the same is also mentioned in the Annexure II of minutes of 28th, 29th, 30th, 31st and 32nd SCM of SR dated 15.06.2009, 27.08.2009, 13.04.2010, 16.11.2010 and 08.06.2011 respectively.

18. We have considered the submissions of the Petitioner and respondent. The Petitioner has submitted that the 1X63 MVAR bus reactor is approved in the 26th, 27th and 28th SCM of SR held on 13.06.2008, 03.03.2009 and 15.06.2009 as well as the scheme was also discussed and agreed in 9th and 10th SRPC meetings dated 06.03.2009 and 02.07.2009 respectively. After going through the document placed



on the records in support of the Approval of 1X63 MVAR bus Reactor at Yelahanka, it is noted that the 1X63 MVAR bus Reactor at Yelahanka is mentioned in Annexure-II of the minutes of the 28th SCM and the same has been considered under the instant petition. However, the Petitioner is directed to submit all documents in support of approval by the SCM in respect of 1X63 MVAR bus Reactor at Yelahanka at the time of truing-up.

Date of Commercial Operation (COD)

19. Clause (3) of Regulation 4 of the 2014 Tariff Regulations provides as under:-

"(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: 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 endeavor 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 or 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."

20. The Petitioner has claimed the following COD under proviso (ii) of Regulation 4 (3) of 2014 Tariff Regulations in respect of the assets covered under the instant petition:

S. N.	Name of Asset	COD claimed
1	Asset-1: LILO of 400kV S/C Neelmangla-Hoody Transmission Line at new 400/220kV GIS Substation at Yelahanka with 1X63 MVAR 420kV Bus Reactor along with associated bays and equipment.	1.4.2018



S. N.	Name of Asset	COD claimed
2	Asset-2A: 2X500MVA, 400/220kV ICT's along with associated bays and 02 No. 220 KV bays at 400/220kV Yelahanka Substation	1.4.2018
3	Asset-2B: 04 No. 220 KV bays at 400/220kV Yelahanka Substation	1.4.2018

21. The petitioner has prayed for approval of Commercial Operation date w.e.f. 1.4.2018 in respect of the instant assets as per the proviso (ii) to Regulation 4 (3) of 2014 Tariff Regulations, since the downstream system at Yelahanka, being implemented by M/s KPTCL, were not ready. The subject scope of works includes 06 Nos. 220 kV downstream bays at Yelahanka Substation under ISTS associated with 220 kV lines to be constructed by M/s KPTCL. Out of the 06 Nos. 220 kV bays, power flow started in 02 No. 220 kV downstream Line bays (Asset 2A) w.e.f. 13.10.2018. The Trial operation certificate of RLDC and power flow data as recorded by SEM for active power flow in 02 No. 500 MVA, 400/220 kV ICT's & 02 No. 220 KV downstream bays have been submitted. 04 Nos. 220 kV downstream bays (Asset 2B) are yet to be commissioned by M/s KPTCL. The Petitioner has prayed to condone the delay and allow transmission tariff as claimed under instant petition as per the provision under proviso (ii) to Regulation 4 (3) of 2014 Tariff Regulations and CERC Sharing Regulation, 2010.

22. TANGEDCO vide affidavit dated 13.2.2019 has submitted that in the present case, KPTCL has not commissioned the downstream systems. Hence, the date of commissioning of the assets viz. 1.4.2018 may be considered as deemed date of commissioning and actual date of commissioning should be reckoned only on commissioning of downstream assets.



23. We have considered the submissions of the Petitioner and Respondent. The petitioner has claimed COD of Asset-1, Asset-2A and Asset-2B as 1.4.2018 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations and Regulation 6.3A (4)(iv) of Indian Electricity Grid Code (Fourth Amendment) Regulations, 2016 as the Petitioner was unable to put the instant assets into regular service due to non-readiness of associated downstream transmission system under the scope of KPTCL.

24. Regulation 6.3A (4)(iv) of Indian Electricity Grid Code Regulations, 2016 provides the following:

“6.3A Commercial operation of Central generating stations and inter-State Generating Stations

.....

.....

4. Date of commercial operation in relation to an inter-State Transmission System or an element thereof 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 the sending end to the receiving end:

.....

.....

(iv) In case a transmission system or an element thereof is prevented from regular service on or before the Scheduled COD 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 of other transmission licensee, 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.”



25. In support of the actual COD of the Asset-1, 2A and 2B, the Petitioner has submitted CEA energisation certificate dated 28.12.2017 under Regulation 43 of CEA (Measures Related to Safety & Electricity Supply) Regulations, 2010 and RLDC 'Idle charging' certificate dated 8.6.2018 and CMD certificate as required under Grid Code. Taking into consideration of the RLDC charging certificate, CEA energisation certificate and CMD certificate as required under Grid Code, the COD of Assets-1, Asset-2A and Asset-2B is approved as 1.4.2018 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations.

Capital Cost

26. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provide as follows:-

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

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

(a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

(c) Increase in cost in contract packages as approved by the Commission;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;

(e) Capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;



(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;

(g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and

(h) Adjustment of any revenue earned by the transmission licensee by using the assets before COD.”

27. The Petitioner has initially submitted the apportioned approved cost as per Investment Approval and Revised Cost Estimate (RCE) as well as submitted the Auditor Certificates dated 4.7.2018 in respect of Asset-1 and Asset-2. Upon bifurcation of Asset-2 into Asset-2A and Asset-2B by the Petitioner, the Petitioner vide affidavit dated 21.5.2019 submitted the revised Tariff forms and Management Certificates dated 17.5.2019 in respect of Asset-2A and Asset-2B and the same have been considered which shall be reviewed at the time of truing up exercise. The details of apportioned approved cost, capital cost as on COD and estimated additional capital expenditure incurred or projected to be incurred during 2018-19 and 2019-20 along with estimated completion cost as claimed by the Petitioner for the instant assets are as under:

(₹ in lakh)

Asset	Apportioned Approved Cost (FR)	Apportioned Approved Cost (RCE)	Cost up to COD	Projected Expenditure		Estimated Completion Cost
				2018-19	2019-20	
Asset-1	15074.16	24208.64	21518.55	674.44	394.49	22587.48
Asset-2A	6029.9	7500.30	7191.56	65.60	82.01	7339.17
Asset-2B	805.95	920.61	703.39	16.50	10.87	730.76

Cost Over-run

28. We have considered the submissions of the Petitioner and noted that against the total apportioned approved cost as per RCE in respect of assets covered under the instant petition as mentioned in the table of Para. 27 above, the estimated



completed cost including additional capitalization is within the apportioned approved cost as per RCE. Therefore, there is no cost over-run.

Time over-run

29. As per the Investment Approval (IA) dated 25.2.2010, the instant assets were scheduled to be commissioned within 28 months from the date of investment approval. Accordingly, the commissioning schedule comes to 25.6.2012 against which the instant assets have been commissioned on 1.4.2018. Hence, there is a delay of 2106 days in commissioning of the assets covered under the instant petition.

30. The Petitioner has submitted that the assets covered in the instant petition is delayed due to severe Right of Way (ROW) issues faced during execution of the line as well as court cases faced during the construction of LILO of 400 kV S/C Neelmangla-Hoody Transmission Line at New 400/220 kV GIS Substation at Yelahanka. The Petitioner has submitted the detailed documentary evidence alongwith the detailed chronology of the events in support of the same.

31. The Petitioner had filed Petition No. 114/MP/2014 under Section 79 (1) (c) of the Electricity Act, 2003 read with Regulation 54 providing for "Power to Relax" and Regulation 55 providing for "Power to Remove Difficulty" of the CERC (Terms and Conditions of Tariff) Regulations, 2014; Regulation 24 read with Regulation 111 of the CERC (Conduct of Business) Regulations, 1999 and Section 67 (4) of the Electricity Act, 2003 to adjudicate the dispute with regard to the compensation relating to construction of 400/220 kV Yelahanka sub-station and LILO of Nelamangala-Hoody 400 kV S/C (Quad) line at 400/220 kV Yelahanka sub-station under System Strengthening in Southern Region-XII and construction of Madhugiri - Yelahanka 400 kV D/C(Quad) line under System Strengthening in Southern Region



XIII. The Commission vide, Order dated 18.04.2017 in Petition No. 114/MP/2014 stated that:

“17. As per the High Court order, the State Government is bound to provide necessary right of way to the Petitioner to complete its project. Since, the High Court has already directed the State Government to provide necessary assistance to execute the project, the order of the Hon`ble High Court holds the field and has to be implemented by the State Government. If the Petitioner is aggrieved, it has the remedy to again approach the High Court for ensuring compliance of the directions of the Hon`ble High Court by the State Government.

18. The Petitioner is directed to take steps for completion of transmission line at the earliest”.

32. The Commission, vide ROP for the hearing dated 24.5.2019 in the instant Petition, directed the Petitioner to submit the details of time over-run and chronology of activities along with documentary evidence as per the prescribed format. In response, the Petitioner vide affidavit dated 21.6.2019 has submitted the following:-

SL. No.	Activity	Schedule		Actual		Remarks,If any
		From	To	From	To	
1.	LOA	April, 2010		16.4.2010		Delay in commissioning of the project is attributable to severe ROW issues, including court cases around Bengaluru (Yelahanka).
2.	Supplies	August, 2010	March, 2012	17.7.2010	16.3.2012	
3.	Survey, peg marking and Foundation	September, 2010	February, 2012	8.9.2010 & 8.1.2011	17.7.2012	
4.	Tower/ Equipment erection	November, 2010	April, 2012	30.1.2011	10.8.2012	
5.	Stringing	March, 2011	May, 2012	12.5.2011	22.3.2018	
6.	Testing and COD	April, 2012	June, 2012	22.3.2018		



33. We have considered the submissions of Petitioner and Respondent. As per the Investment Approval (IA) dated 25.2.2010, the transmission scheme was scheduled to be commissioned within 28 months i.e. by 25.6.2012 against which the assets have been put into commercial operation on 1.4.2018, with a time overrun of 2106 days. The petitioner has submitted that the instant asset is delayed due to Right of way (Row) problems in construction of transmission line and a court case pertaining to construction of transmission line.

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 Neelmangala-Hoody transmission line alongwith 400 kV Substation at Yelahanka on 22.3.2018.

35. The Petitioner has also submitted extensive details of correspondences with various authorities alongwith 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.

Interest During Construction (IDC)

36. The Petitioner has claimed Interest During Construction (IDC) for the instant assets and has submitted the Auditor / Management Certificate in support of the



same. The details of IDC claimed by the Petitioner in respect of the instant assets are as follows:

(₹ in lakh)

Asset	IDC as per Auditor / Management Certificate	Undischarged IDC Liability as on COD	IDC discharged upto COD	IDC discharged year-wise	
				2018-19	2019-20
	1	2	3=(1-2)	4	5
Asset-1	6130.01	442.01	5688.00	442.01	-
Asset-2A	2048.67	69.53	1979.14	69.53	-
Asset-2B	200.37	6.80	193.57	6.80	-

37. The Petitioner has submitted the details of IDC computation alongwith the year-wise its discharges in respect of Asset-1 and Asset-2. However, the Petitioner has not submitted these details in respect of Asset-2A and Asst-2B. Accordingly, the details of IDC computation in respect of Asset-2 has been considered for computing IDC in respect of Asset-2A and Asset-2B and the Petitioner is directed to submit the detailed IDC statement in respect of Asset-2A and Asset-2B at the time of truing up exercise.

38. The loan portfolio as mentioned in IDC computation statement and in Form 9C is not matching. Hence, for the purpose of determination of allowable IDC, the loan amount as mentioned in Form 9C has been considered. The allowable IDC as on COD has been worked out considering loan details submitted in Form-9C for period 2014-19 and date of drawl submitted in IDC statement

39. Accordingly, the IDC claimed and considered as on COD and summary of discharge of IDC liability upto COD and thereafter, for the purpose of tariff determination, subject to revision at the time of true up, are as under:

(₹ in lakh)

Asset	IDC claimed	IDC admissible	IDC Discharged upto COD	Un-discharged IDC as on COD and discharged in FY 2018-19
	1	2	3	3=(2-3)



Asset	IDC claimed	IDC admissible	IDC Discharged upto COD	Un-discharged IDC as on COD and discharged in FY 2018-19
Asset-1	6130.01	6130.01	5688.00	442.01
Asset-2A	2048.67	2048.67	1979.14	69.53
Asset-2B	200.37	200.37	193.57	6.80

Incidental Expenditure During Construction (IEDC)

40. The Petitioner has claimed IEDC for the instant assets and submitted Auditor / Management Certificate in support of the same. The claimed IEDC is beyond the percentage of hard cost of 10.75% as indicated in the FR abstract cost estimate and therefore, the same has been restricted to 10.75% of the hard cost, subject to true up. The details of claimed and allowed IEDC is as follows:-

(₹ in lakh)

Asset	IEDC claimed as per Auditor / Management Certificate	IEDC allowed as on COD	IEDC disallowed
Asset-1	2399.24	1468.85	930.39
Asset-2A	801.83	473.72	328.11
Asset-2B	78.43	47.42	31.01

Initial Spares

41. This has been dealt in line with Regulation 13 of the 2014 Tariff Regulations. The Petitioner has claimed initial spares and submitted Auditor / Management Certificate in support of the same. The details of initial spares claimed by the Petitioner is as follows:-

(₹ in lakh)

Asset	Element	Plant and Machinery Cost excluding IDC, IEDC and Land Expenditure up to cut-off date	Initial spares claimed	Ceiling limit as per Regulations (%)
Asset-1	Sub-Station (S/S)	3383.77	169.20	5%
	Transmission Line(TL)	2900.61	29.00	1%



Asset	Element	Plant and Machinery Cost excluding IDC, IEDC and Land Expenditure up to cut-off date	Initial spares claimed	Ceiling limit as per Regulations (%)
Asset-2A	Sub-Station (S/S)	4488.67	106.35	5%
	Transmission Line (TL)	-	-	1%

42. In addition to the above, the Petitioner vide affidavit dated 5.9.2019 has submitted following the discharge details in respect of initial spares for the instant assets:-

(₹ in lakh)

Asset	Element	Expenditure up to COD	Expenditure in FY 2018-19	Expenditure in FY 2019-20	Total Spare Cost
Asset-1	S/S	169.20	-	-	169.20
	TL	-	-	29.00	29.00
Asset-2A	S/S	106.35	-	-	106.35
	TL	-	-	-	-

43. We have considered the submissions made by the Petitioner. It has been noted that the amount of initial spares discharged claimed as on COD by the Petitioner in Form-5 varies from the amount of initial spares discharged claimed vide affidavit dated 5.9.2019. Accordingly, the details of Initial Spares discharged furnished vide 5.9.2019 has been relied upon. Accordingly, the initial spares allowed for the purpose of tariff calculation after considering the Plant and Machinery cost excluding IDC, IEDC and Land expenses up to 31.3.2019, subject to true-up, are as under:-



(₹ in lakh)

Asset	Element	Plant and Machinery Cost excluding IDC, IEDC and Land expenditure (up to 31.3.2019)	Initial spares claimed	Initial spares admissible	Excess Initial spares	Initial spares Discharged as on COD	Un-discharged as on COD disallowed
Asset-1	S/S	3319.22	169.20	169.20	-	169.20	-
	TL	2570.67	29.00	25.67	3.33	-	25.67
Asset-2A	S/S		106.35	106.35	-	106.35	-
	TL	-	-	-	-	-	-

Capital cost as on COD

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

(₹ in lakh)

Asset	Capital Cost claimed as on COD	Un-discharged IDC as on COD	IEDC Disallowed	Excess Initial spares	un-discharged Initial spares as on COD	Capital Cost considered as on COD
	1	2	3	4	5	6=(1-2-3-4-5)
Asset-1	21518.55	442.01	930.39	3.33	25.67	20117.15
Asset-2A	7191.56	69.53	328.11	0.00	0.00	6793.92
Asset-2B	703.39	6.80	31.01	0.00	0.00	665.58

Additional Capital Expenditure (ACE)

45. As per Clause (13) of Regulation 3 of the 2014 Tariff Regulations, the cut-off date for instant assets is 31.3.2021. The Petitioner has claimed the following ACE on estimation basis in respect of the instant assets and submitted the Auditor / Management Certificate in support of the same:-

(₹ in lakh)

Asset	Year	Work/ equipment proposed to be added after COD to cutoff date/ beyond cutoff date	Amount capitalized and proposed to be capitalized	Regulation under which covered
Asset-1	2018-19	Accrual IDC	442.01	14(1)(i)
		Balance and retention payment	108.18	&
		Add Cap to the extent of unexecuted work	566.25	14(1)(ii)



Asset	Year	Work/ equipment proposed to be added after COD to cutoff date/ beyond cutoff date	Amount capitalized and proposed to be capitalized	Regulation under which covered
		Total	1116.44	
	2019-20	Accrual IDC	0.00	
		Balance and retention payment	143.15	
		Add Cap to the extent of unexecuted work	251.34	
		Total	394.49	
Asset-2A	2018-19	Accrual IDC	69.53	
		Balance and retention payment	27.74	
		Add Cap to the extent of unexecuted work	37.86	
		Total	135.13	
	2019-20	Accrual IDC	0.00	
		Balance and retention payment	50.21	
Add Cap to the extent of unexecuted work		31.80		
	Total	82.01		
Asset-2B	2018-19	Accrual IDC	6.80	
		Balance and retention payment	15.65	
		Add Cap to the extent of unexecuted work	0.85	
		Total	23.30	
	2019-20	Accrual IDC	0.00	
		Balance and retention payment	4.91	
Add Cap to the extent of unexecuted work		5.96		
	Total	10.87		

46. Since, FY 2019-20 falls beyond the tariff period 2014-19 and is not covered under the 2014 Tariff Regulation, the projected ACE claimed by the Petitioner for FY 2019-20 has been ignored for the purpose of tariff and shall be dealt during the next tariff period as per extant tariff Regulations.

47. The Petitioner has claimed additional capital expenditure towards Balance and Retention payments. The admissible un-discharged IDC liability as on COD has been allowed as ACE during the year of its discharge. The allowed Additional Capital expenditure are summarized below which is subject to true up:-

(₹ in lakh)

Particulars	Regulation	Asset-1	Asset-2A	Asset-2B
		2018-19	2018-19	2018-19
ACE to the extent of Balance & Retention Payment	14 (1)(i)	108.19	27.74	15.65
ACE to the extent of unexecuted work	14 (1)(ii)	566.25	37.86	0.85
IDC Discharged	14 (1)(i)	442.01	69.53	6.80
Total Add-Cap allowed for tariff		1116.45	135.13	23.30



Capital cost for the tariff period 2014-19

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

Asset	Capital Cost allowed as on COD	Add Cap for 2018-19	(₹ in lakh)
			Total Estimated Completion Cost up to 31.3.2019
Asset-1	20117.15	1116.45	21233.60
Asset-2A	6793.92	135.13	6929.05
Asset-2B	665.58	23.30	688.88

Debt-Equity Ratio

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

(₹ in lakh)

Asset-1

Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	14082.08	70.00%	14863.59	70.00%
Equity	6035.07	30.00%	6370.01	30.00%
Total	20117.15	100.00%	21233.60	100.00%

Asset-2A

Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	4755.74	70.00%	4850.33	70.00%
Equity	2038.18	30.00%	2078.71	30.00%
Total	6793.92	100.00%	6929.05	100.00%



Asset-2B

Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	465.90	70.00%	482.21	70.00%
Equity	199.67	30.00%	206.66	30.00%
Total	665.58	100.00%	688.88	100.00%

Return on Equity (ROE)

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

51. We have considered the submissions made by the Petitioner and Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, the MAT rate 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.

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

Particulars	(₹ in lakh)		
	Asset-1 2018-19	Asset-2A 2018-19	Asset-2B 2018-19
Opening Equity	6035.07	2038.18	199.67
Addition due to Additional Capitalization	334.94	40.54	6.99
Closing Equity	6370.01	2078.71	206.66
Average Equity	6202.54	2058.45	203.17
Return on Equity (Base Rate)	15.50%	15.50%	15.50%



Particulars	Asset-1	Asset-2A	Asset-2B
	2018-19	2018-19	2018-19
MAT rate	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%
Return on Equity (Pre-tax)	1216.32	403.66	39.84

Interest on Loan (IOL)

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

- a) The Gross Normative loan has been considered as per the Loan amount determined based on the debt equity ratio applied on the allowed capital cost.
- b) The depreciation of every year has been considered as Normative repayment of loan of concerned year;
- c) The weighted average rate of interest on actual loan portfolio has been worked out by considering the Gross amount of loan, repayment & rate of interest as mentioned in the petition, which has been applied on the normative average loan during the year to arrive at the interest on loan.

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

55. The details of IOL calculated are as follows:-



Particulars	(₹ in lakh)		
	Asset-1 2018-19	Asset-2A 2018-19	Asset-2B 2018-19
Gross Normative Loan	14082.07	4755.74	465.90
Cumulative Repayment upto previous Year	0.00	0.00	0.00
Net Loan-Opening	14082.07	4755.74	465.90
Addition due to Additional Capitalization	781.52	94.59	16.31
Repayment during the year	858.88	362.29	35.76
Net Loan-Closing	14004.71	4488.05	446.46
Average Loan	14043.39	4621.89	456.18
Weighted Average Rate of Interest on Loan	8.8298%	8.5847%	8.5846%
Interest on Loan	1240.00	396.77	39.16

Depreciation

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

Particulars	(₹ in lakh)		
	Asset-1 2018-19	Asset-2A 2018-19	Asset-2B 2018-19
Opening Gross Block	20117.15	6793.92	665.58
Additional Capital expenditure	1116.45	135.13	23.30
Closing Gross Block	21233.60	6929.05	688.88
Average Gross Block	20675.37	6861.48	677.23
Rate of Depreciation	4.1541%	5.2800%	5.2800%
Depreciable Value	17715.07	6854.72	676.06
Remaining Depreciable Value	17715.07	6854.72	676.06
Depreciation	858.88	362.29	35.76

Operation and Maintenance Expenses (O&M Expenses)

57. The Petitioner has claimed the O&M expenses for assets covered in the instant petition as per following details:-

(₹ in lakh)

Asset	2018-19
Asset-1	183.78
Asset-2A	309.86
Asset-2B	192.40

58. The Petitioner has submitted that norms for O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M Expenses during the period 2008-13. The Petitioner has further submitted that the wage revision of the employees of the Petitioner is due during the 2014-19 tariff period and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The Petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.

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

Element	2018-19
Sub-Station: 400 kV bay GIS (₹ in lakh per bay)	58.73
Sub-Station: 220 kV bay (₹ in lakh per bay)	48.10
Transmission Line: Double Circuit (Twin and Triple conductor)	0.806

60. We have considered the submissions made by the Petitioner and Respondents. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. Accordingly, the allowed O&M Expenses for the year 2018-19 is given below:-

Asset	Details	(₹ in lakh) 2018-19
Asset-1	LILO of 400kV S/C Neelmangla-Hoody ransmission Line at new 400/220 kV GIS Substation at Yelahanka (9.415 KM)	183.78



Asset	Details	2018-19
	and 3 Nos. 400 kV GIS bays	
Asset-2A	2 Nos. 400 kV GIS Bays and 4 Nos. 220 kV Bays	309.86
Asset-2B	4 Nos. 220 kV Bays	192.40

Interest on Working Capital (IWC)

61. 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 28.

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 (8.70%) as on 01.04.2018 Plus 350 Bps i.e. 12.20% have been considered as the rate of interest on working capital for the Assets.

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

Particulars	(₹ in lakh)		
	Asset-1 2018-19	Asset-2A 2018-19	Asset-2B 2018-19
O&M expenses	15.32	25.82	16.03
Maintenance Spares	27.57	46.48	28.86
Receivables	596.16	252.02	53.19
Total	639.04	324.33	98.08
Rate of Interest	12.20%	12.20%	12.20%
Interest on working Capital	77.96	39.57	11.97



Annual Transmission charges

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

Particulars	(₹ in lakh)		
	Asset-1	Asset-2A	Asset-2B
	2018-19	2018-19	2018-19
Depreciation	858.88	362.29	35.76
Interest on Loan	1240.00	396.77	39.16
Return on Equity	1216.32	403.66	39.84
Interest on Working Capital	77.96	39.57	11.97
O&M Expenses	183.78	309.86	192.40
Total	3576.95	1512.15	319.13

Filing fee and the publication expenses

64. 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

65. 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

66. 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

67. TANGEDCO, vide affidavit dated 13.2.2019, has submitted that KPTCL has not commissioned the downstream lines and bays and the transmission charges for the entire scheme covered in the instant petition should be billed bilaterally till commissioning of the downstream system under the scope of KPTCL.

68. In response, the Petitioner vide affidavit dated 23.5.2019 has submitted that the subject scope of works includes 6 Nos. 220 kV downstream bays at Yelahanka Substation under ISTS associated with 220 kV lines to be constructed by M/s KPTCL. Out of the 06 No. 220 kV bays, power flow started in 2 No. 220 kV downstream Line bays (Asset 2A) w.e.f 13.10.2018. Accordingly, trial operation certificate of RLDC and power flow data as recorded by SEM for active power flow in 02 No. 500 MVA, 400/220 kV ICT's & 02 No. 220 kV downstream bays. The 4 Nos. 220 kV downstream bays (Asset 2B) are yet to be commissioned by M/s KPTCL, which is beyond the control of the petitioner.

69. We have considered the submissions of the petitioner and respondent. The COD of the Assets covered in the instant petition has been approved as 1.4.2018 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations due to non-commissioning of the Assets covered under the scope of KPTCL. Hence, the transmission charges from the COD of the instant assets shall be borne by KPTCL till commissioning of the downstream transmission system. Thereafter, the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of



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

70. This order disposes of Petition No.361/TT/2018.

Sd/-
(I. S. Jha)
Member

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

Sd/-
(P. K. Pujari)
Chairperson

