

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 71/TT/2017**

**Coram:**

**Shri Gireesh B. Pradhan, Chairperson  
Shri A. K. Singhal, Member  
Shri A. S. Bakshi, Member  
Dr. M. K. Iyer, Member**

**Date of Order : 21.11.2017**

**In the matter of:**

Petition for determination of transmission tariff from DOCO to 31.3.2019 for 400 kV Salem pooling station (Dharmapuri)-Salem 400 kV D/C quad line along with new 765/400 kV pooling station at Salem (Dharmapuri) (initially charged at 400 kV) and bay extensions at Salem 400/220 kV existing sub-Station under transmission system associated with common system associated with Coastal Energen Private Limited and Ind-Bharat Power (Madras) Limited LTOA generation projects in Tuticorin area- Part-B" in Southern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

**And in the matter of:**

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

**.....Petitioner**

**Vs**

1. Karnataka Power Transmission Corporation Ltd.  
Kaveri Bhawan, K. G. Road  
Bangalore—560 009.
2. Transmission Corporation of Andhra Pradesh Ltd.  
Vidyut Soudha, Khairatabad,  
Hyderabad-500 082.
3. Kerala State Electricity Boards,  
Vydyuthi Bhavanam,



Thiruvananthapuram-695 004.

4. Tamil Nadu Electricity Board (TNEB)  
NPKRR Maaligai, 800, Anna Salai,  
Cennai-600 002.
5. Electricity Department  
Government of Goa  
Vidyuti Bhawan, Panaji  
Goa-403001.
6. Electricity Department,  
Government of Pondicherry,  
Pondicherry-605 001.
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.
10. Northern Power Distribution Company of Andhra Pradesh Limited (APNPDCL)  
NIT Petrol Pump  
Chaitanyapuri, Kazipet, WARANGAL – 506 004  
Andhra Pradesh
11. Bangalore Electricity Supply Company Ltd. (BESCOM)  
Corporate Office, K. R. Circle,  
Bangalore-560 009.
12. Gulbarga Electricity Supply Company Ltd. (GESCOM)  
Station Main Road, Gulbarga, Karnataka.
13. Hubli Electricity Supply Company Ltd. (HESCOM),  
P.B. Road, Nava Nagar Hubli,  
Karnataka.



14. Mangalore Electricity Supply Company Ltd. (MESCOM)  
Paradingm Plaza, A.B. Shetty Circle,  
Mangalore-575 001.
15. Chamundeshwari Electricity Supply Corp. Ltd.  
(CESC),  
Corporate Office, 927, L. J. Avenue, Ground Floor  
New Kantharaj Urs Road,  
Saraswathi Puram, Mysore-570 009.
16. Costal Energen Private Limited  
5th Floor, Buhari Towers,  
No. 4, Moores Road  
Chennai- 600006
17. Ind-Bharath Power (Madras) Limited  
Plt No. 30-A, Road No.1,  
Film Nagar, Jubilee Hills  
Hyderabad- 500033
18. Transmission Corporation of Telangana Limited,  
Vidhyut Sudha, Khairatabad,  
Hyderabad, 500082

.....**Respondents**

**For Petitioner** : Shri S.K. Venkatesan, PGCIL  
Shri Rakesh Prasad, PGCIL

**For Respondents** : Shri Vallinayagam, Advocate, TANGEDCO  
Shri R. Kathiravan, TANGEDCO  
Ms. Indrakumari, TANGEDCO

### **ORDER**

The instant petition has been filed by Power Grid Corporation of India Ltd. (PGCIL) for approval of the transmission tariff for 400 kV Salem Pooling Station (Dharmapuri)-Salem 400 kV D/C quad line along with new 765/400 kV Pooling Station at Salem (Dharmapuri) (initially charged at 400 kV) and bay extensions at Salem 400/220 kV existing sub-station (hereinafter referred to as “transmission assets”) under



Transmission System associated with Common System associated with Coastal Energen Private Limited and Ind-Bharat Power (Madras) Limited LTOA generation projects in Tuticorin area-Part-B in Southern Region (hereinafter referred to as "transmission system") for the 2014-19 tariff block, in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter "the 2014 Tariff Regulations").

2. The Investment Approval for the transmission project was accorded by the Board of Directors of the petitioner vide Memorandum No. C/CP/LTA Tuticorin-Part-B dated 19.9.2011, at an estimated cost of ₹194013 lakh including an IDC of ₹12092 lakh (based on 1st Quarter, 2011 price level). The project was scheduled to be commissioned within 36 months from the date of Investment Approval. Therefore, the scheduled date of commissioning of the transmission system was 19.9.2014.

3. The Revised Cost Estimate (RCE) for the transmission system was accorded by the Board of Directors of the petitioner vide letter dated 7.3.2017 at RCE of ₹270265 lakh including IDC of ₹37891 lakh.

4. The scope of work covered under the transmission system was discussed and agreed in the 29<sup>th</sup> and 30<sup>th</sup> SCM of Southern Region Constituents and the scope is broadly as follows:-

**Transmission Line**

- (i) Tuticorin Pooling Station-Salem Pooling Station 76 5kV D/C line initially charged at 400 kV.
- (ii) Salem Pooling Station-Salem 400 kV D/C Quad Line
- (iii) Salem Pooling Station-Madhugiri Pooling Station 765 kV S/C Line initially charged at 400 kV.



**Sub-station**

- (i) Establishment of 765 kV/400 kV Pooling Station at Salem (Initially charged at 400kV).
- (ii) Extension of 765/400 kV Tuticorin Pooling Station
- (iii) Extension of 400/220 kV Madhugiri Pooling Station
- (iv) Extension of 400/220 kV Salem Sub-station

**Line Reactors (400 kV)**

- i. 80 MVAR Line Reactors at each end of both circuits of Tuticorin Pooling Station-Salem Pooling Station 765 kV D/C line (initially charged at 400 kV).
- ii. 63 MVAR line reactors at Madhugiri end only of the Salem Pooling Station-Madhugiri 765 kV S/C Line (Initially charged at 400 kV).

5. The petitioner had claimed tariff for the instant transmission asset in Petition No. 25/TT/2014 with the anticipated commercial operation (COD) of 15.8.2014. However, due to severe ROW issues, the asset was not put into commercial operation even after two years of the anticipated COD. Accordingly, the said petition was disposed vide order dated 18.3.2016, because of the uncertainty in commissioning of the asset and the petitioner was directed to file a fresh petition after commissioning of the asset. Accordingly, the petitioner has filed the instant petition claiming tariff for 400 kV Salem Pooling Station (Dharmapuri)-Salem 400 kV D/C quad line along with new 765/400 kV Pooling Station at Salem (Dharmapuri) (initially charged at 400 kV) and bay extensions at Salem 400/220 kV existing sub-station stating that the COD of the instant asset was 23.10.2016.

6. The details of the other assets covered in the instant transmission system along with the petition number is given below:-



Asset	COD	Petition No.	Date of order
Tuticorin Pooling Station-Salem Pooling Station 765 kV D/C line (initially charged at 400 kV) along with Bay extensions at Salem PS and Tuticorin Pooling Station and 80 MVAR Line Reactors at each end of both circuits of Tuticorin Pooling Station-Salem Pooling Station 765 kV D/C line (initially charged at 400 kV)	13.11.2016	235/TT/2016	21.9.2017

7. Annual Fixed Cost was granted for the instant transmission asset vide order dated 17.6.2017 under the first proviso to Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC charges.

8. The petitioner has claimed the following transmission charges for the instant assets:-

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	479.71	1126.54	1144.67
Interest on Loan	422.23	949.52	893.31
Return on Equity	565.53	1333.26	1360.11
Interest on working capital	39.47	91.85	92.19
O & M Expenses	143.00	335.18	346.28
<b>Total</b>	<b>1649.94</b>	<b>3836.35</b>	<b>3836.56</b>

9. The details of the "Interest on Working Capital" claimed by the petitioner for the instant assets are as under:-

(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
Maintenance Spares	48.65	50.28	51.94
O & M Expenses	27.03	27.93	28.86
Receivables	623.76	639.39	639.43
<b>Total</b>	<b>699.44</b>	<b>717.60</b>	<b>720.22</b>
Rate of Interest	12.80%	12.80%	12.80%
<b>Interest</b>	<b>89.53</b>	<b>91.85</b>	<b>92.19</b>

10. The petitioner has served the petition on the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (“the Act”). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. Tamil Nadu Generation and Distribution Corporation Ltd (TANGEDCO), Respondent No. 4, has filed reply vide affidavit dated 28.4.2017. The petitioner has filed its rejoinder to the reply vide affidavit dated 28.7.2017. The issues raised by TANGEDCO and the clarifications given by the petitioner are dealt in relevant paragraphs of the order. The hearing in this matter was held on 3.8.2017.

11. Having heard the petitioner and perused the material on record, we proceed to dispose of the petition.

#### **Date of Commercial Operation (“COD”)**

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

**“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

xxx”

13. The petitioner has submitted that the COD of the instant assets was 23.10.2016.

The petitioner has submitted RLDC trial run operation certificate dated 22.12.2016, CEA



Certificate dated 2.9.2016 under Regulation 43 of CEA (Measures Related to Safety & Electricity Supply) Regulations, 2010 and the self-declaration COD certificate.

14. TANGEDCO in its reply has submitted that the petitioner has charged the instant transmission asset (initially at 400 kV) as part of the common transmission system for the two IPPs in Tuticorin area on 23.10.2016 on its own without following any norms for declaring COD i.e. without bringing it to beneficial use.

15. We have considered the submissions made by the petitioner and TANGEDCO. Taking into consideration the RLDC certificate dated 20.12.2016 and the CEA Energisation certificate dated 2.9.2016 and the fact that the instant asset was put to regular use, the COD of the instant assets is approved as 23.10.2016.

16. Regulation 6.3(A)(4) of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 provides as follows:-

“(vi) The transmission licensee shall submit a certificate from the CMD/CEO/MD of the Company that the transmission line, sub-station and communication system conform to the relevant Grid Standard and Grid Code, and are capable of operation to their full capacity.”

It is observed that the petitioner has not submitted the CMD certificate in the instant case, which is mandatory as per the above said regulation. The petitioner is directed to submit the CMD certificate at the time of truing up. Further, the petitioner is directed to ensure in future that all the required information as per the regulations is furnished at the time of filing of the petition.

### **Capital Cost**





17. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provides 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 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."

18. The details of apportioned approved cost, capital cost as on COD and incurred/projected additional capital expenditure and the estimated completion cost of the instant assets are as follows:-

Approved apportioned cost	Revised apportioned cost as per RCE	Capital cost as on COD	Estimated additional capital expenditure			Total estimated completion cost
			2016-17	2017-18	2018-19	
22722.00	24383.00	21689.28	604.61	815.44	20.00	23129.33



### **Cost over-run**

19. The FR approved apportioned cost of the instant asset is ₹22722 lakh and the total estimated completion cost is ₹23129.33 lakh and hence there is a cost over-run of ₹407.33 lakh in comparison to FR cost. The petitioner has submitted the following reasons for cost over-run:-

- a) The increase in cost of about ₹150 lakh is on account of increased compensation paid for crop, tree, forest clearance and PTCC.
- b) Impact of foreign currency variation led to increase in the completion cost of the project by approximately ₹750 lakh
- c) Due to delay of 25 months, which was beyond the control of petitioner, there is an increase in IDC by ₹1500 lakh. However, there is reduction in IEDC by ₹800 lakh and various SS equipment costs, land cost and actual taxes paid.

The petitioner has submitted that the overall cost over-run is ₹407 lakh which is only 1.79% of the total approved apportioned cost.

20. TANGEDCO has submitted that since the time over-run is not justifiable, the cost escalation due to IDC attributed to the time over-run may be disallowed. As regards ROW issues and compensation, the issues are not related to the instant assets but it pertains to Salem PS-Somanhalli 400 kV S/C line and hence the compensation claimed in the instant petition may be disallowed. As regards escalation due to FERV, TANGEDCO has submitted that as per the Investment Approval dated 16.9.2011 the project is implemented through domestic borrowings and internal resources of the petitioner with debt equity ratio of 70:30. The board of the petitioner company approved



only domestic funding and no foreign component is involved and hence the request of the petitioner for approval of escalation on account of FERV may be declined. TANGEDCO has also submitted that Form-5 reveals that there is a huge over-estimation to the tune of ₹1062.59 lakh with respect to preliminary work, land cost and site preparation for sub-station. There is over-estimation of ₹827.82 lakh in respect of over-heads, audit and accounts, establishment and contingencies. The petitioner has not followed prudent bench mark costing and the cost estimation is not the true representation of actual costs. In response, the petitioner has submitted that the detailed justification for cost over-run has been provided in the main petition.

21. We have considered the submissions of the petitioner and TANGEDCO. The petitioner has submitted that the cost variation is due to increase in compensation against transmission line construction for crop, tree, forest clearance, PTCC and increase in IDC during the execution of project. It is observed that the estimated completion cost is within the RCE. Therefore, the cost variation is allowed.

### **Time over-run**

22. As per the Investment Approval dated 19.9.2011, the commissioning scheduled of the project was 36 months from the date of Investment Approval. Accordingly, the schedule date of commercial operation was 19.9.2014, against which subject asset was put under commercial operation on 23.10.2016. Hence, there is time over-run of 25 months in case of the instant asset.

23. The petitioner has submitted that instant asset was ready for commissioning by August, 2014. However, it could not be declared under commercial operation due to



non-availability of further connectivity at Salem PS. Details of the various connectivity envisaged at Salem PS and various issues observed during execution of these lines are as follows:-

(a) The commissioning of Tuticorin PS-Salem (Dharmapuri) PS 765 kV D/C line was held up due to severe ROW issues and subsequently, it was put into commercial operation on 13.11.2016. Detailed justifications for the time over-run in COD of Tuticorin PS–Salem (Dharmapuri) PS 765 kV D/C line have already been submitted in Petition No. 235/TT/2016.

(b) The commissioning of Salem Pooling Station (Dharmapuri)–Madhugiri Pooling Station 765 kV S/C Line (initially charged at 400 kV) was also held up due to severe ROW issues. Detailed chronology of events for the delay in construction of this line is as under:-

<b>CHRONOLOGY OF EVENTS OF 765 kV S/C DHARMAPURI- MADHUGIRI TL</b>	
<b>Date</b>	<b>Activity</b>
17.10.12	The land owners near Bijjavara in Vijayapura Bobli, Devanahalli Taluk, Bangalore Rural District under the aegis of Farmers Union stopped all the construction activities like foundation, Tower Erection, Earthing. The affected locations are from 41/0 to 45/0. They have gone all the villages in Vijayapura Hobli & Jangamkottai Hobli and informed all other land owners to stop the construction activities in their lands also until land compensation issue is resolved.
17.10.12	Chief Manager/ Yelahanka TLC met DC & DM, Bangalore Rural District, appraised the issue and requested to clear the obstacles created by the Land owners.
18.10.12	The land owners of villages Vijayapura Hobli, Devanahalli Taluk, Bangalore Rural District- A. Ranganathapura, P. Ranganathapura, Gudlumuddenahalli, Chinavundanahalli, Narayanapura, Bijjavara, Gururayanahosur, Irogenahalli, Venkatagirikote, Hosasodya, Singavara, Sagagahalli and Majjige Hosahalli and Karnataka Raitha Sangha gave representation to DC & DM, Bangalore stating that the petitioner is constructing the line without giving notices in fertile lands/grape gardens and the land cost is around two crore and above and requested for suitable value for the land.
20.10.12	A formal communication letter was submitted by DGM/Yelahanka CAO to DC&DM, Bangalore Rural requesting for clearing of obstruction for construction of subject line. All construction activities from location no 36/0 to 45/0 came to a complete stand still. (Under Devanahalli Taluk, Bangalore District).



29.10.12	The news of obstruction of works under Devanahalli Taluk spread to other Taluks of Bangalore Rural (Doddaballapur & Hosakote) and work was stopped in these taluks also. A article was also published in leading Kannada newspapers stating that land compensation was disbursed in similar line in Bangalore District and the works are stopped by the Raitha Sangha leaders.
5.11.12	A letter was received from DC&DM, Bangalore Rural for conducting a meeting with Farmers union and petitioner's officials at the office of DC&DM, Bangalore Rural on 8.11.12.
8.11.12	A meeting was conducted by DC & DM, Bangalore Rural and the meeting was attended by DGM/ Yelahanka CAO, Chief Manager/ Yelahanka TLC and petitioner's officials and Sh. K.Chandra Sekhar, president Karnataka Rajya Raitha Sangha and other leaders of Raitha Sangha. During the meeting details of about the project, compensations payable as per the Indian Electricity Act, 2003 etc are explained by DGM/Yelahanka/CAO. The farmers complained that the construction works are being carried out without properly paying the land compensation and requested DC&DM, Bangalore Rural to pay compensation for the lands as the value of lands near airport is very high. Further, President, Farmers union requested DC&DM, Bangalore Rural that even though the work is being carried out under Central Government Scheme, Compensation for the land owners is to be taken cared by State Administration only and requested DC to call for a high level meeting of Secretary (Energy), Chairman (KPTCL), Secretary (Revenue), Higher officials of petitioner for taking a policy decision in respect of compensation to the land owners for which DC&DM, Bangalore agreed.
28.11.12	Director (Projects) of the petitioner met CM, Karnataka requesting to resolve the issue of ROW in various transmission lines under implementation in Karnataka. The meeting was attended MD, KPTCL, Principal Secretary, Karnataka, DC, Bangalore Rural, DC, Bangalore Urban, Principal Secretary, Energy, ED/ SR-I&II and other officials of Karnataka Government and the petitioner. During the meeting, CM, Karnataka directed ADC, Bangalore Rural to provide all necessary support for smooth execution of high capacity corridor project in Karnataka.
11.12.12	A meeting was conducted by DC&DM, Bangalore Rural and the meeting was attended by DGM/PMS, SR-II & Chief Manager/Yelahanka TLC. During the meeting, it was clarified by the petitioner that the issue was taken up with highest levels of Government of India, Ministry of Power (MoP) by the petitioner's management, for which the MoP has rejected the proposal of payment of land compensation as it involves wider implication across the country, involvement of huge cost and overall tariff implication of public in general. DGM has further clarified that the other damages suffered by the land owners towards crops/trees etc shall be sufficiently compensated within the shortest possible time after assessment by the Revenue Authorities. Clarifying the doubt about tree assessment, it was mentioned that tree compensation shall be for the entire life span of the trees within the guidelines of Horticulture Department.
11.12.12	Sh Rajesh Gowda, ADC, Bangalore Rural while concluding the meeting stated that the problems/damages suffered by the farmers during the construction of the line were understood and suitable action towards compensation shall be taken up with higher levels of Govt. of Karnataka on priority basis. Soon after the meeting, Sh. S. Ravindar Kumar, DGM & Sh. A.S ankara Raju met the DC&DM, Bangalore Rural and explained in detail about the provisions of Electricity Act, 2003 and tariff methodology and also requested him to resolve the issues and issue necessary orders at the earliest taking into consideration financial losses being suffered by the petitioner.
2.1.13	A letter was send from DC&DM, Bangalore rural Energy secretary while forwarding the minutes of meetings conducted at DC, Bangalore Rural office.



4.2.13	ED, SR-II had a meeting with Chief Secretary to GoK, DC(Urban), Bangalore, DC (Rural), Bangalore and the sought the assistance in resolving the ROW issues in Yelahanka LILO Lines and 765 kV Salem-Madhugiri TL
8.2.13	A letter was written by Chief Manager/ Yelahanka TLC to DC&DM, Bangalore rural requesting to remove the obstruction for construction of the instant line.
11.2.13	ED (SRTS-II) had meeting with Chief Secretary to GoK and sought assistance in resolving the ROW issues in Yelahanka LILO lines & 765 kV Dharmapuri-Madhugiri Lines
4.3.13	ED,SR-II had a meeting with Chief Secretary to GoK, DC(Urban), Bangalore,DC(Rural), Bangalore and the sought the assistance in resolving the ROW issues in Yelahanka LILO Lines & 765 kV Salem-Madhugiri TL
5.3.13	ED (SRTS-II) had meeting with Principal Secretary(Energy) to GoK and sought assistance in resolving the ROW issues in Yelahanka LILO lines & 765 kV Dharmapuri-Madhugiri Lines
4.4.13	ED (SRTS-II) had meeting with Chief Secretary to GoK and sought assistance in resolving the ROW issues in Yelahanka LILO lines & 765 kV Dharmapuri-Madhugiri Lines
6.4.13	Secretary (POWER), GOI & ED (SRTS-II) had meeting with Chief Secretary to GoK and sought assistance in resolving the ROW issues in Yelahanka LILO lines & 765 kV Dharmapuri-Madhugiri Lines
24.4.13	AGM(PMS) met DC Bangalore(Rural) and asked for providing Police protection as per the advice of Chief Secretary, GoK. DC Bangalore(Rural) assured that the matter will be taken up only after 10.5.2013 i.e after the end of Assembly elections
30.10.13	ED / SRTS-II had meeting with DC Tumkur
19.11.13	ED, SRTS-II and AGM/PMS attended the meeting convened by Additional Chief Secretary, GoKA and sought the intervention of GoK in resolving the ROW issues.
24.12.13	ED/SR-II along with AGM/PMS met the Principal Secretary(Energy), Government of Karnataka and sought the intervention of GoK in resolving the ROW issues.
27.12.13	ED/SR-II along with AGM/PMS met the Principal Secretary to the Chief Minister of Karnataka and sought the appointment and the intervention of GoK in resolving the ROW issues.
1.3.14	PS (Energy) convened a meeting with the ADC (Bangalore Urban), DC (Tumkur), DC (Bangalore, Rural) and DC(Tumkur) and directed all the concerned DCs to show substantive progress by the month end in resaving the ROW Issues.
1.8.14	The petitioner's CMD met Chief Minister, Karnataka and sought the intervention of Government of Karnataka in resolving the ROW issues in Karnataka lines
22.1.14	ACS(Revenue) has convened a meeting with ADC of Tumkur, DC(Bangalore Rural) and ADC(Kolar) and attended by ED(SR-II) & AGM (KTK Projects)
2.2.14	ED, SR-II had a meeting with the Minister of Energy (Karnataka) and sought the assistance of GoK in resolving the ROW issues.
22.2.14	AGM (Proj) had meeting with DC Tumkur and agreed for enhancing ex-gratia.
11. 3.14	ED(SR-II) & AGM(KTK Projects) had a meeting with Addl. Ch. Secretary (Energy) Shri Patnaik at MS Bldg and sought the GoK assistance to resolve the RoW issues in Karnataka lines
24.3.14	Agitation at Tumkur CAO office by Raitha Sangha under Police Surveillance
25.3.14	AGM/KTK Project met the ACS to the CM and sought the assistance of GoK.
17.4.14	Voting day in Karnataka for LS Election
26.4.14	Meeting scheduled with Raitha Sangha by DC Tumkur. But Raitha Sangha leaders did not come for meeting.



29.4.14	ED(SR-II) had a meeting held with Chief Minister of Karnataka along with the Energy Minister of Karnataka.
7.7.14	Deputy Commissioner, Tumkur issued order for ex-gratia payment to the land formers/ land owners for tower footings and corridor.
15.9.14	Deputy Commissioner, Kolar issued order for ex-gratia payment to the land formers/ land owners for tower footings and corridor.
17.7.14	Committee constituted by Deputy Commissioner, Tumkur consisting representatives from Revenue, Forest, agriculture and Horticulture making Panchanama, JMC etc. for assessment of ex-gratia payment to the formers
11.8.14	Chief Secretary conducted meeting with DCs of Kolar, Bangalore Rural, Tumkur resolving the ROW issues.
8.8.14	Deputy Commissioner, Bangalore issued order for ex-gratia payment to the land formers/ land owners for tower footings and corridor.
26.8.14	Secretary (POWER),GOI convened meeting with the Deputy Commissioner, Kolar, Bangalore Rural, Tumkur regarding resolving of ROW issues in Karnataka
27.8.14	Deputy Commissioner, Bangalore constituted a team consisting of representative from Revenue dept and POWERGRID for carrying out survey ex-gratia payment to the land owners and formers
1.9.14	The assessment for ex-gratia payment in Bangalore Rural is under progress. However, there is resistance from the Raita Sangha for carrying out the assessment demanding higher ex-gratia payment
3.1.2015	The petitioner's CMD had meeting with Chief Minister of Karnataka for administrative support to resolve the RoW issues in ongoing transmission lines in Karnataka.
15.4.2015	GM (Projects) and GM (AM) had meeting with ACS (Energy), Govt. of Karnataka to resolve the RoW issues in ongoing transmission lines in Karnataka.
7.5.2015	ED(SRTS-I&II) along with GM (Projects) and GM (AM) met Energy Minister, Govt. Of Karnataka to resolve the RoW issues in ongoing transmission lines in Karnataka.
11.6.2015	The petitioner's CMD had meeting with Chief Minister of Karnataka for administrative support to resolve the RoW issues in ongoing transmission lines in Karnataka.
	Several meetings were held with officials of Govt. of Karnataka at various levels including MOP, GOI to resolve the ROW issues.
27.8.2015	In the meeting held at Bangalore on 27.8.2015, the issue was discussed by Minister of Power, Govt. of India with Energy Minister, Govt. of Karnataka
7.10.2015	In a meeting held on 7.10.15, the petitioner's CMD) met Energy Minister, Govt. of Karnataka and request was made to provide administrative support for commencement of work
28.10.2015	In the meeting with Chief Secretary, GOK on 20.10.15 and with ACS (Energy), GOK on 28.10.15 the need for early resolution of ROW issues was stressed and also implementation of GOI guidelines dated 15.10.2015 on payment of compensation for tower footing (85%) and line corridor (15%) was requested.
3.12.2015	On 3.12.2015 ED (SR-II) & AGM (KTK-Projects) met Energy Minister, GOK and ACS (Energy) and requested for early resolution of ROW issues. Energy Minister assured to call a meeting of farmers and local MLA and resolve the issue.
18.12.2015	On 18.12.2015 ED (SR-II) & AGM (KTK-Projects) along with Shri. B.N. Sharma Addl. Secretary, MOP met ACS (Energy) and DC (Urban) for early resolution of ROW issues.
13.1.2016	On 13.1.2016, GM (KTK-Projects) met ACS (Energy) and requested for early resolution of ROW issues of Karnataka.



21.1.2016	On 21.1.2016 ED (SR-II) & AGM (KTK-Projects) met Shri. B.N. Sharma Addl. Secretary, MOP and requested for early resolution of ROW issues.
3.2.2016	On 3.2.2016, the petitioner's CMD met Chief Secretary, GOK and requested for early resolution of ROW issues of Karnataka.
2.3.2016	During 10 <sup>th</sup> PMG meeting with Chief Secretary, GOK held on 2.3.2016, ED(SR-II) and GM (Karnataka & Kerala Projects) requested for early resolution of ROW issues for the lines being executed by the petitioner.
8.3.2016	On 8.3.2016, GM (Karnataka & Kerala Projects) met Energy Minister, GOK for early resolution of ROW issues.
3.5.2016	During the Pragathi meeting held on 3.5.2016, Chief Secretary, GOK informed that a meeting shall be conducted with concerned DC's to resolve the ROW issues.
11.7.2016	The Minister of Power, GoI, reviewed the construction projects under execution in Karnataka on 11.7.16; RoW issues in the State of Karnataka have been reviewed.
19.7.2016	Secretary, MoP reviewed critical ongoing projects in Karnataka on 19.7.16, advised Govt. of Karnataka to provide support for completion of projects in Karnataka. Govt. of Karnataka agreed to provide necessary support.

(c) Salem (Dharmapuri) PS-Somanahalli 400 kV D/C line under SRSS-XIV project was scheduled to be commissioned by 27.8.2014. In the 24<sup>th</sup> SRPC meeting held on 15.3.2014, the matter for early commissioning of the line under SRSS-XIV project was taken up. SRPC also concurred for long duration shutdown from 21.5.2014 for a period of 45 days of existing corridor of 400 kV Somanahalli-Hosur S/C line which was required for completion of Salem (Dharmapuri) PS-Somanahalli 400 kV D/c line. However, due to severe RoW issues in construction of Salem (Dharmapuri)-Somanahalli 400 kV D/C line, the shutdown could not be availed and the Salem (Dharmapuri)-Somanahalli 400 kV D/C line is yet to achieve COD. The chronology of events which led to the time over-run as submitted by the petitioner is as under:-

Date	Activity
19.11.13	ED, SRTS-II and AGM/PMS attended the meeting convened by Additional Chief Secretary, GoK and sought the intervention of GoK in resolving the ROW issues.
24.12.13	ED/SR-II along with AGM/PMS met the Principal Secretary (Energy) , Government of Karnataka and sought the intervention of GoK in resolving the ROW issues.
27.12.13	ED/SR-II along with AGM/PMS met the Principal Secretary to the Chief Minister of Karnataka and sought the appointment with the Chief Minister and the intervention of GoK in resolving the ROW issues.





8.1.14	The petitioner's CMD met Chief Minister, Karnataka and sought the intervention of Government of Karnataka in resolving the ROW issues in Karnataka lines
1.3.14	PS (Energy) has convened a meeting with the ADC (Bangalore Urban), DC (Tumkur), DC (Bangalore, Rural) and DC (Tumkur) and directed all the concerned DCs to show substantive progress by the month end in resolving the ROW Issues.
22.1.14	ACS(Revenue) has convened a meeting with ADC of Tumkur, DC (Bangalore Rural) and ADC (Kolar) and attended by ED(SR-II) & AGM (KTK Projects)
2.2.14	ED, SR-II had a meeting with the Minister of Energy (Karnataka) and sought the assistance of GoK in resolving the ROW issues.
22.2.14	AGM (Proj) had Meeting with DC, Tumkur and agreed for enhancing ex-gratia.
11.3.14	ED(SR-II) & AGM(KTK Projects) had a meeting with Addl. Chief Secretary (Energy) Shri Patnaik at MS Bldg and sought the GoK assistance to resolve the RoW issues in Karnataka lines
25.3.14	AGM/KTK Proj met the ACS to the CM and sought the assistance of GoK.
29.4.14	ED (SR-II) had a meeting held with Chief Minister of Karnataka along with the Energy Minister of Karnataka.
12.9.14	Meeting held with District Commissioner (Bangalore Urban) AGM (Karnataka, Proj), DGM (Dharmapuri), Sr Engineer(TLC), Raitha Sangha and land owners for Resolution of ROW.
19.9.14	Meeting held with DC (Bangalore urban) and Raitha Sangha Chief Shree Kodihalli Chandrashekar, AGM (KtakaProj), DGM (Dharmapuri) and land owners for amicable solution to resolve ROW issues.
27.09.14	Meeting and a massive rally held by Raitha Sangha lead by Shree Kodihalli Chandrashekar at Banneghatta for stopping all the works of the petitioner.
21.10.14	Meeting held with DC, Bangalore urban, Raitha Sangha Chief Shree Kodihalli Chandrashekar, AGM (Karnataka, Proj), Sr Engineer (TLC) and land owners - It was demanded by Raitha Sangha to compensate land owners by giving 100% of market value for tower foundation and 55% for line corridor.
23.10.14	Meeting held with DC, Bangalore urban, Raitha Sangha Chief Shree Kodihalli Chandrashekar, AGM (Karnataka, Proj), Sr Engineer (TLC) and land owners - DC(Bangalore Urban) called for compensating land owners by giving 100% of Market Value for Tower Foundation and 55% for line corridor which the petitioner refused.
2.1.15	Order MAG(4)MS/CR/376/2011-12 dated 2.1.2015 was placed by DC (Bangalore Urban) for compensating land owners by giving 100% of market value for tower foundation and 55% for line corridor
28.1.15	Writ Petition filed by the petitioner against Order MAG(4)MS/CR/376/2011-12 dated 2.1.2015 placed by DC (Bangalore Urban).
3.1.15	The petitioner's CMD had meeting with Chief Minister of Karnataka for administrative support to resolve the RoW issues in ongoing transmission lines in Karnataka.
4.2.15	Hon'ble High Court issued stay order against compensation order issued by DC (Bangalore Urban).
15.4.15	GM (Projects) & GM (AM) had meeting with ACS (Energy), Govt. of Karnataka to resolve the RoW issues in ongoing transmission lines in Karnataka.
7.5.15	ED (SRTS-I&II) along with GM (Projects) and GM (AM) met Energy Minister, Govt. Of Karnataka to resolve the RoW issues in ongoing transmission lines in Karnataka.
11.6.15	The petitioner's CMD had meeting with Chief Minister of Karnataka for administrative support to resolve the RoW issues in ongoing transmission lines in Karnataka.



27.8.15	The issue was discussed by Minister of Power, Govt. of India with Energy Minister, Govt. of Karnataka
7.10.15	The petitioner's CMD met Energy Minister, Govt. of Karnataka and request was made to provide administrative support for commencement of work
20.10.15	In the meeting with Chief Secretary, GOK on 20.10.15 and with ACS (Energy) , GOK on 28.10.15 the need for early resolution of ROW issues was stressed and also implementation of GOI guidelines dated 15.10.2015 on payment of compensation for tower footing (85%) and line corridor (15%) was requested.
3.12.15	ED (SR-II) & AGM (KTK-Projects) met Energy Minister, GOK and ACS (Energy) and requested for early resolution of ROW issues. Energy Minister assured to call a meeting of farmers and local MLA and resolve the issue.
18.12.15	ED (SR-II) & AGM (KTK-Projects) along with Shri. B.N. Sharma Addl. Secretary, MOP met ACS (Energy) and DC (Urban) for early resolution of ROW issues.
13.1.16	GM (KTK-Projects) met ACS (Energy) and requested for early resolution of ROW issues of Karnataka.
21.1.16	ED (SR-II) & AGM (KTK-Projects) met Shri. B.N. Sharma Addl. Secretary, MOP and requested for early resolution of ROW issues.
3.2.16,	The petitioner's CMD met Chief Secretary, GOK and requested for early resolution of ROW issues of Karnataka.
2.3.16	During 10 <sup>th</sup> PMG meeting with Chief Secretary, GOK held on 2.3.2016, ED(SR-II) and GM (Karnataka & Kerala Projects) requested for early resolution of ROW issues for the lines being executed by the petitioner
8.3.16	GM (Karnataka & Kerala Projects) met Energy Minister, GOK for early resolution of ROW issues.
3.5.16	During the Pragathi meeting held on 3.5.2016, Chief Secretary, GOK informed that a meeting shall be conducted with concerned DC's to resolve the ROW issues.
11.7.16	Minister of Power, Gol, reviewed the construction projects under execution in Karnataka on 11.7.16; RoW issues in the State of Karnataka have been reviewed.
13.7.16	DC (Urban) issued order for compensation in line with MoP guidelines issued in October, 2015 for resolution of RoW issues after various rounds of deliberations with Raitha Sangha and the petitioner
19.7.16	Secretary, MoP reviewed critical ongoing projects in Karnataka on 19.7.2016, advised Govt. of Karnataka to provide support for completion of projects in Karnataka. Govt. of Karnataka agreed to provide necessary support.

(d) Nagapattinam Pooling Station-Salem New (Dharmapuri) 765 kV D/C Line (Initially charged at 400 kV) being implemented under tariff based bidding (executed by PNMTL under TBCB route) was scheduled to be commissioned by 11.5.2017. However, it was put into commercial operation on 23.10.2016. The power flow at Salem PS was made available only after commissioning of Nagapattinam Pooling Station-Salem New (Dharmapuri) 765 kV D/C Line (Initially



charged at 400 kV) and the instant asset was put into commercial operation along with Nagapattinam–Dharmapuri 765 kV D/C line (executed by PNMTL under TBCB route). The delay in commissioning of the instant asset is mainly attributable to RoW issues encountered in completion of said matching system.

24. TANGEDCO submitted that the subject asset was commissioned on commissioning of the Nagapattinam PS-Salem PS 765 kV D/C line implemented under TBCB. The petitioner’s failure to phase the execution of the schemes under coordinated planning led to time over-run. Therefore, beneficiaries should not be made responsible for the inefficiency of the petitioner. The burden due to lack of planning and coordination between the petitioner and the generation developers cannot be passed on to the beneficiaries. In response, the petitioner submitted that the suggestion of TANGEDCO is not practicable for every given scenarios but same pattern was followed wherever possible. The petitioner further submitted that the time over-run in completion of the instant asset was due to uncontrollable factor as specified in Regulation 12(2)(i) of the 2014 Tariff Regulations.

25. We have considered the submissions of the petitioner and TANGEDCO. The details of connectivity at Salem PS are as follows:-

<b>Connectivity at Salem</b>	<b>COD and petition details</b>
Tuticorin PS-Salem (Dharmapuri) PS 765 kV D/C line	13.11.2016 (235/TT/2016)
Salem PS (Dharmapuri)-Madhugiri PS 765 kV S/C line	Not commissioned (due to ROW issues)
Salem (Dharmapuri) PS-Somanhalli 400 kV D/C line	Not commissioned (due to ROW problem)
Nagapattinam PS-Salem new (Dharmapuri) 765 kV D/C line (initially charged at 400 kV)	23.10.2016 (214/TT/2016)



25. According to the petitioner, it had already commissioned 400 kV Salem PS(Dharmapuri)-Salem 400 kV D/C line along with new 765/400 kV Pooling Station at Salem (Dharmapuri) and bay extensions at Salem 400/220 kV existing sub-station in the month of August, 2014. The petitioner has further submitted that the petitioner was ready with the instant assets in August, 2014 but was not able to put the instant assets in to commercial operation due to non-availability of matching system i.e. Tuticorin PS-Salem (Dharmapuri) PS 765 kV D/C line, Salem Pooling Station (Dhramapuri)-Madhugiri Pooling Station 765 kV S/C line, Salem (Dharmapuri) PS-Somanahalli 400 kV D/C line, Nagapattinam Pooling Station-Salem New (Dharmapuri) 765 kV D/C. However, the petitioner has not submitted any documentary evidence to show that the petitioner was ready in the month of August, 2014. Therefore, we are not inclined to condone the time over-run in COD of the instant assets. The petitioner is directed to submit valid documentary evidence to show that it was ready in August, 2014 and it was not put the instant assts into commercial operation due to non-commissioning of the related assets at the time of truing-up and accordingly the time over-run in case of the instant assets will be reviewed.

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

26. The petitioner has claimed IDC of ₹2920.37 lakh and has submitted the Auditors' Certificate dated 7.12.2016 in support of the same. It is observed that loan amount mentioned for proposed loan for the year 2016-17 in the IDC statement and Form 9C and Form 12B do not match. However, the loan drawn up to actual COD has been considered for IDC computation. IDC has been worked out up to the scheduled dated of COD, i.e. 19.9.2014. The details of IDC allowed are given below:-



(₹ in lakh)

IDC claimed	IDC disallowed	IDC allowed on cash basis
2920.37	1719.73	1200.64

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

27. The petitioner has claimed IEDC of ₹735.18 lakh as per Auditors' Certificate dated 7.12.2016 and the incidental expenditure incurred and paid during construction as on COD is within the percentage of Hard Cost indicated in the Abstract Cost Estimate. Accordingly, the IEDC claimed is allowed.

### **Initial Spares**

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

#### **“13. Initial Spares**

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

(d) Transmission system

- (i) Transmission line-1.00%
- (ii) Transmission Sub-station (Green Field)-4.00%
- (iii) Transmission Sub-station (Brown Field)-6.00%
- (iv) Series Compensation devices and HVDC Station-4.00%
- (v) Gas Insulated Sub-station (GIS)-5.00%
- (vi) Communication system-3.5%

Provided that:

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

(ii) -----

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



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

29. The petitioner has claimed initial spares of ₹140.22 lakh and 82.45 lakh corresponding to the transmission line and sub-station respectively. Initial spares claimed by the petitioner in respect of the instant transmission line and sub-station is within the ceiling limit of 1% and 4% respectively of the capital cost as specified in the 2014 Tariff Regulations. Accordingly, the petitioner’s claim is allowed and considered for the purpose of tariff in this order.

### **Additional Capital Expenditure**

30. 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.

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

“cut-off date” means 31<sup>st</sup> 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 31<sup>st</sup> March of the year closing after three years of the year of commercial operation”.



32. The “cut-off date” in the case of instant transmission asset is 31.3.2019.

33. The petitioner has claimed additional capital expenditure of ₹604.61 lakh, ₹815.44 lakh and ₹20 lakh during 2016-17, 2017-18 and 2018-19 respectively in respect of the instant transmission asset respectively. The additional capital expenditure claimed by the petitioner for the instant asset for the period 2016-17 and 2017-18 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 petitioner’s claim of additional capital expenditure is within the “cut-off date”. Accordingly, the petitioner’s claim is allowed. The additional capital expenditure allowed is as follows:-

(₹ in lakh)				
Capital cost as on COD	2016-17	2017-18	2018-19	Capital cost as on 31.3.2019
19969.55	604.61	815.44	20.00	21409.60

### **Debt- Equity ratio**

34. 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 maybe 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.”

35. The capital cost on the date of commercial operation arrived at as above and additional capitalization allowed have been considered in the normative debt-equity ratio of 70:30 as provided under clause (1) and (5) of the 2014 Tariff Regulations. The details of debt-equity as on the date of commercial operation and 31.3.2019 considered on normative basis are as under:-

(₹ in lakh)				
Particulars	%	Capital cost as on tariff COD	Add Cap during 2016-17 to 2018-19	Capital cost as on 31.3.2019
		Amount	Amount	Amount
Debt	70.00	13978.70	1008.04	14986.73
Equity	30.00	5990.85	432.02	6422.86
<b>Total</b>	<b>100.00</b>	<b>19969.55</b>	<b>1440.05</b>	<b>21409.60</b>

### **Return on Equity (RoE)**

37. 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.”



38. The petitioner has submitted that RoE has been calculated at the rate of 19.610% 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 actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. The petitioner has submitted that any under-recovery or over-recovery of grossed up RoE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

39. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.

40. We have considered the submissions 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. 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 RoE. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of RoE, 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:-



(₹ in lakh)			
Particulars	2016-17 (pro-rata)	2017-18	2018-19
Opening Equity	5990.85	6172.23	6416.86
Addition due to Additional Capitalization	181.38	244.63	6.00
Closing Equity	6172.23	6416.86	6422.86
Average Equity	6081.54	6294.55	6419.86
Return on Equity (Base Rate )	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre Tax )	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	<b>522.78</b>	<b>1234.36</b>	<b>1258.94</b>

### **Interest on Loan (IoL)**

41. 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.”



42. The petitioner's entitlement to IoL has been calculated as per the provisions of Regulation 26 of the 2014 Tariff Regulations as detailed below:-

(i) Gross amount of loan, repayment of instalments and rate of interest have been considered as perform 9C in the petition;

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

43. The petitioner has submitted that the IoL has been claimed on the basis of rate prevailing as on COD i.e.23.10.2016 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.

44. Detailed calculations in support of IoL are given in the Annexure I.

45. The details of IoL allowed are as under:-

Particulars	(₹ in lakh)		
	2016-17 (pro-rata)	2017-18	2018-19
Gross Normative Loan	13978.70	14401.92	14972.73
Cumulative Repayment upto Previous Year	0.00	442.99	1484.48
Net Loan-Opening	13978.70	13958.93	13488.26
Addition due to Additional Capitalisation	423.23	570.81	14.00



Repayment during the year	442.99	1041.49	1057.66
Net Loan-Closing	13958.93	13488.26	12444.60
Average Loan	13968.82	13723.59	12966.43
Weighted Average Rate of Interest on Loan	6.3750%	6.4066%	6.3786%
<b>Interest on Loan</b>	<b>390.36</b>	<b>879.22</b>	<b>827.08</b>

## **Depreciation**

46. Regulation 27 of the 2014 Tariff Regulations specifies as follows:-

### **"27. Depreciation:**

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

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

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

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

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

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

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



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

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

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

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

47. The petitioner has claimed the actual depreciation as a component of annual fixed charges. The instant transmission asset was put under commercial operation during 2015-16. Accordingly, it will complete 12 years after 2018-19. As such, depreciation has been calculated annually based on Straight Line Method in accordance with Regulation 27 at the rates specified in Appendix-II to the 2014 Tariff Regulations.

48. The details of the depreciation worked out are as under:-

Particulars	(₹ in lakh)		
	2016-17 (pro-rata)	2017-18	2018-19
Gross Block as on COD	19969.55	20574.16	21389.60
Addition during 2014-19 due to Projected Additional Capitalisation	604.61	815.44	20.00
Gross Block as on 31 <sup>st</sup> March	<b>20574.16</b>	<b>21389.60</b>	<b>21409.60</b>
Average Gross Block	<b>20271.85</b>	<b>20981.88</b>	<b>21399.60</b>
Rate of Depreciation	4.99%	4.96%	4.94%
Depreciable Value	17976.74	18545.83	18921.78
Remaining Depreciable Value	17976.74	17533.75	16492.26
<b>Depreciation</b>	<b>442.99</b>	<b>1041.49</b>	<b>1057.66</b>



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

49. Regulation 29(4)(a) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition are as under:-

(₹ in lakh)					
Element	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Asset-I (COD-23.10.2016)</b>					
D/C bundled conductor with four or more sub-conductors	1.062	1.097	1.133	1.171	1.210
400 kV bays	60.30	62.30	64.37	66.51	68.71

50. The petitioner has computed normative O&M Expenses as per sub-clause (a) of clause (4) of Regulation 29 of the 2014 Tariff Regulations. Accordingly, the allowable O&M Expenses for the instant transmission asset are as under:-

(₹ in lakh)			
Element	2016-17	2017-18	2018-19
400 KV D/C Quad Line having bundled conductor with four or more sub-conductors (59.04 km)	29.32	69.14	71.44
2 nos. 400 kV bays at Salem Pooling Station	112.87	266.04	274.84
<b>Total</b>	<b>142.19</b>	<b>335.18</b>	<b>346.28</b>

51. The O&M Expenses claimed by the petitioner is as under:-

(₹ in lakh)		
2016-17	2017-18	2018-19
143.00	335.18	346.28

52. The petitioner has submitted that O&M Expenses for the tariff period 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future



date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.

53. TANGEDCO in its reply has submitted that there is no provision in 2014 Tariff Regulations for revising the normative O&M charges based on the actuals. TANGEDCO has submitted that the O&M rates are arrived based on past five years actual O&M Expenses which include the wage hikes during the previous five years and 10% margin over and above the effective CAGR of O&M Expenses have been allowed. The beneficiaries are over-burdened due to the exorbitant O&M rates when compared to the rates of State Transmission Utilities. Therefore, the request for revision of O&M rates should not be allowed.

54. In response, the petitioner has submitted that being a CPSU, the scheme of wage revision is binding on the petitioner. However the actual impact of wage hike (due w.e.f. 1.1.2017) has not been factored in fixation of the normative O&M rates prescribed for the 2014-19 tariff block. In line with the Regulation 19(f)(ii) of the 2014 Tariff Regulations, norms for O&M Expenses for the year 2009-10 were derived considering the impact of wage hike of the employees under PSUs. The petitioner has prayed for suitable revision in the norms for O&M Expenses for claiming the impact of wage hike during 2014-19 period.

55. The O&M Expenses have been worked out as per the norms specified in the 2014 Tariff Regulations. As regards the impact of wage revision, any application filed by the





petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

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

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

#### **“28. Interest on Working Capital**

(1) The working capital shall cover:

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

- (i) Receivables equivalent to two months of fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and
- (iii) Operation and maintenance expenses for one month”

“(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the 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;”

57. The petitioner is entitled to claim IWC as per the 2014 Tariff Regulations. The components of the working capital and the petitioner’s entitlement to interest thereon are discussed hereunder:-

#### **(i) Receivables**

Receivables as a component of working capital will be equivalent to two months fixed cost. The petitioner has claimed the receivables on the basis of 2 months’



annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

**(ii) Maintenance spares**

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

**(iii) O & M Expenses**

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

**(iv) Rate of IWC**

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

58. Accordingly, the IWC allowed for the instant assets is as under:-

(₹ in lakh)			
Particulars	2016-17	2017-18	2018-19
Maintenance Spares	21.33	50.28	51.94
O & M expenses	11.85	27.93	28.86
Receivables	255.89	596.09	596.10
<b>Total</b>	<b>289.06</b>	<b>674.30</b>	<b>676.90</b>
Interest Rate	12.80%	12.80%	12.80%
<b>Interest</b>	<b>37.00</b>	<b>86.31</b>	<b>86.64</b>

### **Transmission charges**

59. The transmission charges allowed for the instant transmission asset are summarized as under:-

Particulars	(₹ in lakh)		
	2016-17 (pro-rata)	2017-18	2018-19
Depreciation	442.99	1041.49	1057.66
Interest on Loan	390.36	879.22	827.08
Return on Equity	522.78	1234.36	1258.94
Interest on Working Capital	37.00	86.31	86.64
O & M Expenses	142.19	335.18	346.28
<b>Total</b>	<b>1535.32</b>	<b>3576.56</b>	<b>3576.59</b>

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

61. TANGEDCO has submitted that as per the Investment Approval there are no external borrowings and hence the petitioner's request for escalation on account of FERV should not be allowed. We have considered the submissions of the petitioner and TANGEDCO. The petitioner is entitled to FERV as provided under Regulation 50 of the 2014 Tariff Regulations and the petitioner can make other claims as per the 2014 Tariff Regulations.

### **Filing Fee and the Publication Expenses**

62. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses



in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

### **Licence Fee and RLDC fees and Charges**

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

### **Sharing of Transmission Charges**

64. As regards sharing of transmission charges, TANGEDCO has submitted as follows:-

a) TANGEDCO has entered into PPA with Coastal Energen Pvt. Ltd. for 558 MW. As of now TANGEDCO has not entered into any Power Purchase Agreement (PPA) with Ind Bharat Power (Madras) Ltd. out of the total LTA quantum of 2000 MW, thus only 558 MW has been firmed up.

b) The petitioner should have revisited the transmission scheme and approached the Commission for approval while considering time leverage, in the absence of target beneficiaries, drawal points in the ISTS and long term PPAs to be executed by generation projects. The petitioner has never deliberated/discussed the issues with the beneficiaries. The issue was also taken up with SRPC and deliberated in the 32<sup>nd</sup> meeting of the Commercial Sub-Committee of SRPC held at Hyderabad on



17.10.2016. The Committee requested to conduct a mid-term review with respect to the schemes associated with IPPs.

c) The petitioner, on the contrary has declared commercial operation of the 400 kV D/C quad line between Salem Pooling station-Salem 400 kV Sub-station along with new 765/400 kV Sub-station at Salem (initially charged at 400 kV) and bay extension at Salem 400/220 kV Sub-station as part of the common transmission system for the two IPPs in Tuticorin area on 23.10.2016 on its own without following any norms for declaring COD i.e. without bringing it to beneficial use.

d) The main connectivity between Salem Pooling station and Madhugiri Pooling station has not been completed by the petitioner. There is no upstream connectivity or no sink for the IPPs at Salem pooling station. Ind Bharath Power (Madras) Ltd is yet to firm up their beneficiaries. The dedicated transmission line has not been built by Ind Bharath Power (Madras) Ltd. Coastal Energen has also not firmed up their beneficiaries for their second unit. Coastal Energen has filed a petition No.246/MP/2016 before the Commission to declare that the LTA of 542 MW under BPTA dated 24.2.2010 stands relinquished with effect from 19.11.2016 without any liability to Coastal Energen.

e) In the absence of both generation as well as target beneficiaries, the intended transmission system will not serve its purpose rather it will increase the financial burden on the existing DICs. There is no upstream connectivity at 765 kV level and no target beneficiary at Salem pooling station or beyond. It makes the instant asset redundant and uneconomical.



f) The Commission in order dated 29.7.2016 in Petition No.124/TT/2014 has concurred with the views of TANGEDCO in respect of the redundant assets and observed that the petitioner should have completed up-stream system as per scheduled timeline so that the assets provide their intended benefits. The relevant portion of the order is reproduced below:-

“72. We have considered the submissions of TANGEDCO, which have been earlier discussed at para-9 of this order. We are of the view that the LILO of the Tuticorin JV-Madurai 400 kV D/C line at Tuticorin Pooling station is redundant and it is of no use to the beneficiaries, unless and until the pooling stations and upstream connectivity is put under operation. Hence, the claim of the petitioner is totally baseless and there is no provision in the Regulations for allowing tariff for any transmission element without any beneficial use.”

“76. We agree with the submission of TANGEDCO that the petitioner should have completed up-stream system i.e. Tuticorin-Salem and Tuticorin-Madurai line as per scheduled timeline so that all the assets provide their intended benefits. We direct the petitioner to complete the construction of these assets expeditiously.”

g) TANGEDCO continues to reimburse the transmission PoC charges with respect to MTOA claimed by Coastal Energen since the declaration of COD of the generating unit. Since the requirement of the common transmission system associated with the IPPs have become futile due to default of IPPs, TANGEDCO being the lone beneficiary of Coastal Energen cannot be penalized.

h) The petitioner has failed to fulfill the statutory requirement of the Connectivity and Open Access regulations regarding firming up of target beneficiaries and hence the tariff of the subject asset can only be recovered from the LTA applicants and not eligible to be included in the PoC pool.

65. In response, the petitioner has submitted that the instant petition is part of the HCPTC-VI (Tuticorin corridor). The Tuticorin Area, had number of existing/under



construction generation projects like Tuticorin (1050 MW), Tuticorin JV (1000 MW), Kudankulam APP (2000 MW). Additionally the area is quite rich (about 7000 MW) in wind generation potential. Additionally the expansion at Kudankulam APP with 2000 MW was also on the anvil with uncertain time frame. Taking into consideration the shifting of about 6500 MW (4000 MW existing/under construction and 2500 MW above generation) in the close proximity at the peninsular coast, it was found to be prudent to evolve a high capacity 765 KV transmission system so as to conserve right of way and charge the same initially at 400 KV level. The geographical location of such huge generation capacity near coast requires that transmission system be drawn up north only, and the nearest load center was at Salem. There was already existing 400/230 kV sub-station at Salem which did not have sufficient space for termination of the transmission lines from Tuticorin area. Further, due to geographical proximity Salem was also found to be convenient location for pooling of power from Nagapattinam area, accordingly a 765/400 kV was planned at Salem and its interconnection with the existing Salem Sub-station was planned with Salem New-Salem 400 kV D/C line.

66. The petitioner has submitted that the transmission system was discussed in the 30<sup>th</sup> SCM held on 13.4.2010. The progress of the generation projects were reviewed in the month of August, 2009 and the investment approval was taken up by PGCIL in September/December, 2011. The petitioner also submitted that CTU was monitoring the progress of generation projects in the JCC meetings on regular intervals, one of the generation project (Coastal Energen) was commissioned and the Ind-Barath till 15<sup>th</sup> JCC meeting on 10.6.2016 did not report about the abandonment of the both the units of their generation project.



67. The petitioner has submitted that before commissioning of main transmission line of the system viz. Tuticorin Pooling-Salem (New) 765 kV D/C (charged at 400 kV) and Salem (new)-Salem (Existing) Sub-station, operational constraints were faced in evacuation of entire power from Coastal Energen under certain operating conditions and required its backing down. As regards charging of 765 kV line at 400 kV level, taking into consideration the large generation concentration in Tuticorin area and rich wind potential in the vicinity, it was considered prudent to construct 765 kV line and charge it initially at 400 kV level to avoid ROW in future. The charging of trunk transmission line viz. Tuticorin-Salem 765 kV D/C line, at its rated voltage of 765 kV has already been on anvil even before its commissioning. This has been necessitated due to projected power transfer requirement from wind generation projects in the vicinity as may be seen from the minutes of 37th meeting of Standing Committee on Power system planning held 31.7.2014.

68. As regards the TANGEDCO's contention w.r.t. the requirement of the transmission system in view of the recent developments like relinquishment request by Coastal Energen Pvt. Ltd., and abandonment of generation projects by Ind-Barath (Madras) Power Ltd., the petitioner has submitted that the information regarding abandonment of the generation project by Ind-Barath was a recent development when the transmission system was under advanced commissioning and the relinquishment petition by Coastal Energen was filed after its entire LTA was operationalized by CTU.

69. The petitioner has submitted that the CTU was well aware of the regulatory requirement of the LTA customers to sign PPA for at least 50% of the capacity prior to





augmentation of the transmission system as identified for grant of LTA. Though the generation projects were progressing in various generation complexes including (viz. Coastal Energen) in the area, PPAs were not signed on account of non-availability of the Case-I biddings by the respective states. Accordingly, CTU had approached the Commission through Petition No.233/2009 about the requirement of 9 nos. of High Capacity Power Transmission Corridors (HCPTC). The Commission directed CTU to submit the Project Inception Report including the site visit report for the progress of the respective generation projects in the various generation complexes. Further, despite being one of the respondents to the Regulatory Approval petition, TANGEDCO never raised its reservations regarding the implementation of transmission system in absence of signing of long term PPA by LTA customers. The regulatory requirement of signing of PPA was not achieved, however looking into the progress of generation projects, the petitioner went ahead with the implementation after taking due regulatory approval, which was allowed by the Commission in order dated 31.05.2010 in Petition No. 233/2009.

70. The petitioner has further submitted that it explained in the SRPC meeting held on 25.11.2010 that except for the LTA quantum for which beneficiaries have been identified the liability of transmission charges would continue to be with the IPPs and the transmission charges for the capacity firmed up through long term PPA is paid by the beneficiary and the transmission charges for the balance capacity untied capacity is paid by the generation project who have availed LTA on target region. Thus, the petitioner all along had been presenting the correct picture with regard to sharing of transmission charges. Now, with the IPPs resorting to relinquishment of LTAs to evade



liability of transmission charges it is recommended that adequate relinquishment charges be levied on the relinquishing parties to bring parity to the other LTA customers.

71. We have considered the submissions of TANGEDCO and the petitioner. Neither TANGEDCO nor the petitioner has denied the quantum of 558 MW LTA being operated against the total LTA capacity of 2000 MW. The transmission line (765 kV) has been charged at 400 kV level which is sufficient to carry power for CEPL and utilization of transmission capacity. We have perused the SLD (at Annexure-II). It is observed that the instant asset is put to use since Salem Pooling Station is connected to existing Salem (400 kV) Sub-station and to Nagapatinam Sub-station. The instant assets form part of the meshed network. Therefore, the transmission charges associated with the instant assets shall be recovered through PoC mechanism. The issue raised by TANGEDCO is that it will have to bear entire transmission charges because only it has PPA for 558 MW. Post notification of 2010 Sharing Regulations, 2010, no asset is bilaterally billed once it is put under PoC pool and it is being borne by the beneficiaries/DICs who are using the asset. Hence, concerns of TANGEDCO are addressed.

72. Transmission Charges shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations and shall be shared by the beneficiaries and long term transmission customers as per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges & Losses) Regulations, 2010 as amended time to time.



73. This order disposes of Petition No. 71/TT/2017.

sd/-  
**(M.K. Iyer)**  
Member

sd/-  
**(A.S. Bakshi)**  
Member

sd/-  
**(A.K. Singhal)**  
Member

sd/-  
**(Gireesh B. Pradhan)**  
Chairperson



**ANNEXURE-I****CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR  
TARIFF PERIOD 2014-19****(₹ in lakh)**

Sl. no.	Name of loan	Particulars	2016-17	2017-18	2018-19
1	BOND XXXVII	Net opening loan	488.18	443.80	399.42
	Rep Scheduled	Add: Addition during the period	-		
		Less: Repayment during the period	44.38	44.38	44.38
		Net Closing Loan	<b>443.80</b>	<b>399.42</b>	<b>355.04</b>
		Average Loan	465.99	421.61	377.23
		Rate of Interest	9.2500%	9.2500%	9.2500%
		<b>Interest</b>	<b>43.10</b>	<b>39.00</b>	<b>34.89</b>
	Rep Scheduled				
2	BOND XL	Net opening loan	458.33	458.33	416.67
		Add: Addition during the period	-		
		Less: Repayment during the period	-	41.67	41.67
		Net Closing Loan	<b>458.33</b>	<b>416.67</b>	<b>375.00</b>
		Average Loan	458.33	437.50	395.83
		Rate of Interest	9.3000%	9.3000%	9.3000%
		<b>Interest</b>	<b>42.62</b>	<b>40.69</b>	<b>36.81</b>
	Rep Scheduled				
3	BOND XXXIX	Net opening loan	500.00	500.00	500.00
		Add: Addition during the period			
		Less: Repayment during the period	-		-
		Net Closing Loan	<b>500.00</b>	<b>500.00</b>	<b>500.00</b>
		Average Loan	500.00	500.00	500.00
		Rate of Interest	9.4000%	9.4000%	9.4000%
		<b>Interest</b>	<b>47.00</b>	<b>47.00</b>	<b>47.00</b>
	Rep Scheduled				
4	SBI (21.03.2012) - CHILD 1	Net opening loan	715.91	681.82	613.64
		Add: Addition during the period			
		Less: Repayment during the period	34.09	68.18	68.18
		Net Closing Loan	<b>681.82</b>	<b>613.64</b>	<b>545.45</b>
		Average Loan	698.86	647.73	579.55
		Rate of Interest	9.3500%	9.3500%	9.3500%
		<b>Interest</b>	<b>65.34</b>	<b>60.56</b>	<b>54.19</b>



	<b>Rep Scheduled</b>				
5	<b>IFC (IFC - A LOAN) (31419-00) CHILD 01</b>	Net opening loan	468.84	468.84	421.95
		Add: Addition during the period			
		Less: Repayment during the period		46.88	46.88
		Net Closing Loan	<b>468.84</b>	<b>421.95</b>	<b>375.07</b>
		Average Loan	468.84	445.39	398.51
		Rate of Interest	4.1490%	4.1490%	4.1490%
		<b>Interest</b>	<b>19.45</b>	<b>18.48</b>	<b>16.53</b>
	<b>Rep Scheduled</b>				
6	<b>BOND - XLII</b>	Net opening loan	250.00	250.00	250.00
		Add: Addition during the period	-	-	
		Less: Repayment during the period			
		Net Closing Loan	<b>250.00</b>	<b>250.00</b>	<b>250.00</b>
		Average Loan	250.00	250.00	250.00
		Rate of Interest	8.8000%	8.8000%	8.8000%
		<b>Interest</b>	<b>22.00</b>	<b>22.00</b>	<b>22.00</b>
7	<b>BOND - XLIII</b>	Net opening loan	250.00	250.00	229.17
		Add: Addition during the period	-	-	-
		Less: Repayment during the period		20.83	20.83
		Net Closing Loan	<b>250.00</b>	<b>229.17</b>	<b>208.33</b>
		Average Loan	250.00	239.58	218.75
		Rate of Interest	7.9300%	7.9300%	7.9300%
		<b>Interest</b>	<b>19.83</b>	<b>19.00</b>	<b>17.35</b>
8	<b>BOND - XLV</b>	Net opening loan	250.00	250.00	229.17
		Add: Addition during the period	-	-	-
		Less: Repayment during the period	-	20.83	20.83
		Net Closing Loan	<b>250.00</b>	<b>229.17</b>	<b>208.33</b>
		Average Loan	250.00	239.58	218.75
		Rate of Interest	9.6500%	9.6500%	9.6500%
		<b>Interest</b>	<b>24.13</b>	<b>23.12</b>	<b>21.11</b>
	<b>Rep Scheduled</b>				
9	<b>BOND - XLIV - CHILD 1</b>	Net opening loan	250.00	250.00	250.00
		Add: Addition during the period	-	-	-
		Less: Repayment during the period			83.33
		Net Closing Loan	<b>250.00</b>	<b>250.00</b>	<b>166.67</b>



		Average Loan	250.00	250.00	208.33
		Rate of Interest	8.7000%	8.7000%	8.7000%
		<b>Interest</b>	<b>21.75</b>	<b>21.75</b>	<b>18.13</b>
	<b>Rep Scheduled</b>				
10	<b>BOND XLVI</b>	Net opening loan	250.00	250.00	250.00
		Add: Addition during the period	-	-	-
		Less: Repayment during the period			
		Net Closing Loan	<b>250.00</b>	<b>250.00</b>	<b>250.00</b>
		Average Loan	250.00	250.00	250.00
		Rate of Interest	9.3000%	9.3000%	9.3000%
		<b>Interest</b>	<b>23.25</b>	<b>23.25</b>	<b>23.25</b>
	<b>Rep Scheduled</b>				
11	<b>BOND XLVII</b>	Net opening loan	250.00	250.00	250.00
		Add: Addition during the period	-	-	-
		Less: Repayment during the period			20.83
		Net Closing Loan	<b>250.00</b>	<b>250.00</b>	<b>229.17</b>
		Average Loan	250.00	250.00	239.58
		Rate of Interest	8.9300%	8.9300%	8.9300%
		<b>Interest</b>	<b>22.33</b>	<b>22.33</b>	<b>21.39</b>
	<b>Rep Scheduled</b>				
12	<b>Bond XLVIII</b>	Net opening loan	250.00	250.00	250.00
		Add: Addition during the period	-	-	-
		Less: Repayment during the period			
		Net Closing Loan	<b>250.00</b>	<b>250.00</b>	<b>250.00</b>
		Average Loan	250.00	250.00	250.00
		Rate of Interest	8.2000%	8.2000%	8.2000%
		<b>Interest</b>	<b>20.50</b>	<b>20.50</b>	<b>20.50</b>
	<b>Rep Scheduled</b>				
13	<b>SBI 10000 (01.05.2014)</b>	Net opening loan	1,168.36	1,168.36	1,168.36
		Add: Addition during the period	-	-	-
		Less: Repayment during the period	-	-	-
		Net Closing Loan	<b>1,168.36</b>	<b>1,168.36</b>	<b>1,168.36</b>
		Average Loan	1,168.36	1,168.36	1,168.36
		Rate of Interest	9.3500%	9.3500%	9.3500%
		<b>Interest</b>	<b>109.24</b>	<b>109.24</b>	<b>109.24</b>
	<b>Rep Scheduled</b>				
14	<b>Bond XLIX</b>	Net opening loan	250.00	250.00	250.00
		Add: Addition during the	-	-	-



		period			
		Less: Repayment during the period	-	-	-
		Net Closing Loan	<b>250.00</b>	<b>250.00</b>	<b>250.00</b>
		Average Loan	250.00	250.00	250.00
		Rate of Interest	8.1500%	8.1500%	8.1500%
		<b>Interest</b>	<b>20.38</b>	<b>20.38</b>	<b>20.38</b>
	<b>Rep Scheduled</b>				
15	<b>BOND - L</b>	Net opening loan	250.00	250.00	250.00
		Add: Addition during the period	-	-	-
		Less: Repayment during the period	-	-	-
		Net Closing Loan	<b>250.00</b>	<b>250.00</b>	<b>250.00</b>
		Average Loan	250.00	250.00	250.00
		Rate of Interest	8.4000%	8.4000%	8.4000%
		<b>Interest</b>	<b>21.00</b>	<b>21.00</b>	<b>21.00</b>
	<b>Rep Scheduled</b>				
16	<b>IFC(ICFF Loan) (31419-02)</b>	Net opening loan	677.90	677.90	610.11
		Add: Addition during the period	-	-	-
		Less: Repayment during the period	-	67.79	67.79
		Net Closing Loan	<b>677.90</b>	<b>610.11</b>	<b>542.32</b>
		Average Loan	677.90	644.01	576.22
		Rate of Interest	4.1500%	4.1500%	4.1500%
		<b>Interest</b>	<b>28.13</b>	<b>26.73</b>	<b>23.91</b>
	<b>Rep Scheduled</b>				
17	<b>FC Bond (17.01.2013)</b>	Net opening loan	5,897.73	5,897.73	5,897.73
		Add: Addition during the period	-	-	-
		Less: Repayment during the period	-	-	-
		Net Closing Loan	<b>5,897.73</b>	<b>5,897.73</b>	<b>5,897.73</b>
		Average Loan	5,897.73	5,897.73	5,897.73
		Rate of Interest	4.0965%	4.0965%	4.0965%
		<b>Interest</b>	<b>241.60</b>	<b>241.60</b>	<b>241.60</b>
	<b>Rep Scheduled</b>				
18	<b>Bond LI</b>	Net opening loan	100.00	100.00	100.00
		Add: Addition during the period	-	-	-
		Less: Repayment during the period	-	-	-
		Net Closing Loan	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
		Average Loan	100.00	100.00	100.00
		Rate of Interest	8.4000%	8.4000%	8.4000%



		<b>Interest</b>	<b>8.40</b>	<b>8.40</b>	<b>8.40</b>
	<b>Rep Scheduled</b>				
19	<b>BOND LII</b>	Net opening loan	100.00	100.00	100.00
		Add: Addition during the period	-	-	-
		Less: Repayment during the period	-	-	-
		Net Closing Loan	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
		Average Loan	100.00	100.00	100.00
		Rate of Interest	8.3200%	8.3200%	8.3200%
		<b>Interest</b>	<b>8.32</b>	<b>8.32</b>	<b>8.32</b>
	<b>Rep Scheduled</b>				
20	<b>IFC (IFC - B LOAN) (31419-01)_Child 01</b>	Net opening loan	338.95	-	-
		Add: Addition during the period	-	-	-
		Less: Repayment during the period	338.95	-	-
		Net Closing Loan	-	-	-
		Average Loan	169.48	-	-
		Rate of Interest	3.2900%	3.2900%	3.2900%
		<b>Interest</b>	<b>5.58</b>	-	-
	<b>Rep Scheduled</b>				
21	<b>Proposed Loan 2016-17 (7.97%)</b>	Net opening loan	674.17	674.17	674.17
		Add: Addition during the period	-	-	-
		Less: Repayment during the period	-	-	-
		Net Closing Loan	<b>674.17</b>	<b>674.17</b>	<b>674.17</b>
		Average Loan	674.17	674.17	674.17
		Rate of Interest	7.9700%	7.9700%	7.9700%
		<b>Interest</b>	<b>53.73</b>	<b>53.73</b>	<b>53.73</b>
	<b>Rep Scheduled</b>				
22	<b>Proposed Loan 2016-17 (7.97%)</b>	Net opening loan	-	152.92	152.92
		Add: Addition during the period	152.92	-	-
		Less: Repayment during the period	-	-	-
		Net Closing Loan	<b>152.92</b>	<b>152.92</b>	<b>152.92</b>
		Average Loan	76.46	152.92	152.92
		Rate of Interest	7.9700%	7.9700%	7.9700%
		<b>Interest</b>	<b>6.09</b>	<b>12.19</b>	<b>12.19</b>
	<b>Rep Scheduled</b>				
23	<b>Proposed Loan 2016-17 (7.97%)</b>	Net opening loan	-	-	54.22
		Add: Addition during the	-	54.22	-





	period			
	Less: Repayment during the period	-	-	-
	Net Closing Loan	-	<b>54.22</b>	<b>54.22</b>
	Average Loan	-	27.11	54.22
	Rate of Interest	7.9700%	7.9700%	7.9700%
	<b>Interest</b>	-	<b>2.16</b>	<b>4.32</b>
	<b>Rep Scheduled</b>			
	<b>Gross Total</b>			
	Net opening loan	13838.37	13573.87	13317.52
	Add: Addition during the period	152.92	54.22	0.00
	Less: Repayment during the period	417.42	310.57	414.74
	Net Closing Loan	13573.87	13317.52	12902.78
	Average Loan	13706.12	13445.69	13110.15
	<b>Rate of Interest</b>	<b>6.3750%</b>	<b>6.4066%</b>	<b>6.3786%</b>
	Interest	873.77	861.42	836.24

