

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 51/TT/2015**

**Coram:**

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

**Date of Hearing: 06.10.2015**

**Date of Order : 20.07.2016**

**In the matter of**

Approval of transmission tariff for **Asset-1:** LILO of 2<sup>nd</sup> circuit of Neyveli-Trichy 400 kV D/C line at Nagapattinam Pooling Station along with associated bays (COD: 29.9.2015) and **Asset-2:** Strengthening of Neyveli TS-II-TS-I expansion link with higher capacity conductor (COD: 9.11.2015) under "Transmission system associated with Contingency plan for evacuation of power from IL&FS (2x600 MW)" in Southern Region from COD to 31.3.2019 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. (KPTCL),  
Kaveri Bhawan, Bangalore-560 009
2. Transmission Corporation of Andhra Pradesh Ltd. (APTRANCO),  
Vidyut Soudha,  
Hyderabad-500 082
3. Kerala State Electricity Board (KSEB),  
Vaidyuthi Bhavanam, Pattom,  
Thiruvananthapuram-695 004



4. Tamil Nadu Electricity Board (TNEB),  
NPKRR Maaligai, 800, Anna Salai,  
Chennai-600 002
5. Electricity Department  
Government of Goa  
Vidyuti Bhawan, Panaji, Goa-403001
6. Electricity Department, 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
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),  
Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet,  
Warangal-506 004, Andhra Pradesh
11. Bangalore Electricity Supply Company Limited (BESCOM),  
Corporate Office, K. R. Circle,  
Bangalore-560 001, Karnataka
12. Gulbarga Electricity Supply Company Limited (GESCOM),  
Station Main Road, Gulbarga.  
Karnataka
13. Hubli Electricity Supply Company Limited (HESCOM),  
Navanagar, PB Road,  
Hubli, Karnataka
14. MESCOM Corporate Office,  
Paradigm Plaza, AB Shetty Circle,  
Mangalore-575 001



15. Chamundeswari Electricity Supply Corporation Limited (CESC),  
# 927, L J Avenue, Ground Floor,  
New Kantharaj Urs Road,  
Saraswatipuram, Mysore-570 009

16. IL&FS Tamil Nadu Power Company Limited,  
B-Block, 4<sup>th</sup> Floor, Navin's Presidium,  
13, Nelson Manickam Road, Aminjikarai,  
Chennai-600 029, Tamil Nadu

17. PEL Power Limited,  
8-2-293/A/76, Road No. 9A, Jubilee Hills,  
Hyderabad-500 033, Andhra Pradesh

.....**Respondents**

For petitioner : Shri S.S. Raju, PGCIL  
Shri S.K. Meena, PGCIL  
Shri S.K. Venkatesan, PGCIL  
Shri M.M. Mondal, PGCIL

For respondents : Shri S. Vallinayagam, Advocate for TANGEDCO  
Ms. C. Lakshmi Devi, TANGEDCO  
Shri S.C. Misra, ITPCL  
Shri V.L. Dua, ITPCL  
Shri Anil R. Shah, ITPCL

### **ORDER**

In the instant petition the petitioner, Power Grid Corporation of India Limited (PGCIL) has sought approval of transmission tariff for Asset-1: LILO of 2<sup>nd</sup> circuit of Neyveli-Trichy 400 kV D/C line at Nagapattinam Pooling Station along with associated bays and Asset-2: Strengthening of Neyveli TS-II-TS-I expansion link with higher capacity conductor under "Transmission system associated with Contingency plan for evacuation of power from IL&FS (2x600 MW)" in Southern Region from the date of commercial operation to 31.3.2019 as per the Central



Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "2014 Tariff Regulations").

2. The petitioner was entrusted with the implementation of Transmission System associated with "Contingency plan for evacuation of Power from IL&FS (2x600 MW)" in Southern Region. The scope of the scheme was discussed and agreed in the 36<sup>th</sup> SCM of Southern Region Constituents held on 4.9.2013 and was further ratified in the 23<sup>rd</sup> SRPC meeting held on 26.10.2013. The Investment Approval (IA) for the project was accorded by the Board of Directors of the petitioner vide Memorandum No. C/CP/Contingency for IL&FS dated 30.1.2014 for 297<sup>th</sup> meeting held on 13.1.2014 at an estimated cost of ₹9795 lakh including an IDC of ₹439 lakh (based on October, 2013 price level). The project was scheduled to be commissioned within 18 months from the IA dated 13.1.2014. Therefore, the scheduled date of commissioning of the transmission system was 13.7.2015. The scope of work covered under the project is broadly as follows:-

**Transmission Lines:**

- (i) LILO of 2<sup>nd</sup> circuit of Neyveli-Trichy 400 kV D/C line at Nagapattinam pooling station;
- (ii) Strengthening of Neyveli TS-II to Neyveli TS-I expansion link with higher capacity conductor;

**Sub-station:**

- (i) Extension of 765/400 kV pooling station at Nagapattinam by 2 number 400 kV line bays for terminating LILO of 2<sup>nd</sup> circuit of Neyveli-Trichy 400 kV D/C line;



3. The petitioner vide affidavit dated 2.3.2016 has submitted the actual date of commercial operation of the instant transmission assets. The actual dates of commercial operation of the instant assets are as under:-

Particulars	Scheduled COD	Actual COD	Delay
<b>Asset-1:</b> LILO of 2 <sup>nd</sup> circuit of Neyveli-Trichy 400 kV D/C line at Nagapattinam Pooling Station along with associated bays	13.7.2015	29.9.2015	2 months 16 days
<b>Asset-2:</b> Strengthening of Neyveli TS-II-TS-I expansion link with higher capacity conductor		9.11.2015	3 months 27 days

4. Annual Fixed Charges for the instant assets were approved by the Commission vide its order dated 15.4.2015, subject to adjustment as per Regulation 7 (7) (iii) and (iv) of the 2014 Tariff Regulations, as per the petitioner's initial claim of tariff for the instant assets from the anticipated COD of 15.3.2015 for 2014-15 and 2015-16 period. However, during the hearing dated 6.10.2015, the petitioner submitted the revised anticipated date of commercial operation as 1.7.2015. AFC allowed vide order dated 15.4.2015 was extended till 30.9.2016 vide order dated 6.4.2016 or till the issue of final tariff, whichever is earlier.

5. The details of the transmission charges claimed by the petitioner are as under:-

Particulars	(₹ in lakh)			
	Asset-1			
	2015-16	2016-17	2017-18	2018-19
Depreciation	165.73	399.71	416.43	416.43
Interest on Loan	178.50	409.31	394.49	360.21
Return on Equity	185.76	448.61	467.77	467.77



Interest on Working Capital	15.64	35.99	36.70	36.16
O & M Expenses	62.34	127.41	131.62	136.00
<b>Total</b>	<b>607.97</b>	<b>1421.03</b>	<b>1447.01</b>	<b>1416.57</b>
<b>Particulars</b>	<b>Asset-2</b>			
	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	19.41	57.58	60.80	60.80
Interest on Loan	21.30	60.07	58.69	53.58
Return on Equity	21.63	64.15	67.74	67.74
Interest on Working Capital	1.44	4.18	4.31	4.19
O & M Expenses	-	-	-	-
<b>Total</b>	<b>63.78</b>	<b>185.98</b>	<b>191.54</b>	<b>186.31</b>

6. The details submitted by the petitioner in support of its claim for interest on working capital are as follows:-

(₹ in lakh)				
<b>Particulars</b>	<b>Asset-1</b>			
	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Maintenance Spares	18.50	19.11	19.74	20.40
O & M expenses	10.28	10.62	10.97	11.33
Receivables	200.43	236.84	241.17	236.10
<b>Total</b>	<b>229.21</b>	<b>266.57</b>	<b>271.88</b>	<b>267.83</b>
Interest Rate	13.50%	13.50%	13.50%	13.50%
<b>Interest</b>	<b>30.94</b>	<b>35.99</b>	<b>36.70</b>	<b>36.16</b>
<b>Particulars</b>	<b>Asset-2</b>			
	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Maintenance Spares	-	-	-	-
O & M expenses	-	-	-	-
Receivables	26.95	31.00	31.92	31.05
<b>Total</b>	<b>26.95</b>	<b>31.00</b>	<b>31.92</b>	<b>31.05</b>
Interest Rate	13.50%	13.50%	13.50%	13.50%
<b>Interest</b>	<b>3.64</b>	<b>4.18</b>	<b>4.31</b>	<b>4.19</b>

7. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act, 2003. Tamil Nadu Generation and Distribution Corporation Limited, (TANGEDCO), a subsidiary of TNEB Limited and one of the successor entities to the erstwhile Tamil Nadu Electricity Board (TNEB), Respondent No. 4 has filed reply



dated 10.3.2015. TANGEDCO has raised the issue of cost over-run, initial spares, additional capital expenditure, O&M Expenses, floating rate of interest on loan, license fee and service tax, etc. TANGEDCO has further submitted that the instant asset are only for contingency requirements of evacuation of IL&FS power and the instant assets shall become redundant on commissioning of Nagapattinam-Salem 765 kV line and Salem-Madhugiri 764 kV line. Hence, the transmission charges need to be paid only by IL&FS or any other beneficiary availing LTA for the life time of these assets. PEL Power Limited (PELPL), Respondent No. 17 has also filed reply dated 17.3.2015. PELPL has submitted that due to non-availability of one of the statutory clearance, it has not been able to establish its generating station. Thus, it had claimed force majeure condition in line with the Bulk Power Transmission Agreement signed with the petitioner and the petitioner was kept well informed of the situation, much before the date of investment approval by its Board of Directors. As such, it is not responsible to pay any transmission charges. IL&FS has filed its reply to the petition vide affidavit dated 15.3.2016 and it has basically raised the issue of its liability towards payment of transmission charges. The petitioner has filed rejoinder to the reply of TANGEDCO vide affidavit dated 30.4.2015. The petitioner has not filed rejoinder to the reply of PELPL. The issues raised by TANGEDCO, PELPL and IL&FS and the clarification given by the petitioner to TANGEDCO'S reply are addressed in the relevant paragraphs of this order.



8. Having heard the representatives of the parties and perused the material available on record we proceed to dispose of the petition.

**Capital cost**

9. 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 13 of these regulations;

(f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations; 39

(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.

10. The petitioner vide affidavit dated 2.3.2016 has submitted the Auditors' Certificate dated 6.1.2016 alongwith re-apportionment of approved estimated cost





of the instant assets. The details of the approved re-apportioned capital cost, capital cost as on the date of commercial operation and estimated additional capital expenditure incurred or projected to be incurred for the instant transmission assets are as given hereinafter:-

Particulars	Original approved apportioned cost	Approved Re-apportioned cost	Claimed capital cost as on COD	Additional capital expenditure Incurred/Projected		Total estimated completion cost
				2015-16	2016-17	
Asset-1	7761.74	8001.98	5350.79	1948.99	651.46	7951.24
Asset-2	2033.00	1793.44	842.28	194.48	114.76	1151.52
<b>Total</b>	<b>9794.74</b>	<b>9795.42</b>	<b>6193.07</b>	<b>2143.47</b>	<b>766.22</b>	<b>9102.76</b>

### **Cost over-run**

11. TANGEDCO has submitted that the petitioner has stated in the original petition that anticipated completion cost is ₹9925 lakh as against the approved cost of ₹9725 lakh and it is due to higher award cost received in competitive bidding but the petitioner has not submitted the approval of its Board of Directors for the revised cost estimate. The petitioner in its rejoinder has submitted that it is a statement of fact.

12. We have considered the submissions of TANGEDCO and the petitioner. The total estimated completion cost of the instant assets is ₹9102.76 lakh against the original total approved cost of ₹9795.00 lakh. However, it is observed that against the total approved cost of ₹9794.74 lakh (Asset-1: ₹7761.74 lakh+Asset-2: ₹2033.00 lakh) as per the original petition, the petitioner has submitted the reapportioned approved cost of ₹9795.42 lakh (Asset-1: 8001.98 lakh+Asset-2: 1793.44 lakh) but



without any approval of its Board of Directors or any justification for re-apportionment. It is also observed that the instant assets form the entire scope of the project as described and covered in the Investment Approval. Thus, not only there is a small difference in the total approved cost, there is difference in apportionment in between the instant assets.

13. As per the reapportioned approved cost, there is no cost over-run in case of instant transmission assets. However, the petitioner is directed to submit proper justification and approval of the Board of Directors for both apportionment and re-apportionment of approved estimated cost at the time of truing-up.

#### **Time over-run**

14. The project was scheduled to be commissioned within 18 months from the date of investment approval of 13.1.2014. Accordingly, the scheduled date of commercial operation works out to 13.7.2015 against which, Asset-1 and Asset-2 have been commissioned on 29.9.2015 and 9.11.2015 respectively. Thus, there is time over-run of 2 months and 16 days in the commissioning of Asset-1 and 3 months and 27 days in the commissioning of Asset-2.

15. The petitioner was directed to submit, vide RoP for the hearing held on 6.10.2015, details of time over-run alongwith documentary evidence and chronology of events. The petitioner vide affidavit dated 2.3.2016 has submitted the reasons for delay in commissioning of Asset-1 to be mainly due to RoW issues and in case of



Asset-2 to be mainly on account of non-availability of shutdown on 400 KV Neyveli TS-II exp. from SRPC.

16. The petitioner has not submitted any valid documentary evidence for time over-run in the commissioning of Asset-1. As such, we are not inclined to condone the delay of 2 months and 16 days in the commissioning of Asset-1. In case of Asset-2, there was a delay of about 10 months on account of obtaining SRPC approval for shutdown. Therefore, the delay of 3 months and 27 days in the commissioning of Asset-2 is condoned.

### **Treatment of IDC and IEDC**

17. The petitioner has submitted Management Certificate dated 9.10.2014 vide affidavit dated 7.1.2015 and claimed Interest During Construction (IDC) of ₹327.22 lakh and ₹30.00 lakh for Asset-1 and Asset-2 respectively. The petitioner was directed vide RoP for hearing held on 6.10.2015, to submit computation of actual IDC on cash basis along with editable soft copy of computation in Excel Format. The petitioner, in response thereof, vide affidavit dated 2.3.2016 has submitted Auditors' Certificate dated 6.1.2016 and has claimed IDC of ₹159.05 lakh and ₹7.38 lakh as accrued IDC as on COD for Asset-1 and Asset-2 respectively, but without any computation in soft copy. However, vide affidavit dated 2.3.2016, the petitioner has submitted a statement showing IDC computation but without loan wise computation, although it indicates that no IDC has been discharged up to COD for the instant assets. Thus, the IDC claimed is treated as undischarged IDC as on



COD for instant assets.

18. The petitioner has indicated in the IDC statement a proposed loan i.e. Bond-L amounting to ₹787.65 lakh and ₹589.60 lakh for Asset-1 and Asset-2 respectively, but in Form-9C and Form-12B, the principal amount towards proposed loan i.e. Bond-L has been indicated as ₹676.32 lakh and ₹584.43 lakh for Asset-1 and Asset-2 respectively. As such, due to variation in the submissions of the petitioner, we have considered the loan amounts as submitted in Form-9C and Form-12B for computation of IDC in this order. Accordingly, IDC on cash basis as on COD has been worked out as NIL for both the assets and undischarged IDC as on COD, amounting to ₹159.05 lakh and ₹7.38 lakh for Asset-1 and Asset-2 respectively, as submitted by the petitioner has been reduced from the capital cost claimed for the respective asset as on COD. The IDC to be discharged after COD shall be allowed as additional capital expenditure of the concerned year at the time of truing-up subject to submission of required details by the petitioner.

19. In case of Asset-1, the delay of 2 months and 16 days in the commissioning has not been condoned. The petitioner, vide affidavit dated 2.3.2016 has submitted that ₹119.02 lakh is the amount of IDC for the period of scheduled COD to actual COD in case of Asset-1. However, as the entire claim of IDC has been treated as undischarged IDC and the capital cost of Asset-1 as on COD has been reduced by the amount of IDC claimed, the actual recovery of IDC due to time over-run shall be decided at the time of truing-up.



20. In view of above, the undischarged liability pertaining to IDC would be considered once it is paid, subject to submission of adequate information and prudence check at the time of truing-up. Therefore, the petitioner is directed to submit the details related to payment of actual IDC on cash basis and loan wise IDC discharged after COD along with reasons/clarification for difference in loan amount i.e. Bond-L indicated in Form-9C and the IDC statement at the time of truing-up.

21. Similarly, the petitioner was directed vide RoP for hearing held on 6.10.2015, to submit details of Incidental Expenditure During Construction (IEDC) incurred upto COD alongwith liquidated damages recovered or recoverable, if any. The petitioner vide affidavit dated 2.3.2016 has submitted Auditors' Certificate dated 6.1.2016 and has claimed IEDC of ₹36.82 lakh and ₹0.28 lakh for Asset-1 and Asset-2 respectively. In case of Asset-2, IEDC of ₹0.28 lakh, as claimed by the petitioner, has been considered for the purpose of tariff calculations in this order. However, in case of Asset-1, the delay of 2 months and 16 days in the commissioning has not been condoned. Accordingly, the IEDC claimed for Asset-1 has been reduced on pro-rata basis as under:-

(₹ in lakh)	
Particulars	Amount
IEDC claimed as on COD	36.82
Disallowed due to time over-run	11.97
<b>Admissible IEDC as on COD</b>	<b>24.85</b>

### **Initial Spares**

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



**“13. Initial Spares**

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

(d) Transmission system

(i) Transmission line - 1.00%

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

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

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

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

(vi) Communication system-3.5%

Provided that:

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

(ii) -----

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

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

23. The petitioner initially claimed initial spares of ₹438.12 lakh towards sub-station of Asset-1. The petitioner has not claimed any initial spares for Asset-2. The percentage of initial spares works out to 12.47% of the sub-station cost. TANGEDCO in its reply submitted that the petitioner has claimed initial spares for sub-station as 12.47% of the capital cost and as per petitioners submission there is no norm specified in Regulations in respect of initial spares for brown field GIS sub-



stations. Therefore, the petitioner is eligible to claim only 5% of capital cost as initial spares since the asset is GIS sub-station as per Regulation 13(d)(V). As such, due to excess claim of initial spares included in the capital cost, an excess amount of ₹181.31 lakh has been claimed as transmission tariff for the block 2014-19. Hence, the claim for initial spares be restricted to 5% to be included in the capital cost for tariff purpose irrespective of whether it is Greenfield or Brown field.

24. The petitioner in its rejoinder dated 30.4.2015 has submitted that the instant asset is a brown field project i.e., extension of bays at Nagapattinam Pooling Station and accordingly the initial spares of ₹438 lakh has been claimed as per actual. Although, in the green field projects (i.e. new sub-stations) normally a large number of bays are commissioned under single project and the spares are taken against these large numbers of bays and equipments. However, in the instant case only two bays at Nagapattinam pooling station are commissioned as compared to large number of bays and sub-station equipments in green field project. Even though similar type of spares have been procured for this system as is normally done for green field project, the percentage of cost of initial spares with reference to the project capital cost in the instant case is higher due to lesser number of equipments as compared to green field project. As per the regulation 13(d) of 2014 Tariff Regulations, norm of claiming 5% of capital cost as initial spares is permitted for GIS. However, no norms have been specified for initial spares for brown field GIS projects, but the requirement of initial spares for brown field projects has been appreciated and higher percentage of initial spare for brown field AIS projects as



compared to the green field AIS projects have been allowed in the 2014 Tariff Regulations. Therefore, the petitioner requested that the requirement of spare under this small extension work may be allowed as per actual while determination of transmission tariff till the norms for initial spares for brown field GIS project are notified.

25. The petitioner vide affidavit dated 2.3.2016 has submitted the revised apportionment of the approved cost and its claim for initial spares. The details of initial spares claim submitted by the petitioner vide auditor certificate dated 6.1.2016 are as under :-

Particulars	Revised apportioned cost	Total cost*		Initial spares		% age
		TL	S/S	TL	S/S	
Asset-1	8001.98	3818.15	3599.39	-	177.67	4.93%
Asset-2	1793.44	1151.33	-	-	-	-

26. Accordingly, as the petitioners' revised claim of ₹177.67 lakh is within the ceiling norms as specified in the 2014 Tariff Regulations, the same is allowed for tariff purpose in this order.

### **De-capitalisation**

27. The petitioner vide RoP for hearing dated 6.10.2015 was directed to confirm if any asset has been de-capitalised or has not been in use due to commissioning of instant asset. The petitioner was directed to submit details of date of capitalisation/date from which the asset has not been in use, gross block and





cumulative depreciation till the date of de-capitalisation, in case any asset has been de-capitalised.

28. The petitioner, in response submitted vide affidavit dated 2.3.2016 as under:-

“With regard to the above query, it is submitted that with the Re-conductoring of Neyveli TS-II-TS-I Transmission Line with HTLS conductor, the ACSR Moose conductor and hardware accessories for conductor have been replaced. In regard to ACSR Moose conductor, it is submitted that considerable amount of the retrieved ACSR Moose Conductor is in serviceable condition. The petitioner therefore, proposes to utilize/re-use the ACSR Moose conductor in Transmission System for development of Pooling Station in Southern region at no cost. With regard to hardware accessories for conductor, it is submitted that during de-stringing, these hardware accessories were broken and are not in condition for re-use due to wear & tear and aging. These unserviceable hardware accessories after removal have no value except the scrap. Accordingly, after completion of project, the scrap value of hardware accessories and conductor (bits & wastage) shall be finalized and the adjustment shall be made from the amount in the subject asset at the time of truing-up.”

29. Despite our clear direction to the petitioner to submit the information regarding decapitalisation, the petitioner has not submitted the information. We do not appreciate the approach of the petitioner. In a similar case, we have earlier dealt with the issue of de-capitalisation, wherein the petitioner had submitted the details of gross block and cumulative depreciation. The relevant portion of the order dated 12.4.2016 in Petition No. 104/TT/2013 is as under:-

“28 .....tariff for these de-capitalised conductors has been claimed without any mention of the replacement of the conductor. We have noted that the above said petitions were filed for truing-up for the tariff block 2009-14 along with 2014-19 tariff petitions and the Commission has already issued orders in these petitions. The petitioner should have disclosed the correct information with regard to the replacement of conductor in these petitions. The Commission is of the view that such lapses are not expected of the petitioner. However, taking into account the fact that the decapitalized conductors have been replaced by new conductors, the Gross Block of the old de-capitalised conductors has been deducted from the Gross Block of the instant asset.....”



30. As such, in the absence of information, 30% of completion cost of new asset has been assumed and considered as the net value of the replaced asset for the purpose of de-capitalisation. Accordingly, ₹345.46 lakh (i.e. 30% ₹1151.52) has been considered as de-capitalised amount and the same has been reduced from capital cost as on COD for the Asset-2. However, the actual de-capitalisation shall be reviewed at the time of true-up on submission of details as directed vide RoP dated 6.10.2015.

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

31. The details of capital cost as on the date of commercial operation for the instant transmission assets after adjustment of IDC and IEDC, initial spares and de-capitalisation is considered as per Regulation 9 (2) of the 2014 Tariff Regulations, as under:-

(₹ in lakh)					
Particulars	Capital cost claimed as on COD	Un-discharged		De-capitalisation of asset	Capital cost allowed as on COD
		IDC	IEDC		
1	2	3	4	5	6=(2-3-4-5)
Asset-1	5350.79	159.05	11.97	-	5179.77
Asset-2	842.28	7.38	-	345.46	489.44

32. The details of element wise break-up of capital cost as on COD are as under:-

(₹ in lakh)		
Particulars	Asset-1	
	Capital cost as on COD as per Auditor's certificate dated 6.1.2016 (affidavit dated. 2.3.2016)	Admitted capital Cost
Freehold Land	-	-
Leasehold Land	-	-



Building & Other Civil Works	139.07	134.63
Transmission Line	2587.94	2505.23
Sub-Station Equipments	2512.59	2432.29
PLCC	111.19	107.64
<b>Total</b>	<b>5350.79</b>	<b>5179.77</b>
<b>Particulars</b>	<b>Asset-2</b>	
	<b>Capital cost as on COD as per Auditor's certificate dated 6.1.2016 (affidavit dated. 2.3.2016)</b>	<b>Admitted capital Cost</b>
Freehold Land	-	-
Leasehold Land	-	-
Building & Other Civil Works	-	-
Transmission Line	842.28	489.44
Sub-Station Equipments	-	-
PLCC	-	-
<b>Total</b>	<b>842.28</b>	<b>489.44</b>

### **Additional Capitalisation**

33. 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.

34. 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”.

“Provided that the cut-off date may be extended by the Commission if it is proved on the basis of documentary evidence that the capitalisation could not be made within the cut-off date for reasons beyond the control of the project developer;”

35. The cut-off date in the case of instant transmission assets is 31.3.2018.

36. TANGEDCO has submitted that petitioner has not furnished the details with regard to balance and retention payments claimed as additional capital expenditure and the petitioner should furnish the details to establish the necessity of these liabilities. We have considered the claim of the petitioner with regard to additional capital expenditure incurred or projected to be incurred. The additional capital expenditure claimed by petitioner in respect of the instant transmission assets for Asset-1 and Asset-2 is within the cut-off date and is on account of balance payments. However, the petitioner is directed to submit the actual capital expenditure towards new addition to the gross block (i.e. additional capitalisation made during the year in books of account) and the cost towards the discharge of liability as on COD in respect of Asset-1, Asset-2 separately at the time of truing-up.

37. The additional capital expenditure claimed in respect of the instant transmission assets is allowed. The additional capital expenditure approved for the purpose of tariff is as follows:-



(₹ in lakh)

Particulars	Asset-1	
	2015-16	2016-17
Freehold Land	-	-
Leasehold Land	-	-
Building & Other Civil Works	56.02	50.00
Transmission Line	979.15	350.95
Sub-Station Equipments	895.90	250.51
PLCC	17.92	-
<b>Total</b>	<b>1948.99</b>	<b>651.46</b>
Particulars	Asset-2	
	2015-16	2016-17
Freehold Land	-	-
Leasehold Land	-	-
Building & Other Civil Works	-	-
Transmission Line	194.48	114.76
Sub-Station Equipments	-	-
PLCC	-	-
<b>Total</b>	<b>194.48</b>	<b>114.76</b>

**Capital cost as on 31.3.2019**

38. Based on the above, capital cost as on 31.3.2019 has been considered as per details given below:-

(₹ in lakh)

Particulars	Asset-1			
	As on COD	Add Cap		As on 31.3.2019
		2015-16	2016-17	
Freehold Land	-	-	-	-
Leasehold Land	-	-	-	-
Building & Other Civil Works	134.63	56.02	50.00	240.65
Transmission Line	2505.23	979.15	350.95	3835.33
Sub-Station Equipments	2432.29	895.90	250.51	3578.70
PLCC	107.64	17.92	-	125.56
<b>Total</b>	<b>5179.77</b>	<b>1948.99</b>	<b>651.46</b>	<b>7780.22</b>
Particulars	Asset-2			
	As on COD	Add Cap		As on 31.3.2019
		2015-16	2016-17	
Freehold Land	-	-	-	-
Leasehold Land	-	-	-	-
Building & Other Civil Works	-	-	-	-
Transmission Line	489.44	194.48	114.76	798.68
Sub-Station Equipments	-	-	-	-



PLCC	-	-	-	-
<b>Total</b>	<b>489.44</b>	<b>194.48</b>	<b>114.76</b>	<b>798.68</b>

### **Debt- Equity ratio**

39. Clause 1 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.

40. The capital cost on the dates of commercial operation arrived at as above and additional capitalization allowed have been considered in the normative debt-equity ratio of 70:30. The details of debt-equity in respect of instant assets as on the date of commercial operation and 31.3.2019 considered on normative basis are as follows:-



(₹ in lakh)

Particulars	Asset-1				
	As on COD	Add-cap for		As on 31.3.2019	
	Amount	2015-16	2016-17	Amount	% age
Debt	3625.84	1364.29	456.02	5446.16	70.00
Equity	1553.93	584.70	195.44	2334.07	30.00
<b>Total</b>	<b>5179.77</b>	<b>1948.99</b>	<b>651.46</b>	<b>7780.22</b>	<b>100.00</b>
Particulars	Asset-2				
	As on COD	Add-cap for		As on 31.3.2019	
	Amount	2015-16	2016-17	Amount	% age
Debt	342.61	136.14	80.33	559.08	70.00
Equity	146.83	58.34	34.43	239.60	30.00
<b>Total</b>	<b>489.44</b>	<b>194.48</b>	<b>114.76</b>	<b>798.68</b>	<b>100.00</b>

**Return on equity**

41. 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....”

Provided that:

(i) In case of projects commissioned on or after 1<sup>st</sup> 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 0.50% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) Additional RoE 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: -----“

**“25. Tax on Return on Equity:**

(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.”

42. 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% based on the rate prescribed as per illustration under Regulation 25 (2) (i) of the 2014 Tariff 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. 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.

43. 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.

44. 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 return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is





paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the RoE determined is as given under:-

(₹ in lakh)				
Particulars	Asset-1			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Equity	1553.93	2138.63	2334.07	2334.07
Addition due to Additional Capitalization	584.70	195.44	-	-
Closing Equity	2138.63	2334.07	2334.07	2334.07
Average Equity	1846.28	2236.35	2334.07	2334.07
Return on Equity (Base Rate )	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre Tax )	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	<b>183.51</b>	<b>438.55</b>	<b>457.71</b>	<b>457.71</b>
Particulars	Asset-2			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Equity	146.83	205.18	239.60	239.60
Addition due to Additional Capitalization	58.34	34.43	-	-
Closing Equity	205.18	239.60	239.60	239.60
Average Equity	176.00	222.39	239.60	239.60
Return on Equity (Base Rate )	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre Tax )	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	<b>13.62</b>	<b>43.61</b>	<b>46.99</b>	<b>46.99</b>

### **Interest on loan**

45. 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 65 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.”

46. In keeping with the provisions of Regulation 26 of the 2014 Tariff Regulations, the petitioner’s entitlement to interest on loan has been calculated on the following basis:-

(a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition;



- (b) The repayment for the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for that period;
- (c) Notwithstanding moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed;
- (d) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan; and
- (e) As per Regulation 26(5), only actual loans have been considered for computation of weighted average rate of interest.

47. The petitioner has submitted that the interest on loan has been considered on the basis of rate prevailing as on COD and the change in interest due to floating rate of interest applicable, if any, for the project needs to be claimed/ adjusted over the tariff block of 5 years directly from the beneficiaries. TANGEDCO has submitted that there is no specific provision in this regard in the 2014 Tariff Regulations.

48. We would like to clarify that the interest on loan has been calculated 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.



49. Detailed calculations in support of interest on loan have been given at Annexure-1 to Annexure-2 of this order.

50. The details of Interest on Loan calculated are as under:-

Particulars	Asset-1			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Gross Normative Loan	3625.84	4990.14	5446.16	5446.16
Cumulative Repayment upto Previous Year	-	163.72	554.45	961.90
Net Loan-Opening	3625.84	4826.42	4891.71	4484.26
Addition due to Additional Capitalisation	1364.29	456.02	-	-
Repayment during the year	163.72	390.73	407.45	407.45
Net Loan-Closing	4826.42	4891.71	4484.26	4076.81
Average Loan	4226.13	4859.06	4687.98	4280.54
Weighted Average Rate of Interest on Loan	8.23%	8.23%	8.23%	8.23%
<b>Interest on Loan</b>	<b>176.33</b>	<b>399.99</b>	<b>385.91</b>	<b>352.37</b>
Particulars	Asset-2			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Gross Normative Loan	342.61	478.74	559.08	559.08
Cumulative Repayment upto Previous Year	-	12.22	51.36	93.53
Net Loan-Opening	342.61	466.52	507.71	465.54
Addition due to Additional Capitalisation	136.14	80.33	-	-
Repayment during the year	12.22	39.14	42.17	42.17
Net Loan-Closing	466.52	507.71	465.54	423.37
Average Loan	404.57	487.12	486.63	444.46
Weighted Average Rate of Interest on Loan	8.40%	8.40%	8.40%	8.40%
<b>Interest on Loan</b>	<b>13.41</b>	<b>40.92</b>	<b>40.88</b>	<b>37.33</b>

### **Depreciation**

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



## "27. Depreciation:

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

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

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

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

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

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

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

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

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



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

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

52. The Asset-1 and Asset-2 have been put under commercial operation on 29.9.2015 and 9.11.2015 respectively. Accordingly, the depreciation for the instant assets has been calculated annually based on Straight Line Method and at rates specified in Appendix-II to the 2014 Tariff Regulations.

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

(₹ in lakh)				
Particulars	Asset-1			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Gross Block as on COD	5179.77	7128.76	7780.22	7780.22
Addition during 2014-19 due to Projected Additional Capitalisation	1948.99	651.46	-	-
Gross Block as on 31 <sup>st</sup> March	7128.76	7780.22	7780.22	7780.22
Average Gross Block	6154.27	7454.49	7780.22	7780.22
Rate of Depreciation	5.2486%	5.2416%	5.2369%	5.2369%
Depreciable Value	5538.84	6709.04	7002.20	7002.20
Remaining Depreciable Value	5538.84	6545.33	6447.75	6040.30
<b>Depreciation</b>	<b>163.72</b>	<b>390.73</b>	<b>407.45</b>	<b>407.45</b>
Particulars	Asset-2			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Gross Block as on COD	489.44	683.92	798.68	798.68
Addition during 2014-19 due to Projected Additional Capitalisation	194.48	114.76	-	-
Gross Block as on 31 <sup>st</sup> March	683.92	798.68	798.68	798.68
Average Gross Block	586.68	741.30	798.68	798.68
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	528.01	667.17	718.81	718.81
Remaining Depreciable Value	528.01	654.95	667.45	625.28
<b>Depreciation</b>	<b>12.22</b>	<b>39.14</b>	<b>42.17</b>	<b>42.17</b>



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

54. Regulation 29 (4) (a) of the 2014 Tariff Regulations specifies the norms for operation and maintenance 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:-

<b>Elements</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
D/C twin conductor T/L (₹ lakh per km)	0.731	0.755	0.780	0.806
400 kV GIS bays (₹ lakh per bay)	53.25	55.02	56.84	58.73

55. The petitioner has not claimed O&M Expenses for Asset-2. Accordingly, the petitioner's entitlement to O&M Expenses has been worked out and the allowable O&M expenses for Asset-1 are as under:-

<b>Elements</b>	<b>(₹ in lakh)</b>			
	<b>2015-16 (pro-rata)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
23 km, D/C twin conductor T/L	8.50	17.376	17.94	18.54
2 nos. 400 kV GIS bays	53.83	110.04	113.68	117.46
<b>Total</b>	<b>62.33</b>	<b>127.416</b>	<b>131.62</b>	<b>136.00</b>

56. 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 w.e.f. 1.1.2017 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.

57. TANGEDCO has submitted that the petitioner has stated that the wage revision of the employees is due w.e.f. 1.1.2017 and has reserved the right to approach the Commission as the actual impact of the wage hike was not factored in fixation of the normative O&M Expenses for the tariff block 2014-19. However, the 2014 Tariff Regulations do not provide for revising the normative O&M Expenses based on the actuals and hence may be negated. The petitioner has submitted that norms for O&M expenditure for tariff block 2014-19 have been arrived at by considering normalized actual O&M expenses of the petitioner during the years 2008-09 to 2012-13. Further, it being a CPSU, the scheme of wage revision is binding on it and the O&M rates prescribed for tariff block 2014-19 were fixed without factoring the wage revision due from 1.1.2017. Thus, the prayer has been made in line with the provision of Regulation 19(f)(ii) of the 2009 Tariff Regulations for suitable revision in the norms for O&M Expenditure for claiming the impact of wage hike, if any, during 2014-19.

58. We have considered the submissions of TANGEDCO and the petitioner. The O&M Expenses have been worked out as per the norms specified in the 2014 Tariff Regulations. Any application filed by the petitioner with regard to the impact of wage revision will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.





### **Interest on working capital**

59. Clause 1 (c) and 3 of Regulation 28 and Clause 5 of Regulation 3 of the 2014

Tariff Regulations specify as follows:-

**“28. Interest on Working Capital:** (1) The working capital shall cover:

(a)-----

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

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

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

(iii) Operation and maintenance expenses for one month”

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

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

60. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points). The interest on working capital as determined is as under:-

Particulars	Asset-1			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Maintenance Spares	9.35	19.11	19.74	20.40
O & M expenses	5.19	10.62	10.97	11.33
Receivables	98.94	232.00	236.46	231.51

(₹ in lakh)



<b>Total</b>	<b>113.49</b>	<b>261.73</b>	<b>267.17</b>	<b>263.24</b>
Interest Rate	13.50%	13.50%	13.50%	13.50%
<b>Interest</b>	<b>7.77</b>	<b>35.33</b>	<b>36.07</b>	<b>35.54</b>
<b>Particulars</b>	<b>Asset-2</b>			
	<b>2015-16 (pro-rata)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Maintenance Spares	-	-	-	-
O & M expenses	-	-	-	-
Receivables	6.60	21.09	22.17	21.57
<b>Total</b>	<b>6.60</b>	<b>21.09</b>	<b>22.17</b>	<b>21.57</b>
Interest Rate	13.50%	13.50%	13.50%	13.50%
<b>Interest</b>	<b>0.35</b>	<b>2.85</b>	<b>2.99</b>	<b>2.91</b>

### Transmission charges

61. The transmission charges allowed for the instant transmission assets are summarized as under:-

(₹ in lakh)				
<b>Particulars</b>	<b>Asset-1</b>			
	<b>2015-16 (pro-rata)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	163.72	390.73	407.45	407.45
Interest on Loan	176.33	399.99	385.91	352.37
Return on Equity	183.51	438.55	457.71	457.71
Interest on Working Capital	7.77	35.33	36.07	35.54
O & M Expenses	62.33	127.42	131.62	136.00
<b>Total</b>	<b>593.65</b>	<b>1392.02</b>	<b>1418.75</b>	<b>1389.06</b>
<b>Particulars</b>	<b>Asset-2</b>			
	<b>2015-16 (pro-rata)</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	12.22	39.14	42.17	42.17
Interest on Loan	13.41	40.92	40.88	37.33
Return on Equity	13.62	43.61	46.99	46.99
Interest on Working Capital	0.35	2.85	2.99	2.91
O & M Expenses	-	-	-	-
<b>Total</b>	<b>39.60</b>	<b>126.52</b>	<b>133.03</b>	<b>129.40</b>

62. 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, filing fees, license fee, RLDC fees and charges



or any other kind of impositions or surcharges etc. The same if imposed shall be borne and additionally paid by the respondents. The petitioner can make claims as per the prevailing regulations. We have allowed transmission tariff as per the 2014 Tariff Regulations.

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

63. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

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

64. The petitioner has requested to allow it to bill and recover License fee and RLDC fees and charges, separately from the respondents. TANGEDCO has submitted that in reply to the various petitions, it has requested that the claim of the petitioner may not be allowed and hence the claim in this petition may also be negated. The petitioner has submitted that as per Regulation 52 of the 2014 Tariff Regulations, application filing fee, expenses incurred on publication of notices in newspapers and license fee are recoverable separately from the beneficiaries.

65. We have considered the submissions of TANGEDCO and the petitioner. 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.

### **Service Tax**

66. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list at any time in future. TANGEDCO has submitted that the Government of India has exempted transmission services from the purview of levy of service tax and hence future claims in this regard may be negated. The petitioner has further prayed that if any taxes and duties including cess etc. are imposed by any statutory/ Government/ municipal authorities, it shall be allowed to be recovered from the beneficiaries. We have considered the submissions of the petitioner and TANGEDCO and consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

### **Sharing of Transmission Charges**

67. TANGEDCO has submitted that the petitioner has stated that as per the approval of the Standing Committee and SRPC during 36th and 23rd meetings respectively, the transmission scheme has been evolved as a contingency plan for evacuation of power from IL&FS till such time of completion of original scheme for evacuation of power from IL&FS. The transmission charges have to be borne by IL&FS. It has been stated that on commissioning of Nagapattinam-Salem 765 kV line and Salem-Madhugiri 764 kV line, the tariff of instant assets covered under contingency plan will be included in the PoC charges and shared by the



respondents of this petition. Therefore, it is submitted that on commissioning of Nagapattinam-Salem 765 kV line and Salem-Madhugiri 764 kV line, the assets covered under the instant petition will become redundant and the respondents need not pay the charges. Hence, it is requested that the petitioner be directed to claim the tariff from IL&FS and any other beneficiary availing LTA for the life time of the asset.

68. PELPL has submitted that the transmission system including the pooling station has been planned and envisaged to be established by the petitioner with the full knowledge that the PELPL would not be utilising the pooling station in question and with full knowledge that the generating station would not come up to use the system. Further, as per the suggestion of the petitioner itself, the 2nd pooling station may be proposed which may be utilised and the said proposal was accepted by PELPL. The pooling station and associated facilities in question has been proposed to be established much after PELPL had stated that it would not be requiring the present pooling station as the generating station is delayed due to force majeure conditions, and hence PELPL should not have been arrayed as a respondent to the present proceedings or be levied with transmission charges for the pooling station in question. In the circumstances, the question of continued use of open access and payment of transmission charges does not arise.

69. IL&FS has submitted that TANGEDCO had contended that on commissioning of Nagapattinam-Salem and Salem-Madhugiri 765 KV lines, the instant assets will become redundant and the respondents need not pay the



transmission charge since the scheme was evolved as a contingency plan for evacuation of power till completion of original scheme for evacuation of power from IL&FS. Thus, the transmission tariff is to be claimed by the petitioner from IL&FS and any other beneficiaries availing LTA for the life time of the instant assets. However, it is evident that under the present scenario, only one generation project of IL&FS (1150MW) is functional and the likelihood of any further generation projects in the vicinity in the near future is uncertain in Nagapattinam/Cuddalore area and as stated by the petitioner, the LILO arrangement identified in the contingency plan and common transmission system shall provide additional reliability to the grid, therefore, it becomes a part of main transmission system. As such, the petitioner has stated that AFC shall be shared as per Regulation 43 of the 2014 Tariff Regulations and these charges shall be recovered on monthly basis and shall be borne by IL&FS from the date of commissioning till such date when the transmission charges for the system is included under the billing, collection and disbursement of transmission charges to be governed by provision of Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 (2010 Sharing Regulations). IL&FS has submitted that that CTU granted the operationalisation of LTA of 540 MW to its generation project subject to completion of LILO of 2nd Circuit of Neyveli-Trichy 400 kV D/C line covered under the contingency scheme. The petitioner commissioned the LILO of 2<sup>nd</sup> circuit of Neyveli-Trichy covered under the contingency scheme and operationalised the LTA of 540 MW from IL&FS generation project to TANGEDCO and on the same day of the operationalisation of the LTA, IL&FS generation project



commenced the power supply to TANGEDCO. Further, as advised by the petitioner and in compliance with the requirement of 2010 Sharing Regulations IL&FS is paying the PoC charges as applicable for withdrawal zone in Tamil Nadu since the date from operationalisation of LTA i.e. 29.9.2015 for 540 MW and has established letter of credit in favour of the petitioner towards payment security. The instant assets are implemented by the petitioner on the direction of Commission due to delay in implementation of main trunk line viz. Nagapattinam-Salem and Salem-Madhugiri 765 kV Transmission lines by NMTNI, (a wholly owned subsidiary of the petitioner). IL&FS has submitted that the petitioner has amply clarified that LILO arrangement identified in the contingency plan and common transmission system shall provide additional reliability to the grid, therefore, it becomes a part of main transmission system. IL&FS has requested to include the transmission charges for the instant assets in the PoC charges under 2010 Sharing Regulations.

70. The petitioner vide affidavit dated 27.5.2015 has submitted that no specific agreement is signed w.r.t. instant assets and with regard to the date from which the LILO of Neyveli-Trichy line and Nagapattinam Sub-station shall be considered in the pool for sharing of transmission charges, the following need to be considered:-

- a) In the absence of specific agreement regarding the payment of transmission charges for these assets, the same shall have to be considered in the pool for sharing transmission charges from the COD.
- b) The LILO of the 2nd circuit of the Neyveli-Trichy D/C Line at Nagapattinam PS is executed exclusively for evacuation of power from



IL&FS. Hence, the same has to be considered as dedicated line constructed for IL&FS. In such case the charges are payable by the generator as per Clause 5 of Regulation 8 of 2010 Sharing Regulations.

71. We have considered the submissions of the petitioner, TANGEDCO, PELPL and IL&FS. LTA of IL&FS was operationalised on 29.9.2015. Asset-1 was also commissioned on 29.9.2015 and hence Asset-I shall be considered in POC pool from 29.9.2015 and Asset-2 from 9.11.2015. Accordingly the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time, as provided in Regulation 43 of the 2014 Tariff Regulations from date of COD of assets.

72. This order disposes of Petition No. 51/TT/2015.

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

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

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

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





**Annexure-1**

(₹ in lakh)

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN</b>						
	<b>Details of Loan</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
1	<b>Bond XLVIII</b>					
	Gross loan opening	0.00	2570.90	2570.90	2570.90	2570.90
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	2570.90	2570.90	2570.90	2570.90
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	2570.90	2570.90	2570.90	2570.90
	Average Loan	0.00	2570.90	2570.90	2570.90	2570.90
	Rate of Interest	0.00%	8.20%	8.20%	8.20%	8.20%
	Interest	0.00	210.81	210.81	210.81	210.81
	Rep Schedule	4 Equal Instalments on 23-01-2020, 23-01-2022, 23-01-2025 and 23-01-2030.				
2	<b>Bond XLIX</b>					
	Gross loan opening	0.00	387.00	387.00	387.00	387.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	387.00	387.00	387.00	387.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	387.00	387.00	387.00	387.00
	Average Loan	0.00	387.00	387.00	387.00	387.00
	Rate of Interest	0.00%	8.15%	8.15%	8.15%	8.15%
	Interest	0.00	31.54	31.54	31.54	31.54
	Rep Schedule	3 Equal Instalments on 09-03-2020, 09-03-2025, 09-03-2030				
3	<b>PROPOSED LOAN (Series L Bond)</b>					
	Gross loan opening	0.00	676.32	676.32	676.32	676.32
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	676.32	676.32	676.32	676.32
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	676.32	676.32	676.32	676.32
	Average Loan	0.00	676.32	676.32	676.32	676.32
	Rate of Interest	0.00%	8.40%	8.40%	8.40%	8.40%
	Interest	0.00	56.81	56.81	56.81	56.81
	Rep Schedule	12 Annual Instalments starting from 27-05-2019.				



	<b>Total Loan</b>					
	Gross loan opening	0.00	3634.22	3634.22	3634.22	3634.22
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	3634.22	3634.22	3634.22	3634.22
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	3634.22	3634.22	3634.22	3634.22
	Average Loan	0.00	3634.22	3634.22	3634.22	3634.22
	<b>Weighted Average Rate of Interest</b>	<b>0.0000%</b>	<b>8.2319%</b>	<b>8.2319%</b>	<b>8.2319%</b>	<b>8.2319%</b>
	<b>Interest</b>	<b>0.00</b>	<b>299.17</b>	<b>299.17</b>	<b>299.17</b>	<b>299.17</b>



**Annexure-2**

(₹ in lakh)

<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN</b>					
	<b>Details of Loan</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
1	<b>PROPOSED LOAN (Series L Bond)</b>				
	Gross loan opening	584.43	584.43	584.43	584.43
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	584.43	584.43	584.43	584.43
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	584.43	584.43	584.43	584.43
	Average Loan	584.43	584.43	584.43	584.43
	Rate of Interest	8.40%	8.40%	8.40%	8.40%
	Interest	49.09	49.09	49.09	49.09
	Rep Schedule	12 Annual Instalments starting from 27-05-2019.			
	<b>Total Loan</b>				
	Gross loan opening	584.43	584.43	584.43	584.43
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	584.43	584.43	584.43	584.43
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	584.43	584.43	584.43	584.43
	Average Loan	584.43	584.43	584.43	584.43
	<b>Weighted Average Rate of Interest</b>	<b>8.40%</b>	<b>8.40%</b>	<b>8.40%</b>	<b>8.40%</b>
	<b>Interest</b>	<b>49.09</b>	<b>49.09</b>	<b>49.09</b>	<b>49.09</b>

