

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 26/TT/2016**

**Coram:  
Shri A.S. Bakshi, Member  
Dr. M.K. Iyer, Member**

**Date of Hearing : 13.06.2016  
Date of Order : 30.06.2016**

**In the matter of:**

Determination of transmission tariff for 2019 for LILO of 400 kV Kapada-Kolar S/C line at NP Kunta and establishment of 400/220 kV Sub-station at NP Kunta under "Transmission System for Ultra Mega Solar Park in Anantpur District, Andhra Pradesh-Part A (Phase-I)" for the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

**And in the matter of:**

Power Grid Corporation of India Ltd.  
'SAUDAMINI', Plot No-2,  
Sector-29, Gurgaon -122 001 (Haryana).

.....**Petitioner**

**Versus**

1. Karnataka Power Transmission Corporation Ltd., (KPTCL),  
Kaveri Bhavan, Bangalore - 560 009
2. Transmission Corporation of Andhra Pradesh Ltd.,  
(APTRANSCO), Vidyut Soudha, Hyderabad- 500082
3. Kerala State Electricity Board (KSEB)  
Vaidyuthi Bhavanam  
Pattom, Thiruvananthapuram - 695 004
4. Tamilnadu Electricity Board (TNEB)  
NPKRR Maaligai, 800, Anna Salai  
Chennai - 600 002



5. Electricity Department  
Government of Goa  
Vidyuti Bhawan, Panaji, Goa 403001
6. Electricity Department  
Govt of Pondicherry,  
Pondicherry - 605001
7. Eastern Power Distribution Company of Andhra Pradesh  
Limited (APEPDCL)  
APEPDCL, P&T Colony,  
Seethmmadhara, Vishakhapatnam  
Andhra Pradesh
8. Southern Power Distribution Company of Andhra Pradesh  
Limited (APSPDCL)  
Srinivasasa Kalyana Mandapam Backside,  
Tiruchanoor Road, Kesavayana Gunta,  
TIRUPATI-517 501,  
Chittoor District, Andhra Pradesh
9. Central Power Distribution Company of Andhra Pradesh  
limited (APCPDCL)  
Corporate Office, Mint Compound,  
HYDERABAD - 500 063  
Andhra Pradesh
10. Northern Power Distribution Company of Andhra Pradesh  
Limited (APNPDCL)  
Opp. NIT Petrol Pump  
Chaitanyapuri, Kazipet,  
WARANGAL - 506 004  
Andhra Pradesh
11. Bangalore Electricity Supply Company Ltd., (BESCOM),  
Corporate Office, K.R-Circle  
BANGALORE, 560 001  
Karnataka
12. Gulbarga Electricity Supply Company Ltd., (GESCOM)  
Station Main Road, GULBURGA  
Karnataka
13. Hubli Electricity Supply Company Ltd., (HESCOM)  
Navanagar, PB Road, HUBLI, Karnataka



14. MESCOM Corporate Office,  
Paradigm Plaza, AB Shetty Circle  
MANGALORE - 575 001  
Karnataka

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

16. Transmission Corporation of Telangana Limited,  
Vidhyut Sudha, Khairatabad,  
Hyderabad, 500082

17. Andhra Pradesh Solar Power Corporation Private Limited,  
6-3-856/A3, Neeraj Public School Lane, opp to Green Park  
Hotel, Ameerpet,  
Hyderabad-500016

....**Respondents**

The following were present:-

**For Petitioner:** Shri S. S. Raju, PGCIL  
Shri M. M. Mondal, PGCIL  
Shri Rakesh Prasad, PGCIL  
Shri Jasbir Singh, PGCIL

**For Respondent:** Shri S. Vallinayagam, Advocate, TANGEDCO

### **ORDER**

The present petition has been filed by Power Grid Corporation of India Ltd. ("the petitioner") for determination of tariff for LILO of 400 kV Kapada-Kolar S/C line at NP Kunta and establishment of 400/220 kV Sub-station at NP Kunta under "Transmission System for Ultra Mega Solar Park in Anantpur District, Andhra Pradesh-Part A (Phase-I)" under Central Electricity Regulatory Commission



(Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from the date of commercial operation to 31.3.2019.

2. The respondents are distribution licensees or electricity departments or power procurement companies of States, who are procuring transmission service from the petitioner, mainly beneficiaries of Southern Region.

3. The brief facts of the case are as follows:-

(a) The investment approval for the project was accorded by Board of Directors of the petitioner company, vide Memorandum No. /CP/Solar Park-A.P-A dated 3.6.2015 with an estimated cost of ₹31294 lakh, based on price level of February, 2015. The total approved apportioned cost for the instant assets is ₹20279.00 lakh. As per the investment approval, the transmission asset was scheduled to be commissioned within 12 months from the date of investment approval, i.e. by 3.6.2016.

(b) The petitioner in its original petition has claimed the transmission charges of the single assets. Subsequently, the petitioner vide affidavit dated 21.6.2016, has submitted that out of all the assets covered in the petition only LILO of 400 kV Kadapa-Kolar S/C Line at NP Kunta alongwith associated line bays and 1 no of 500 MVA ICT along with its bays at NP Kunta Sub-station (referred as “**Asset I**”) has been commissioned on 28.4.2016. The remaining asset, namely 2x500 MVA transformer & 1x125



MVAR reactor alongwith associated bays at NP Kunta (referred as “**Asset II**”) are anticipated to be commissioned on 1.7.2016.

- (c) The scope of work covered under Transmission System for Ultra Mega Solar Park in Anantpur District, Andhra Pradesh- Part A (Phase-I) is as follows:-

**Transmission line:**

- (i) LILO of 400 kV Kapada-Kolar S/C line at NP Kunta Sub-station

**Sub-stations**

- (i) Establishment of 400/220 kV NP Kunta Sub-station with 3\*500 MVA Transformers  
(ii) 2 nos. 220 kV line bays at NP Kunta Pooling Station

**Reactive Compensation (already covered above)**

- (iii) 1x125 MVAR, 420 kV bus reactor at NP Kunta Sub-station  
(iv)  $\pm$  100 MVAR STATCOM at NP Kunta Pooling Station

- (d) Subsequently, vide affidavit dated transmission charges claimed by the petitioner are as under:-

(₹ in lakh)			
<b>Asset I</b>			
<b>Particulars</b>	<b>2016-17 (pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	296.23	465.00	499.8
Interest on Loan	393.71	597.27	614.67
Return on Equity	390.35	620.15	678.92
Interest on Working Capital	39.64	54.64	57.66
O&M Expenses	307.47	343.42	354.82
<b>Total</b>	<b>1427.40</b>	<b>2080.48</b>	<b>2205.87</b>



(₹ in lakh)

<b>Asset II</b>			
<b>Particulars</b>	<b>2016-17 (pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	174.36	250.27	250.27
Interest on Loan	189.4	255.61	234.91
Return on Equity	205.4	295.61	295.61
Interest on Working Capital	23.52	32.78	32.84
O&M Expenses	212.42	292.63	302.33
<b>Total</b>	<b>805.10</b>	<b>1126.90</b>	<b>1115.96</b>

(e) The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:-

(₹ in lakh)

<b>Asset I</b>			
<b>Particulars</b>	<b>2016-17 (pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
O & M Expenses	27.70	28.62	19.57
Maintenance Spares	49.86	51.51	53.22
Receivables	257.19	346.75	367.65
Total	334.75	426.88	450.44
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest</b>	<b>39.64</b>	<b>54.64</b>	<b>57.66</b>

(₹ in lakh)

<b>Asset II</b>			
<b>Particulars</b>	<b>2016-17 (pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
O & M Expenses	23.60	24.39	25.19
Maintenance Spares	42.48	43.89	45.35
Receivables	178.91	187.82	185.99
Total	244.99	256.10	256.33
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest</b>	<b>23.52</b>	<b>32.78</b>	<b>32.84</b>

4. The annual fixed charges for the instant asset were allowed under Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC charges vide order dated 16.5.2016 based on anticipated COD. The petitioner has submitted the status of COD, IDC on cash basis, Auditor Certificates and revised



tariff forms for Asset I & II vide affidavit dated 21.6.2016 and the same has been considered for the purpose of computation of tariff.

5. The petitioner has served the petition to 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. The hearing in this matter was held on 13.6.2016. Respondent No. 3, Kerala State Electricity Board (hereinafter to be referred as "KSEB") and Respondent No. 4, TANGEDCO (hereinafter to be referred as "TANGEDCO"), has filed its reply vide affidavit dated 19.3.2016. The petitioner has submitted the rejoinder to the reply of KSEB vide affidavit dated 8.6.2016.

#### **Commercial Operation Date ("COD")**

6. 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"



7. The petitioner, vide affidavit dated 21.6.2016, has submitted that Asset I was commissioned on 28.4.2016 and Asset II is anticipated to be commissioned on 1.7.2016. The petitioner has submitted RLDC trial run operation certificate for Asset I dated 10.6.2016. Tariff for Asset II is allowed in this order as it is anticipated to be commissioned on 1.7.2016. We have considered the COD of Assets I and II as 28.4.2016 and 1.7.2016 respectively. Accordingly, the tariff is worked out for the instant assets from the COD to 31.3.2019. However, the petitioner is directed to provide RLDC trial run certificate for Asset II at the time of true up.

### **Capital Cost**

8. The petitioner has claimed the capital cost ₹4704.27 lakh and ₹4131.65 lakh for Asset I and II respectively as on actual/anticipated COD. The details of the capital cost claimed by the petitioner and the estimated completion is as follows:-

(₹ in lakh)						
Asset	Approved apportioned cost*	Expenditure up to COD	Additional capital expenditure			Estimated completion cost
			2016-17	2017-18	Total	
Asset I	20279.00	4704.27	4494.98	1926.42	6421.40	11125.68
Asset II		4131.65	712.60	0.00	712.60	4844.25
		8835.92	5207.58	1926.42	7134.00	15969.93

9. Regulation 9 (1), 9(2) and 10 (1) of the 2014 Tariff Regulations specify as follows:-

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





- (2) The Capital Cost of a new project shall include the following:
- a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
  - b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
  - c) Increase in cost in contract packages as approved by the Commission;
  - d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;
  - e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;
  - f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;
  - g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and
  - h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.”

**“10. Prudence Check of Capital Expenditure:** The following principles shall be adopted for prudence check of capital cost of the existing or new projects:

(1) In case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out taking into consideration the benchmark norms specified/to be specified by the Commission from time to time: Provided that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the capital expenditure, financing plan, interest during construction, incidental expenditure during construction for its reasonableness, use of efficient technology, cost over-run and time over-run, competitive bidding for procurement and such other matters as may be considered appropriate by the Commission for determination of tariff.”

10. The capital cost of the assets has been discussed in the subsequent paragraphs.

### **Time over-run**

11. As per the investment approval, the commissioning schedule of the project is 12 months from the date of investment approval. The investment approval was accorded on 3.6.2015 and hence the schedule date of commercial operation works out to 3.6.2016. Asset I was commissioned on 28.4.2016 and Asset II is anticipated to be commissioned on 1.7.2016. Hence, there is no time over-run in



commissioning of Asset I. However there is an anticipated time over-run of 28 days with regard to Asset II. The time overrun in case of Asset II shall be considered when the actual COD of the asset is achieved. For the present, the anticipated time overrun of 28 days is disallowed.

12. Accordingly, IDC & IEDC corresponding to 28 days of time overrun in case of Asset II have been disallowed as under:

(₹ in lakh)	
<b>IDC &amp; IEDC as per Auditor's certificate</b>	<b>IDC and IEDC</b>
Upto 1.7.2016 (Ant. COD)	108.49
Disallowed 3.6.2016 (SCOD) to 1.7.2016 (COD) - 28 days	7.71

### **IDC and IEDC**

13. The petitioner, vide affidavit dated 21.6.2016, has submitted the details with regard to IEDC and IDC based on actual COD and undischarged liabilities for Asset I and the petitioner further submitted that all the details with regard to IEDC and IDC based on actual COD and un-discharged liabilities in case of Asset II shall be submitted after commissioning of the asset. Hence, we have considered IDC and IEDC as per Auditor's Certificate dated 11.6.2016 for Asset II which is as follows:-

(₹ in lakh)		
<b>Asset</b>	<b>IEDC up to COD</b>	<b>IDC up to COD</b>
Asset I	160.21	111.45
Asset II	58.43	50.06



14. The petitioner has submitted that IEDC claimed is based on the actual/ anticipated COD. The IDC discharged on cash basis with regard to Asset I as below:-

(₹ in lakh)		
Asset	IDC discharged up to COD	IDC discharged during 2016-17
Asset I	38.81	72.64

15. Based on the above submissions of the petitioner, IDC in case of Asset I is being capitalised up to COD and IDC discharged during 2016-17 has been added to the additional capital expenditure during 2016-17. However, in case of Asset II, IDC and IEDC has been reduced after disallowing the time overrun. IDC and IEDC considered for the purpose of tariff calculation is shown below:-

(₹ in lakh)		
Asset	IEDC up to COD	IDC up to COD
Asset I	160.21	38.81
Asset II	54.28	46.50

16. The capital cost of the instant assets after adjustment of IDC and IEDC is as follows:-

(₹ in lakh)			
Asset	Capital Cost as on COD after adjustment of IDC & IEDC	Additional Capital Expenditure after adjustment of IDC	
		FY 2016-17	FY 2017-18
Asset I	4631.64	4567.62	1926.42
Asset II	4123.94	712.60	0.00



### **Cost over-run**

17. The petitioner, vide Auditor's certificate dated 11.6.2016 has submitted that total estimated completion cost of ₹11125.68 lakh Asset I and ₹4844.25 lakh for Asset II respectively which is within the approved cost as per investment approval. The petitioner has not submitted the apportioned approved cost of the Asset I and Asset II separately. The cost over-run is to be examined separately for the Asset I and Asset II at the time of true up. Accordingly, the petitioner is directed to submit the apportioned approved cost for Asset I and Asset II separately at the time of true up.

18. KSEB has submitted that the petitioner has not submitted justification alongwith documentary evidence for the increase in expenditure in case of certain components of the assets. The petitioner in its reply submitted that open bidding route is followed for procurement and equal opportunity is provided to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tender may happen to be lower or higher than the cost estimate depending upon prevailing market conditions and that is the reason for variation in cost of certain elements.

19. We have considered the submission of the petitioner and the respondent. Though there is no cost overrun in case of instant assets, there is variation in cost of certain elements. The petitioner is directed to adopt a prudent methodology to make cost estimates of different elements of the transmission



projects more realistic. The cost variation in some of the elements of the instant transmission asset is allowed.

### **Initial Spares**

20. The petitioner has claimed initial spares of ₹158.16 lakh and ₹93.66 lakh, pertaining to Sub-station for Asset I and II respectively and ₹22.28 lakh with regard to transmission line for Asset I vide Auditor's certificate dated 11.6.2016.

21. Regulation 13 of the 2014 Tariff Regulations provide for ceiling norms for capitalization of initial spares. The ceiling limit for initial spares in case green-field sub-station is 4.00% of the cost of 'Plant and Machinery'. The initial spares claimed by the petitioner for Asset I and II are within the limits prescribed under Regulation 13 of the Tariff Regulation, 2014 and hence the claim made by the petitioner is allowed. The initial spares allowed for the instant assets is as under:-

(₹ in lakh)				
Particulars	Formula	Asset I (Sub-station)	Asset I (Transmission line)	Asset II (Sub-station)
Capital cost claimed as on cut-off date after deducting IDC, IEDC and civil works	(a)	4270.55	2407.32	4454.91
Initial spares as per Auditor's Certificate	(c)	158.16	22.28	93.51
Ceiling limit as per Regulation 13 of 2014 regulations	(e)	4.00%	1.00%	4.00%
Initial spares worked out as per norms	(f) = $\frac{(b-d)*e}{(100\%-e)}$	171.35	24.09	181.72
Excess initial spares claimed	(g) = (d) - (f)	0.00	0.00	0.00



### **Additional Capital Expenditure**

22. The petitioner has projected additional capitalization of ₹6421.40 lakh and ₹712.60 lakh for Asset I and II towards balance and retention payment under Regulation 14(1) (i) of 2014 Tariff Regulations.

23. 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;”

24. The cut-off date of the transmission asset is 31.3.2019. In case of Asset I, IDC discharged after COD has been added to the additional capital expenditure during the period. Accordingly, additional capitalization for the subject asset is allowed under Regulation 14(1)(i) of 2014 Tariff Regulations, subject to true up on actual basis and it is as follows:-

(₹ in lakh)

Asset	Approved apportioned cost	Exp. up to COD	Additional capital expenditure			Estimated completion cost
			2016-17	2017-18	Total	
Asset I	14127.66	4631.64	4567.62	1926.42	6494.04	11125.68
Asset II	6151.34	4123.94	712.60	0.00	712.60	4836.54

25. The petitioner has submitted that the balance and retention details for Asset II will be submitted along with the tariff forms based on actual COD.



## **Debt: Equity Ratio**

26. Regulation 19 (1) of the 2014 Tariff Regulations specifies as under:-

**“19. Debt-Equity Ratio:** (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:

- where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- 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.”

27. The petitioner has claimed debt:equity ratio of 70:30 as on COD and for additional capitalization during 2016-17, 2017-18 and 2018-19 as provided in the regulation. Accordingly, we have considered the same for the purpose of computation of tariff for the 2014-19 tariff period and it is as follows:-

(₹ in lakh)

<b>Asset I</b>						
<b>Particulars</b>	<b>As on COD</b>		<b>Additional capitalization during 2014-19</b>		<b>As on 31.3.2019</b>	
	<b>Amount</b>	<b>(%)</b>	<b>Amount</b>	<b>(%)</b>	<b>Amount</b>	<b>(%)</b>
<b>Debt</b>	3242.15	70.00	4545.83	70.00	7787.98	70.00
<b>Equity</b>	1389.49	30.00	1948.21	30.00	3337.70	30.00
<b>Total</b>	<b>4631.64</b>	<b>100.00</b>	<b>6494.04</b>	<b>100.00</b>	<b>11125.68</b>	<b>100.00</b>

(₹ in lakh)

<b>Asset II</b>						
<b>Particulars</b>	<b>As on COD</b>		<b>Additional capitalization during 2014-19</b>		<b>As on 31.3.2019</b>	
	<b>Amount</b>	<b>(%)</b>	<b>Amount</b>	<b>(%)</b>	<b>Amount</b>	<b>(%)</b>
<b>Debt</b>	2886.76	70.00	498.82	70.00	3385.58	70.00
<b>Equity</b>	1237.18	30.00	213.78	30.00	1450.96	30.00
<b>Total</b>	<b>4123.94</b>	<b>100.00</b>	<b>712.60</b>	<b>100.00</b>	<b>4836.54</b>	<b>100.00</b>



### **Interest on Loan (“IOL”)**

28. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations provides as under:-

“(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.”

29. We have considered the weighted average rate of IOL on the basis of rate prevailing as on 1.4.2014. Further, the petitioner has prayed to allow it to bill and adjust impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2014-19 period, if any from the respondents. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The petitioner’s prayer to bill and adjust the impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2014-19 period from the respondents will be considered at the time of truing up. The details of weighted average rate of interest are placed at **Annexure-I** and the IOL has been worked out as follows:-





(₹ in lakh)

Asset I			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Gross loan opening	3242.15	6439.48	7787.98
Cumulative Repayment upto previous year	0.00	296.57	761.57
Net Loan-Opening	3242.15	6142.91	7026.41
Additions during the year	3197.33	1348.49	0.00
Repayment during the year	296.57	465.00	499.80
Net Loan-Closing	6142.91	7026.41	6526.61
Average Loan	4692.53	6584.66	6776.51
Rate of Interest (%)	9.0701	9.0701	9.0701
<b>Interest on Loan</b>	<b>394.13</b>	<b>597.24</b>	<b>614.64</b>

(₹ in lakh)

Asset II			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Gross loan opening	2886.76	3385.58	3385.58
Cumulative Repayment upto previous year	0.00	174.22	424.09
Net Loan-Opening	2886.76	3211.36	2961.49
Additions during the year	498.82	0.00	0.00
Repayment during the year	174.22	249.87	249.87
Net Loan-Closing	3211.36	2961.49	2711.62
Average Loan	3049.06	3086.43	2836.56
Rate of Interest (%)	8.2680	8.2680	8.2680
Interest on Loan	189.25	255.19	234.53

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

30. Clause (1) & (2) of Regulation 24 and Clause (2) of Regulation 25(2) 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:

xxx"

**"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.”

31. The petitioner has submitted that the instant asset is commissioned within the timelines specified in the 2014 Tariff Regulations and has claimed an additional RoE of 0.5%. The petitioner has claimed ROE at the rate of 20.341% after grossing up the ROE of 16.00% with MAT rate as per the above said Regulation. 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.

32. 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.



33. KSEB has submitted that the additional ROE of 0.5% claimed by the petitioner for completing the project within the time line specified in the 2014 Tariff Regulations is not admissible as per Regulation 24(2) (iv) of the 2014 Tariff Regulations.

34. As per Appendix I of the 2014 Tariff Regulations, time line for new 400 kV Sub-station is 30 months for allowing additional RoE of 0.5%. The instant asset has been commissioned within the timeline of 30 months. However, other assets covered in the scheme have not been commissioned. In such situation, the petitioner is required to submit a certificate under Regulation 24(2)(iii) of the 2014 Tariff Regulations from the RPC/NRPC stating that commissioning of the particular element will benefit the system operation in the regional/national grid. No such certificate is furnished by the petitioner in the instant case. Accordingly, petitioner's prayer for additional RoE is not allowed. However, the same will be reviewed at the time of truing up if all the assets/elements in the instant scheme are commissioned within the specified timelines or if the petitioner files a certificate from the RPC/NRPC as stated above.

35. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, MAT rate of 21.342% of 2015-16 has been



considered to work out the return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. The ROE allowed for the instant transmission asset is given below:-

(₹ in lakh)

<b>Asset I</b>			
<b>Particulars</b>	<b>2016-17 (pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Equity	1389.49	2759.78	3337.70
Additional Capitalization	1370.29	577.93	0.00
Closing Equity	2759.78	3337.70	3337.70
Average Equity	2074.64	3048.74	3337.70
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
Tax rate for the year (%)	21.342	21.342	21.342
Rate of Return on Equity (Pre Tax) (%)	19.705	19.705	19.705
<b>Return on Equity</b>	<b>378.58</b>	<b>600.77</b>	<b>657.71</b>

(₹ in lakh)

<b>Asset II</b>			
<b>Particulars</b>	<b>2016-17 (pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Equity	1237.18	1450.96	1450.96
Additional Capitalization	213.78	0.00	0.00
Closing Equity	1450.96	1450.96	1450.96
Average Equity	1344.07	1450.96	1450.96
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
Tax rate for the year (%)	21.342	21.342	21.342
Rate of Return on Equity (Pre Tax) (%)	19.705	19.705	19.705
<b>Return on Equity</b>	<b>198.82</b>	<b>285.92</b>	<b>285.92</b>

### **Depreciation**

36. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide as follows:-

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



(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”

“(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.”

37. Clause (67) of Regulation 3 of the 2014 Tariff Regulations defines useful life as follows:-

“(67) ‘**Useful life**’ in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:

- (a) Coal/Lignite based thermal generating station 25 years
- (b) Gas/Liquid fuel based thermal generating station 25 years
- (c) AC and DC sub-station 25 years
- (d) Gas Insulated Substation (GIS) 25 years
- (d) Hydro generating station including pumped Storage hydro generating stations 35 years
- (e) Transmission line (including HVAC & HVDC) 35 years
- (f) Communication system 15 years”

38. The weighted average useful life of the asset has been considered as 29 years for Asset I and 25 year for Asset II in accordance with the above regulation. The details of the depreciation allowed are given hereunder:-



(₹ in lakh)

Asset I			
Particulars	2016-17 (pro-rata)	2017-18	2018-19
Opening Gross block	4631.64	9199.26	11125.68
Additional Capitalization	4567.62	1926.42	0.00
Closing Gross block	9199.26	11125.68	11125.68
Average Gross block	6915.45	10162.47	11125.68
Rate of Depreciation (%)	4.63	4.58	4.49
Depreciable Value	6223.91	9146.22	9743.11
Balance useful life of the assets	29	28	27
Elapsed life	0	1	2
Remaining Depreciable Value	6223.91	8384.66	8481.75
Depreciation during the year	296.57	465.00	499.80
Cumulative depreciation	296.57	761.57	1261.37

(₹ in lakh)

Asset II			
Particulars	2016-17 (pro-rata)	2017-18	2018-19
Opening Gross block	4123.94	4836.54	4836.54
Additional Capitalization	712.60	0.00	0.00
Closing Gross block	4836.54	4836.54	4836.54
Average Gross block	4480.24	4836.54	4836.54
Rate of Depreciation (%)	5.18	5.17	5.17
Depreciable Value	4032.22	4352.89	4352.89
Balance Useful life of the assets	25	24	23
Elapsed life	0	1	2
Remaining Depreciable Value	4032.22	3928.80	3678.93
Depreciation during the year	174.22	249.87	249.87
Cumulative depreciation	174.22	424.09	673.96

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

39. The petitioner has submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rate specified for the 2014-19 tariff period. The petitioner has



also submitted that it will approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

40. We have considered the submissions of the petitioner. We would like to clarify that any application filed by the petitioner for revision of O&M Expenses on account of wage revision will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The O&M Expenses are allowed for the instant transmission assets as per the prevailing norms.

41. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total allowable O&M Expenses for the instant assets are as follows:-

(in ₹ lakh)			
Particulars	2016-17	2017-18	2018-19
<b>400 kV Bays:</b>			
Norms (₹ lakh/Bay)	64.37	66.51	68.71
<b>220 kV Bays:</b>			
Norms (₹ lakh/Bay)	45.06	46.55	48.10
<b>S/C (Twin Conductor)</b>			
Norms Line (₹ lakh per KM)	0.755	0.78	0.806

(in ₹ lakh)			
Asset I			
Particulars	2016-17	2017-18	2018-19
<b>400 kV Bays:</b>			
No. of Bays	3	3	3
<b>220 kV Bays:</b>			
No. of Bays	3	3	3
<b>S/C (Twin Conductor)</b>			
Line (KM)	9.512	9.512	9.512
<b>Total O&amp;M Expenses</b>	<b>307.81</b>	<b>343.42</b>	<b>354.82</b>



(in ₹ lakh)

Asset II			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
<b>400 kV Bays:</b>			
No. of Bays	3	3	3
<b>220 kV Bays:</b>			
No. of Bays	2	2	2
<b>Total O&amp;M Expenses</b>	<b>212.62</b>	<b>292.63</b>	<b>302.33</b>

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

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

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

As per Regulation 28(1) (c) (i) of the 2014 Tariff Regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of 2 months transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

#### **(ii) Maintenance Spares**

Regulation 28 (1) (c) (ii) of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses from 1.4.2014. The petitioner has claimed maintenance spares for the instant asset and value of maintenance spares has accordingly been worked out as 15% of O&M Expenses.





### **(iii) O & M Expenses**

Regulation 28 (1) (c) (iii) of the 2014 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O & M Expenses for the instant asset and value of O & M Expenses has accordingly been worked out by considering 1 month O&M Expenses.

### **(iv) Rate of interest on working capital**

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 transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later. Further, the 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. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points).

43. The interest on working capital allowed is shown in the table below:-

<b>(₹ in lakh)</b>			
<b>Asset I</b>			
<b>Particulars</b>	<b>2016-17 (pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
O & M expenses	27.70	28.62	29.57
Maintenance Spares	49.86	51.51	53.22



<b>Asset I</b>			
<b>Particulars</b>	<b>2016-17 (pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
Receivables	254.94	343.44	364.03
Total	332.50	423.57	446.82
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest on Working Capital</b>	39.41	54.22	57.19

(₹ in lakh)

<b>Asset II</b>			
<b>Particulars</b>	<b>2016-17 (pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
O & M expenses	23.60	24.39	25.19
Maintenance Spares	42.48	43.89	45.35
Receivables	177.23	186.03	184.21
Total	243.32	254.31	254.75
Rate of Interest (%)	12.80	12.80	12.80
<b>Interest on Working Capital</b>	23.38	32.55	32.61

### **Annual Transmission Charges**

44. The detailed computation of the various components of the annual fixed charges for the transmission asset for the tariff period 2014-19 is summarised below:-

(₹ in lakh)

<b>Asset I</b>			
<b>Particulars</b>	<b>2016-17 (Pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Depreciation</b>			
Opening Gross Block	4631.64	9199.26	11125.68
Additional Capitalisation	4567.62	1926.42	0.00
Closing Gross Block	9199.26	11125.68	11125.68
Average Gross Block	6915.45	10162.47	11125.68
Rate of Depreciation (%)	4.63	4.58	4.49
Depreciable Value	6223.91	9146.22	9743.11
Balance useful life of the asset	29.00	28.00	27.00
Elapsed life	0.00	1.00	2.00



<b>Asset I</b>			
<b>Particulars</b>	<b>2016-17 (Pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
Remaining Depreciable Value	6223.91	8384.66	8481.75
Depreciation during the year	296.57	465.00	499.80
Cumulative depreciation	296.57	761.57	1261.37
<b>Interest on Loan</b>			
Gross Normative Loan	3242.15	6439.48	7787.98
Cumulative Repayments upto Previous Year	0.00	296.57	761.57
Net Loan-Opening	3242.15	6142.91	7026.41
Additions	3197.33	1348.49	0.00
Repayment during the year	296.57	465.00	499.80
Net Loan-Closing	6142.91	7026.41	6526.61
Average Loan	4692.53	6584.66	6776.51
Weighted Average Rate of Interest on Loan (%)	9.0701	9.0701	9.0701
Interest on Loan	394.13	597.24	614.64
<b>Return on Equity</b>			
Opening Equity	1389.49	2759.78	3337.70
Additions	1370.29	577.93	0.00
Closing Equity	2759.78	3337.70	3337.70
Average Equity	2074.64	3048.74	3337.70
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT Rate for respective year (%)	21.342	21.342	21.342
Rate of Return on Equity (%)	19.705	19.705	19.705
Return on Equity	378.58	600.77	657.71
<b>Interest on Working Capital</b>			
O & M Expenses	27.70	28.62	29.57
Maintenance Spares	49.86	51.51	53.22
Receivables	254.94	343.44	364.03
Total Working Capital	332.50	423.57	446.82
Rate of Interest (%)	12.80	12.80	12.80
Interest of working capital	39.41	54.22	57.19
<b>Annual Transmission Charges</b>			
Depreciation	296.57	465.00	499.80
Interest on Loan	394.13	597.24	614.64
Return on Equity	378.58	600.77	657.71
Interest on Working Capital	39.41	54.22	57.19
O & M Expenses	307.81	343.42	354.82
<b>Total</b>	<b>1416.50</b>	<b>2060.65</b>	<b>2184.15</b>



<b>Asset II</b>			
<b>Particulars</b>	<b>2016-17 (Pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Depreciation</b>			
Opening Gross Block	4123.94	4836.54	4836.54
Additional Capitalisation	712.60	0.00	0.00
Closing Gross Block	4836.54	4836.54	4836.54
Average Gross Block	4480.24	4836.54	4836.54
Rate of Depreciation (%)	5.18	5.17	5.17
Depreciable Value	4032.22	4352.89	4352.89
Balance useful life of the asset	25	24	23
Elapsed life	0	1	2
Remaining Depreciable Value	4032.22	3928.80	3678.93
Depreciation during the year	174.22	249.87	249.87
Cumulative depreciation (incl. of AAD)	174.22	424.09	673.96
<b>Interest on Loan</b>			
Gross Normative Loan	2886.76	3385.58	3385.58
Cumulative Repayments upto Previous Year	0.00	174.22	424.09
Net Loan-Opening	2886.76	3211.36	2961.49
Additions	498.82	0.00	0.00
Repayment during the year	174.22	249.87	249.87
Net Loan-Closing	3211.36	2961.49	2711.62
Average Loan	3049.06	3086.43	2836.56
Weighted Average Rate of Interest on Loan (%)	8.2680	8.2680	8.2680
Interest on Loan	189.25	255.19	234.53
<b>Return on Equity</b>			
Opening Equity	1237.18	1450.96	1450.96
Additions	213.78	0.00	0.00
Closing Equity	1450.96	1450.96	1450.96
Average Equity	1344.07	1450.96	1450.96
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT Rate for respective year (%)	21.342	21.342	21.342
Rate of Return on Equity (%)	19.705	19.705	19.705
Return on Equity	198.82	285.92	285.92
<b>Interest on Working Capital</b>			
O & M Expenses	23.60	24.39	25.19
Maintenance Spares	42.48	43.89	45.35
Receivables	177.23	186.03	184.21
Total Working Capital	243.32	254.31	254.75
Rate of Interest (%)	12.80	12.80	12.80



<b>Asset II</b>			
<b>Particulars</b>	<b>2016-17 (Pro-rata)</b>	<b>2017-18</b>	<b>2018-19</b>
Interest of working capital	23.38	32.55	32.61
<b>Annual Transmission Charges</b>			
Depreciation	174.22	249.87	249.87
Interest on Loan	189.25	255.19	234.53
Return on Equity	198.82	285.92	285.92
Interest on Working Capital	23.38	32.55	32.61
O & M Expenses	212.62	292.63	302.33
<b>Total</b>	<b>798.28</b>	<b>1116.16</b>	<b>1105.25</b>

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

45. 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**

46. 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.

### **Service Tax**

47. The petitioner has sought to recover service tax on transmission charges separately from the respondents, if at any time service tax on transmission is



withdrawn from negative list in future. We are of the view that the petitioner's prayer of service tax is premature.

### **Sharing of Transmission Charges**

48. TANGEDCO has submitted that Andhra Pradesh Solar Power Corporation Pvt. Ltd (APSPCL), a joint venture of SECI, APGENCO and NREDAP, being the authorized Solar Power Park Developer (SPPD) for the state of Andhra Pradesh is facilitating establishment of ultra solar power park of 1500 MW capacity at NP Kunta at Anantpur and Kadapa districts under JNNSM. This solar power park is being developed by the State of Andhra Pradesh and the Andhra State distribution companies are the sole beneficiaries of the project. The entire cost towards development of the project including transmission schemes should be borne by the targeted beneficiaries. The guidelines for development of solar power park issued by Ministry of Power during February, 2016 also affirm that it is responsibility of the SPPD for arranging connectivity and LTA for ISTS. MoP in its letter dated 12.12.2014 has spelt out that if the capital expenditure for the evacuation network is high then a separate proposal may also be considered for funding from National Clean Energy Fund (NCEF), Green Corridor Programme or any other source. Moreover, the answering respondent is no way responsible for sharing of transmission charges since it is neither the beneficiaries of the solar project nor is it using the transmission lines. The power generated and consumed within the state of Andhra Pradesh does not entitle levy of transmission charges on TANGEDCO.



49. KSEB submitted that as per Regulation 43 of 2014 Tariff Regulations the sharing of transmission charges shall be governed by the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and losses) Regulations, 2010, which stipulates that the transmission charges shall be shared among the designated ISTS consumers as per Regulation 3. Hence, KSEB has to share the transmission charges for the subject transmission system implemented by the petitioner.

50. We have considered the submission of the petitioner, TANGEDCO and KSEBL. TANGEDCO has submitted that it is not required to bear the transmission charges as they are not the beneficiaries of the solar project. We would like to clarify that the transmission charges will be recovered as per the provisions of Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2010 and subsequent amendments thereof.

51. There is delay in commissioning of solar generation by the developer. Accordingly, the transmission tariff for the instant assets from the date of commercial operation till the commissioning of solar generation shall be borne by Andhra Pradesh Solar Power Corporation Pvt. Ltd. in line with the Commission's order dated 6.8.2015 in Petition No.29/MP/2015. The relevant portion of the order is extracted hereunder:-

"33. With regard to recovery of transmission charges on account of delay in commissioning of solar generation, it has been clarified in the Statement of Reasons to the Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and medium-term Open Access in inter-state Transmission and related matters) (Fifth Amendment) Regulations, 2015, and Central Electricity Regulatory Commission (Grant of Regulatory Approval for execution of Inter-State Transmission Scheme to Central Transmission Utility) (First



Amendment) Regulations, 2015 that transmission charges for delay in commissioning of solar power generators are required to be paid by such solar generators/SPPD on the same line as the liability for payment by the thermal and hydro generating stations in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014. The relevant portion of the Statement of Reasons is extracted as under:

“8.2.1 With regard to the suggestions of PGCIL, it is clarified that SPPD who shall apply for Connectivity/Long term Access shall be liable to deposit Application Bank Guarantee/Construction Bank Guarantee as required under Connectivity Regulation. Further, SPPD shall also be liable for payment of transmission charges for delay in commissioning of generator and relinquishment charges towards transmission access under Connectivity Regulations and Sharing Regulations. Regulation 7(1)(u) of the Sharing Regulations provides that "No transmission charges for the use of ISTS network shall be charged to solar based generation" is applicable only when the power is evacuated through the transmission system to the beneficiaries after the commercial operation of the generating station. Therefore, transmission charges for delay in commissioning of solar power generators shall be payable by such solar generators/SPPD on the same line as the liability for payment by the thermal and hydro generating station in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

8.2.2 With regard to delay of internal system, it is clarified that SPPD shall be executing internal system on behalf of solar power generators. The treatment of delay or other modalities should be covered in Agreement between solar power generators and SPPD. In regard to NTPC's comments on development of transmission matching with generation, it is clarified that CTU shall carry out coordination with the SPPD/solar power generators in accordance with Section 38 of the Act.”

52. After commissioning of the solar generation, 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.

53. This order disposes of Petition No. 26/TT/2016

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

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





**ANNEXURE-I****DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2014-19**

(in ₹ lakh)

<b>Asset I</b>				
<b>Particulars</b>	<b>Interest Rate (%)</b>	<b>Loan deployed as on 1.4.2016</b>	<b>Additions during the tariff period</b>	<b>Total</b>
SBI (2014-15)-doco-	9.55	1931.85	0.00	1931.85
BOND LI-doco-	8.40	1129.00	0.00	1129.00
PROPOSED LOAN 2016-17 INTT 8.13%doco-	8.13	181.30	0.00	181.30
<b>Total</b>		<b>3242.15</b>	<b>0.00</b>	<b>3242.15</b>

(₹in lakh)

<b>Asset II</b>				
<b>Particulars</b>	<b>Interest Rate (%)</b>	<b>Loan deployed as on 1.4.2016</b>	<b>Additions during the tariff period</b>	<b>Total</b>
SBI (2014-15)-doco-	9.55	281.15	0.00	281.15
PROPOSED LOAN 2016-17 INTT 8.13%-doco-	8.13	2611.01	0.00	2611.01
<b>Total</b>		<b>2892.16</b>	<b>0.00</b>	<b>2892.16</b>

**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2014-19**

(₹in lakh)

<b>Asset-I</b>			
<b>Summary</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Gross Opening Loan	3242.15	3242.15	3242.15
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00
<b>Net Loans Opening</b>	<b>3242.15</b>	<b>3242.15</b>	<b>3242.15</b>
Add: Draw(s) during the Year	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00
<b>Net Closing Loan</b>	<b>3242.15</b>	<b>3242.15</b>	<b>3242.15</b>



<b>Asset-I</b>			
<b>Summary</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Average Net Loan	3242.15	3242.15	3242.15
Rate of Interest on Loan (%)	9.0701	9.0701	9.0701
<b>Interest on Loan</b>	<b>294.07</b>	<b>294.07</b>	<b>294.07</b>

(₹in lakh)

<b>Asset-II</b>			
<b>Summary</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Gross Opening Loan	2892.16	2892.16	2892.16
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00
<b>Net Loans Opening</b>	<b>2892.16</b>	<b>2892.16</b>	<b>2892.16</b>
Add: Draw(s) during the Year	0.00	0.00	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00
<b>Net Closing Loan</b>	<b>2892.16</b>	<b>2892.16</b>	<b>2892.16</b>
Average Net Loan	2892.16	2892.16	2892.16
Rate of Interest on Loan (%)	8.2680%	8.2680%	8.2680%
<b>Interest on Loan</b>	<b>239.12</b>	<b>239.12</b>	<b>239.12</b>

