

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No.108/TT/2018**

**Coram:**

**Shri. P. K. Pujari, Chairperson  
Dr. M. K. Iyer, Member**

**Date of hearing: 23.10.2018**

**Date of Order: 11.12.2018**

**In the matter of:**

Approval under regulation-86 of CERC (Conduct of Business) Regulations, 1999 and Regulation-6 of CERC (Terms and Conditions of Tariff) Regulations, 2009 and CERC (Terms and Conditions of Tariff) Regulations, 2014 for determination of (i) Truing up Transmission tariff for 2009-14 tariff block and (ii) Transmission tariff for 2014-19 tariff block for Transmission System associated with NRSS-XIII in Northern Region consisting of Asset-I: 400 kV D/C (Quad) Gurgaon - Manesar Transmission Line along with associated bays, Asset-II : 400/220 kV 500 MVA ICT-I at Manesar S/S along with associated bays, Asset-III: 400/220 kV 500 MVA ICT-II at Manesar S/S along with associated bays and Asset-IV:125 MVAR Bus Reactor at Manesar.

**And in the matter of:**

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

**.....Petitioner**

**Vs**

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg, Jaipur – 302005.
  
2. Ajmer Vidyut Vitran Nigam Limited, 132 kV GSS RVPNL Sub-station Building, Malviya Nagar Jaipur-302017.



3. Jaipur Vidyut Vitran Nigam Limited,  
132 kV GSS RVPNL Sub-station  
Building, Malviya Nagar  
Jaipur-302017.
4. Jodhpur Vidyut Vitran Nigam Limited,  
132 kV GSS RVPNL Sub-station  
Building, Malviya Nagar  
Jaipur-302017.
5. Himachal Pradesh State Electricity  
Board, Vidyut Bhawan,  
Kumar House Complex Building,  
Shimla-171004.
6. Punjab State Electricity Board,  
The Mall, Patiala-147001.
7. Haryana Power Purchase Centre  
Shakti Bhawan, Sector-6, Panchkula  
(Haryana) 134109.
8. Power Development Department,  
Government of Jammu & Kashmir  
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation  
Limited, Shakti Bhawan,  
Ashok Marg, Lucknow – 226001.
10. Delhi Transco Limited, Shakti Sadan,  
Kotla Road, New Delhi-110002.
11. BSES Yamuna Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi.
12. BSES Rajdhani Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi
13. North Delhi Power Limited  
Power Trading & Load Dispatch Group,  
Pitampura, New Delhi- 110034



14. Chandigarh Administration,  
Sector -9, Chandigarh.
15. Uttarakhand Power Corporation  
Limited, Urja Bhawan, Kanwali Road,  
Dehradun.
16. North Central Railway, Allahabad.
17. New Delhi Municipal Council, Palika  
Kendra, Sansad Marg,  
New Delhi-110002.

**.....Respondents**

The following were present:

**For Petitioner:**

Shri S. K. Venkatesan, PGCIL  
Shri S. S. Raju, PGCIL

**For Respondents:**

Shri R. B. Sharma, Advocate, BRPL

**ORDER**

The present petition has been filed by Power Grid Corporation of India Ltd. (“the petitioner”) for truing up of capital expenditure and tariff for Asset-I: 400 kV D/C (Quad) Gurgaon - Manesar Transmission Line along with associated bays, Asset-II: 400/220 kV 500 MVA ICT-I at Manesar S/S along with associated bays, Asset-III: 400/220 kV 500 MVA ICT-II at Manesar S/S along with associated bays and Asset-IV: 125 MVAR Bus Reactor at Manesar, under transmission system associated with NRSS-XIII in Northern Region for the period from COD to 31.03.2014 as per Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) and for determination of tariff under Central Electricity Regulatory



Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019.

2. The petitioner has made the following prayers:-

- (i) Approve the Trued up Transmission Tariff for the tariff block 2009-14 for the assets covered under the petition. The adjustment billing shall be raised.
- (ii) Admit the capital cost as on 31.03.2014 as claimed in the petition and approve the Additional Capitalization incurred during 2009-14 period and projected to be incurred during the tariff block 2014-19 as claimed in the petition.
- (iii) Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under the petition.
- (iv) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided under clause 25 of the Tariff regulations 2014.
- (v) Allow the Petitioner to approach Hon’ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19.
- (vi) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents
- (vii) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure ( if any) in relation to the filing of petition.
- (viii) Allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.
- (ix) Allow the Petitioner to bill and recover Service tax/GST on Transmission Charges separately from the respondents, if service tax/GST on transmission is withdrawn from negative list at any time in future. Further, any taxes and duties including cess



etc. imposed by any statutory/Govt/municipal authorities shall be allowed to be recovered from the beneficiaries.

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.

3. The details of the project and the assets covered in the instant petition are given below:-

**i) Project details**

Project Scope	<p><u>Transmission Lines</u></p> <ol style="list-style-type: none"> <li>Gurgaon (Powergrid) - Manesar 400 kV (quad) line-18 Km</li> <li>Delinking Agra-Samaypur and Samaypur-Gurgaon (Powergrid) 400KV lines from Samaypur and making a direct 400 kV S/C line from Agra to Gurgaon (PG).</li> </ol> <p><u>Substations</u></p> <ol style="list-style-type: none"> <li>Manesar 400/220 kV (POWERGRID) – GIS S/S (New)-2x500 MVA 400/220 kV Transformer</li> <li>Gurgaon 400/220 kV (POWERGRID) GIS (extension)</li> <li>Fatehabad 400/220 kV (POWERGRID) Sub-Station (Extension).</li> </ol> <p><u>Reactive Compensation</u></p> <ol style="list-style-type: none"> <li>Delinking of Agra-Samaypur and Samaypur-Gurgaon 400 kV lines from Samaypur and making a direct 400 kV S/C circuit line from Agra to Gurgaon.</li> <li>125 MVAR Bus Reactor at Manesar</li> <li>50 MVAR Switchable line reactor (at Agra)</li> <li>50 MVAR Switchable line reactor at Ballabgarh end of Agra-Ballabgarh line to be made switchable bus reactor on the vacated bay.</li> </ol>
Investment Approval	The investment approval for the project was accorded by Board of Directors of the petitioner vide letter dated 16.02.2009 at an estimated cost of Rs. 31769 lakh, including IDC of Rs. 2432 lakh (based on 4 <sup>th</sup> quarter, 2008 price level).
Scheduled COD of the project	The project was scheduled to be commissioned within 33 months from the date of investment approval i.e 16.2.2009. Hence the Scheduled COD was 01.12.2011.

**ii) Assets Covered in the present petition**

The petitioner has filed the instant petition for true up of tariff for 2009-14 period as well as the tariff for 2014-19 period for the following assets which



were commissioned during 2009-14 tariff period (hereinafter referred to as “transmission assets”) :-

<b>Asset No.</b>	<b>Asset Name</b>	<b>Date of commercial operation</b>	<b>Previous orders</b>
Asset-I	400 kV D/C (Quad) Gurgaon-Manesar Transmission Line along with associated bays	01.09.2012	Order dated 31.01.2014 in petition no. 79/TT/2012 & Order dated 30.04.2015 in Review Petition No. 01/RP/2015.
Asset-II	400/220 kV 500 MVA ICT-I at Manesar S/S along with associated bays	01.06.2012	
Asset-III	400/220 kV 500 MVA ICT-II at Manesar S/S along with associated bays	01.08.2012	
Asset-IV	125 MVAR Bus Reactor at Manesar	01.10.2012	Order dated 10.08.2015 in petition no. 54/TT/2013.

4. Accordingly the instant petition covers True up of Capital Cost & tariff for 2009-14 period under Regulation 6 of the 2009 Tariff Regulations and Tariff for 2014-19 period for determination of tariff under the 2014 Tariff Regulations for the period from 1.4.2014 to 31.3.2019 for Combined Assets.
5. The respondents are distribution licensees and power departments, who are procuring transmission service from the petitioner, mainly beneficiaries of Northern Region.
6. The petitioner has served the petition on the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (hereinafter referred to as the Act). 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

Act. BSES Rajdhani Power Limited (BRPL), Respondent No. 12 has filed reply vide affidavit dated 11.06.2018. BRPL has raised issue of accrual IDC, initial spare, add-cap, effective tax rate, wage revision, reimbursement of expenditure towards filing fee, license fee etc. The petitioner has filed rejoinder dated 11.10.2018 to the reply of BRPL. We have considered the submissions made by the petitioner and BRPL in the instant petition. The hearing in this matter was held on 23.10.2018. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

**Capital cost and Tariff allowed in previous petitions**

7. Final transmission tariff for Asset-I, Asset-II and Asset-III, from COD to 31.3.2014, were approved by the Commission vide order dated 31.01.2014 in petition no. 79/TT/2012 read with order dated 30.04.2015 in review petition No. 01/RP/2015. Similarly, final transmission tariff for Asset-IV, from COD to 31.3.2014, was approved by the Commission vide order dated 10.08.2015 in petition no. 54/TT/2013.

(a) The capital cost allowed in the above said order is given below:-

(₹ in lakhs)

Name of Asset	Approved Cost	Cost as on DOCO	Add Cap 2012-13	Total admitted cost up to 31.03.2014
Asset-I	9567.08	6357.19	2494.37	8851.56
Asset-II	8421.30	5139.22	466.65	5605.87
Asset-III	8421.30	5170.56	454.63	5625.19
Asset-IV	1851.51	1363.56	420.59	1784.15

(b) The tariff allowed in the above referred order for the instant assets for the

period from their respective COD to 31.3.2014 in terms of the provisions of the 2009 Tariff Regulations are as under:-

(₹ in lakhs)

Particulars	Asset-I		Asset-II	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	227.69	456.18	211.10	263.24
Interest on Loan	276.72	522.82	282.52	332.18
Return on Equity	232.63	464.20	234.79	293.99
Interest on Working Capital	25.55	48.78	29.59	36.74
O&M expenses	155.43	281.68	232.18	294.56
<b>Total</b>	<b>918.02</b>	<b>1773.66</b>	<b>990.18</b>	<b>1220.72</b>

(₹ in lakhs)

Particulars	Asset-III		Asset-IV	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	169.68	264.20	39.07	88.42
Interest on Loan	227.31	335.63	50.18	108.12
Return on Equity	188.72	295.00	41.27	93.57
Interest on Working Capital	23.74	36.87	4.71	10.29
O&M expenses	185.75	294.56	30.96	65.46
<b>Total</b>	<b>795.20</b>	<b>1226.27</b>	<b>166.19</b>	<b>365.86</b>

#### **TRUING UP OF ANNUAL FIXED CHARGES FOR TARIFF PERIOD 2009-14**

8. The truing up of tariff for the 2009-14 period has been carried out in accordance to Regulation 6 of 2009 Tariff Regulation based on the details of capital expenditure and additional capital expenditure incurred for the period from COD of asset to 31.03.2014.

#### **Capital Cost**

9. The capital cost for the period from COD to 31.03.2014 has been dealt as per Clause (1) of Regulation 7 of the 2009 Tariff Regulations.



10. Petitioner had submitted management certificates for Asset-I, Asset-II & Asset-III and Auditor's Certificate for Asset-IV for Capital Cost as on COD and details of projected capital expenditure during 2009-14 period. In the instant petition, the petitioner has submitted the actual capital expenditure incurred for the assets, for the period 2009-14, vide auditor's certificates dated 19.12.2017 for truing-up purpose. Details of capital cost claimed by the petitioner are summarized below:

(₹ in lakh)

Asset Details	Apportioned Approved Cost	Capital Cost as on DOCO	Add Cap 2012-13	Add Cap 2013-14	Total cost as on 31.03.2014
<b>Asset-I</b>	9567.08	6679.10	1388.46	694.37	8761.93
<b>Asset-II</b>	8421.30	5266.38	95.32	392.13	5753.83
<b>Asset-III</b>	8421.30	5278.41	95.69	392.13	5766.23
<b>Asset-IV</b>	1851.51	1410.80	78.49	318.16	1807.45
<b>TOTAL</b>	<b>28261.19</b>	<b>18634.69</b>	<b>1657.96</b>	<b>1796.79</b>	<b>22089.43</b>

### Cost Overrun

11. The completion cost as on 31.3.2014 as per the Auditor certificates of the assets are within the limit of the apportioned approved cost for the assets. Thus, there are no cost over-run in case of the instant assets.

### Time Overrun

12. The Asset-I, II, III and IV were put into commercial operation after a delay of 9, 6, 8 and 10 months respectively. The Commission, vide order dated 31.1.2014 in petition no.79/TT/2012, has condoned the delay of 9 months in case of Asset-I. The Commission, vide order dated 30.4.2015 in review petition no. 1/RP/2015, has condoned the entire delay of 6 months in case

of Asset-II and condoned the delay of 6 months out of total delay of 8 months in case of Asset-III. Similarly, the Commission, vide order dated 10.8.2015 in petition no. 54/TT/2013, has condoned the delay of 6 months out of total delay of 10 months in case of Asset-IV.

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

13. The petitioner has claimed Interest During Construction (IDC) of ₹ 534.14 lakhs, ₹ 281.53 lakhs, ₹ 281.54 and ₹ 93.78 lakhs for Asset-I, Asset-II, Asset-III and Asset-IV respectively vide auditor's certificate dated 19.12.2017. The petitioner has submitted IDC computation statement indicating loan wise drawl date, loan amount, interest rate and interest claimed. The petitioner has also submitted the statements showing discharge of IDC liability as on COD and thereafter in respect of all the assets. Considering the "cash basis" approach, IDC has been calculated as per the details given in the IDC statement and the IDC remaining un-discharged on COD has been added to the additional capital expenditure, which has been discussed in one of the subsequent paragraphs of this Order. The IDC considered for the purpose of tariff determination is as below:-

(₹ in lakh)

Asset	IDC claimed as per Auditor certificate	IDC disallowed as on COD due to time over run	Un-discharged IDC disallowed as on COD	IDC allowed on cash basis as on COD
	1	2	3	4=1-(2+3)
Asset-I	534.14	0.00	137.13	397.01
Asset-II	281.53	0.00	142.31	139.22
Asset-III	281.54	53.76	158.68	69.10
Asset-IV	93.78	17.00	0.95	75.83

14. The petitioner has claimed Incidental Expenditure during Construction



(IEDC) of Rs.156.92 lakhs, Rs.82.79 lakhs, Rs.82.79 and Rs.27.57 lakhs for Asset-I, Asset-II, Asset-III and Asset-IV respectively vide auditor's certificate dated 19.12.2017. The percentage of 10.75 % on Hard Cost indicated in the Abstract Cost Estimate submitted by the petitioner has been considered as the allowable limit of the IEDC. The IEDC claimed is within the percentage of the Hard Cost indicated in the Abstract Cost Estimate as on COD of the respective assets. Further, the petitioner has submitted that the entire IEDC has been discharged up to COD. The IEDC considered for the purpose of tariff determination is as below:-

(₹ in lakhs)

Asset	IEDC claimed as per Auditor certificate	IEDC disallowed due to time over run	IEDC allowed as on COD
Asset-I	156.92	0.00	156.92
Asset-II	82.79	0.00	82.79
Asset-III	82.79	4.04	78.75
Asset-IV	27.57	2.56	25.01

### **Treatment of Initial Spares**

15. Initial spares have been dealt as per Regulation 8 of the 2009 Tariff Regulations. The petitioner has claimed initial spares pertaining to series compensation devices and HVDC substation amounting to Rs.370.99 lakh, Rs.205.82 lakh, Rs.205.82 and Rs.45.86 lakh in respect of Asset-I, Asset-II, Asset-III and Asset-IV respectively. Petitioner has submitted the year wise discharge details of initial spares which were included in additional capitalization during 2012-13, 2013-14 and 2014-19 as claimed in auditor's certificates dated 19.12.2017.
16. The respondent BSES Rajdhani Power Limited has contended that the petitioner has claimed initial spares on consolidated basis although the tariff

has been claimed asset wise which is liable to be rejected by the Commission.

17. This issue was earlier decided by the Commission vide Order dated 7.9.2016 in petition no. 35/RP/2016:

Quote

12. We have computed the initial spares on the basis of the apportioned cost of the individual assets submitted by the petitioner. While doing so we have relied on the judgement of the Hon'ble Appellate Tribunal for Electricity dated 28.11.2013 in Appeal No. 165 of 2012, wherein the Commission's policy of considering the apportioned cost of the individual assets for computation of tariff was upheld. The Commission has adopted similar approach in its orders for working out the capital cost and computation of initial spares of individual elements.

Unquote

18. The asset wise initial spare have been worked out and the excess initial spare has been adjusted from capital cost as on COD. The allowable and excess initial spares for the assets covered in the instant petition are given below.

(₹ in lakhs)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
Total Cap. Cost as on cut-off date (31.03.2015) for S/s including PLCC (A)	3867.00	5006.10	5012.18	1700.10
Spares claimed (B)	370.99	205.82	205.82	45.86
Proportionate disallowed IDC & IEDC for S/s including PLCC (C)	0.00	0.00	54.84	19.20
Capital Cost as on Cut-off date (31.03.2015) after scrutiny of IEDC & IDC as on DOCO (D) =A-C	3867.00	5006.10	4957.98	1680.90
Proportionate Spares claimed (E) =B*D/A	370.99	205.82	204.14	45.34
Ceiling Limits as per clause 8 the 2009 Tariff Regulations (F)	3.50%	3.50%	3.50%	3.50%
Spares worked out (G) = $\frac{\{(D)-(E)\}*(F)}{\{(100\%-(F))\}}$	126.80	174.10	172.42	59.32
Excess claimed (H) = E-G	244.19	31.72	31.72	0.00
<b>Excess spare deducted from capital cost as on COD</b>	<b>244.19</b>	<b>31.72</b>	<b>31.72</b>	<b>0.00</b>

### Capital cost as on COD

19. The capital cost considered for the purpose of tariff after considering IDC, IEDC and initial spares as per the provisions of Regulation 9(2) and 9(5) of the 2014 Tariff Regulations is as under:-

(₹ In lakhs)

Asset	Capital cost as on COD claimed by Petitioner	Less: IDC disallowed due to time over run	Less: Un-discharged IDC as on COD	Less: IEDC disallowed due to time over run	Less: Excess Initial spares as on COD.	Capital Cost as on COD considered for tariff calculation
Asset-I	6679.10	0.00	137.13	0.00	244.19	6297.78
Asset-II	5266.38	0.00	142.31	0.00	31.72	5092.35
Asset-III	5278.41	53.76	158.68	4.04	31.72	5030.21
Asset-IV	1410.80	17.00	0.95	2.56	0.00	1390.29

### Additional Capital Expenditure (ACE)

20. Additional Capital Expenditure is considered as per Regulation 9 of the 2009 tariff Regulations. The cut-off dates for instant assets are 31.3.2015. The petitioner, vide Auditor certificates dated 19.12.2017, has claimed the following ACE in respect of all the assets:

(₹ in lakh)

Asset Details	2012-13	2013-14	Total add cap
<b>Asset-I</b>	1388.46	694.37	2082.83
<b>Asset-II</b>	95.32	392.13	487.45
<b>Asset-III</b>	95.69	392.13	487.82
<b>Asset-IV</b>	78.49	318.16	396.65

The petitioner has claimed the entire additional capital expenditure as Balance & Retention Payment under Regulation (9)(1)(i) of Tariff Regulation 2009. Hence,



the ACE claimed by the petitioner has been allowed. In addition, the petitioner has claimed the IDC liability as ACE during the year in which it is discharged. BSES Rajdhani Power Limited has debated that there is no provision in Tariff Regulations, 2009 to include accrued IDC in additional capitalisation. As mentioned at para 13 above, the ACE up to 31.03.2014 being allowed includes the un-discharged liabilities and is summarized in the table below:-

(₹ in lakhs)

Particulars	Asset-I		Asset-II	
	2012-13	2013-14	2012-13	2013-14
Add Cap claimed	1388.46	694.37	95.32	392.13
Discharge of IDC Liability	137.13	0.00	142.31	0.00
<b>Total add-cap allowed</b>	<b>1525.59</b>	<b>694.37</b>	<b>237.63</b>	<b>392.13</b>

(₹ in lakhs)

Particulars	Asset-III		Asset-IV	
	2012-13	2013-14	2012-13	2013-14
Add Cap claimed	95.69	392.13	78.49	318.16
Discharge of IDC Liability	158.68	0.00	0.95	0.00
<b>Total add-cap allowed</b>	<b>254.37</b>	<b>392.13</b>	<b>79.44</b>	<b>318.16</b>

### **Capital Cost summary from COD to 31.3.2014**

21. In view of the above, the following cost has been considered as on 31.3.2014:

(₹ in lakh)

Asset	Capital cost allowed as on COD	ACE for the year 2012-13	ACE for the year 2013-14	Capital Cost as on 31.03.2014 considered for tariff calculation
Asset-I	6297.78	1525.59	694.37	8517.74
Asset-II	5092.35	237.63	392.13	5722.11
Asset-III	5030.21	254.37	392.13	5676.72
Asset-IV	1390.29	79.44	318.16	1787.88

### **Debt-Equity Ratio**

22. Debt: Equity Ratio has been considered as per Regulation 12 of the 2009 tariff Regulations. The Debt Equity ratio as on COD has been considered

based on the Financing details submitted by the petitioner in Form 6. The details of debt: equity ratio of the instant assets as on COD and 31.03.2014 is given below:-

(₹ in lakh)

<b>Asset-I</b>				
<b>Particular</b>	<b>Capital cost as on COD</b>		<b>Capital cost as on 31.3.2014</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	4408.44	70.00	5962.42	70.00
Equity	1889.33	30.00	2555.32	30.00
<b>Total</b>	<b>6297.78</b>	<b>100.00</b>	<b>8517.74</b>	<b>100.00</b>

(₹ in lakh)

<b>Asset-II</b>				
<b>Particular</b>	<b>Capital cost as on COD</b>		<b>Capital cost as on 31.3.2014</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	3564.65	70.00	4005.48	70.00
Equity	1527.71	30.00	1716.63	30.00
<b>Total</b>	<b>5092.35</b>	<b>100.00</b>	<b>5722.11</b>	<b>100.00</b>

(₹ in lakh)

<b>Asset-III</b>				
<b>Particular</b>	<b>Capital cost as on COD</b>		<b>Capital cost as on 31.3.2014</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	3521.15	70.00	3973.70	70.00
Equity	1509.06	30.00	1703.01	30.00
<b>Total</b>	<b>5030.21</b>	<b>100.00</b>	<b>5676.72</b>	<b>100.00</b>

(₹ in lakh)

<b>Asset-IV</b>				
<b>Particular</b>	<b>Capital cost as on COD</b>		<b>Capital cost as on 31.3.2014</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
Debt	973.20	70.00	1251.53	70.00
Equity	417.07	30.00	536.35	30.00
<b>Total</b>	<b>1390.28</b>	<b>100.00</b>	<b>1787.88</b>	<b>100.00</b>

### Return on Equity (“ROE”)

23. The petitioner has submitted the MAT rate applicable during the various years. RoE has been worked out by considering year wise MAT rate submitted by the petitioner in accordance with Regulation 15 of the 2009 Tariff Regulations.
24. The petitioner has submitted the MAT rate applicable during 2009-14 period.

Year	MAT Rate	Grossed up ROE (Base rate/(1-t))
2009-10	16.995	18.674
2010-11	19.931	19.358
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.961	19.610

25. The trued up ROE allowed for the instant transmission assets under Regulation 15 of the 2009 Tariff Regulations are as follows:

Particulars	(₹ in lakh)	
	Asset-I	
	2012-13 (pro-rata)	2013-14
Opening Equity	1889.33	2347.01
Addition due to Additional Capitalisation	457.68	208.31
Closing Equity	2347.01	2555.32
Average Equity	2118.17	2451.17
Return on Equity (Base Rate )	15.50%	15.50%
Tax rate (MAT) for the respective year	20.0080%	20.9605%
Rate of Return on Equity (Pre Tax )	19.377%	19.610%
Return on Equity (Pre Tax)	239.42	480.67



(₹ in lakh)

Particulars	Asset-II	
	2012-13 (pro-rata)	2013-14
Opening Equity	1527.71	1598.99
Addition due to Additional Capitalisation	71.29	117.64
Closing Equity	1598.99	1716.63
Average Equity	1563.35	1657.81
Return on Equity (Base Rate )	15.50%	15.50%
Tax rate (MAT) for the respective year	20.0080%	20.9605%
Rate of Return on Equity (Pre Tax )	19.377%	19.610%
Return on Equity (Pre Tax)	252.44	325.10

(₹ in lakh)

Particulars	Asset-III	
	2012-13 (pro-rata)	2013-14
Opening Equity	1509.06	1585.38
Addition due to Additional Capitalisation	76.31	117.64
Closing Equity	1585.38	1703.01
Average Equity	1547.22	1644.20
Return on Equity (Base Rate )	15.50%	15.50%
Tax rate (MAT) for the respective year	20.0080%	20.9605%
Rate of Return on Equity (Pre Tax )	19.377%	19.610%
Return on Equity (Pre Tax)	199.87	322.43

(₹ in lakh)

Particulars	Asset-IV	
	2012-13 (pro-rata)	2013-14
Opening Equity	417.07	440.91
Addition due to Additional Capitalisation	23.83	95.45
Closing Equity	440.91	536.35
Average Equity	428.99	488.63
Return on Equity (Base Rate )	15.50%	15.50%
Tax rate (MAT) for the respective year	20.0080%	20.9605%
Rate of Return on Equity (Pre Tax )	19.377%	19.610%
Return on Equity (Pre Tax)	41.56	95.82

**Interest on loan (IOL)**

26. The petitioner has claimed the IOL based on actual interest rates for each year during the 2009-14 period. We have considered the submissions of the petitioner and accordingly calculated the IOL based on gross amount of normative loan and normative repayment of installments and rate of interest submitted by the petitioner, in accordance with Regulation 16 of the 2009 Tariff Regulations.
27. In the calculations, the IoL has been worked out as detailed below:-
- a) Gross amount of loan, repayment of installments and rate of interest weighted average rate of interest on actual average loan have been considered as per the petition.
  - b) The normative repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period. Accordingly, the cumulative repayment has been worked out.
  - c) The weighted average rate of interest has been considered as per Form 13 of respective assets.
28. The IOL has been worked out and allowed as under :

(₹ in lakh)

Particulars	Asset-I	
	2012-13 (pro-rata)	2013-14
Gross Normative Loan	4408.44	5476.36
Cumulative Repayment upto previous Year	0.00	200.32
Net Loan-Opening	4408.44	5276.04
Addition due to Additional Capitalization	1067.91	486.06
Repayment during the year	200.32	401.73
Net Loan-Closing	5276.04	5360.36
Average Loan	4842.24	5318.20
Weighted Average Rate of Interest on Loan	9.1442%	9.1063%
<b>Interest on Loan</b>	258.29	484.29

Particulars	(₹ in lakh)	
	Asset-II	
	2012-13 (pro-rata)	2013-14
Gross Normative Loan	3564.65	3730.99
Cumulative Repayment upto previous Year	0.00	199.08
Net Loan-Opening	3564.65	3531.91
Addition due to Additional Capitalization	166.34	274.49
Repayment during the year	199.08	254.81
Net Loan-Closing	3531.91	3551.59
Average Loan	3548.28	3541.75
Weighted Average Rate of Interest on Loan	9.2195%	9.2005%
<b>Interest on Loan</b>	272.61	325.86

Particulars	(₹ in lakh)	
	Asset-III	
	2012-13 (pro-rata)	2013-14
Gross Normative Loan	3521.15	3699.21
Cumulative Repayment upto previous Year	0.00	155.20
Net Loan-Opening	3521.15	3544.01
Addition due to Additional Capitalization	178.06	274.49
Repayment during the year	155.20	249.10
Net Loan-Closing	3544.01	3569.40
Average Loan	3532.58	3556.71
Weighted Average Rate of Interest on Loan	9.2216%	9.2045%
<b>Interest on Loan</b>	217.17	327.38

Particulars	(₹ in lakh)	
	Asset-IV	
	2012-13 (pro-rata)	2013-14
Gross Normative Loan	973.20	1028.81
Cumulative Repayment upto previous Year	0.00	35.13
Net Loan-Opening	973.20	993.69
Addition due to Additional Capitalization	55.61	222.71
Repayment during the year	35.13	80.63
Net Loan-Closing	993.69	1135.77
Average Loan	983.45	1064.73
Weighted Average Rate of Interest on Loan	9.2099%	9.3044%
<b>Interest on Loan</b>	45.29	99.07

## Depreciation

29. Depreciation has been considered in accordance with Regulation 17 of the 2009 Tariff Regulations. The useful life for transmission line and sub-station is 35 years and 25 years, respectively. The actual COD of the instant assets is during 2012-13.
30. The depreciation for the period 2009-14 has been worked out based on straight line method:-

(₹ in lakh)

Particulars	Asset-I		Asset-II	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Opening Gross Block	6297.78	7823.37	5092.35	5329.98
Additional Capital expenditure	1525.59	694.37	237.63	392.13
Closing Gross Block	7823.37	8517.74	5329.98	5722.11
Average Gross Block	7060.57	8170.55	5211.17	5526.05
Rate of Depreciation	4.8637%	4.9168%	4.5844%	4.6110%
Depreciable Value	6226.91	7225.90	4307.25	4590.64
Remaining Depreciable Value	6226.91	7025.58	4307.25	4391.55
<b>Depreciation</b>	200.32	401.73	199.08	254.81

(₹ in lakh)

Particulars	Asset-III		Asset-IV	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Opening Gross Block	5030.21	5284.59	1390.28	1469.72
Additional Capital expenditure	254.37	392.13	79.44	318.16
Closing Gross Block	5284.59	5676.72	1469.72	1787.88
Average Gross Block	5157.40	5480.65	1430.00	1628.80
Rate of Depreciation	4.5138%	4.5451%	4.9127%	4.9501%
Depreciable Value	4258.85	4549.78	1223.20	1402.12
Remaining Depreciable Value	4258.85	4394.58	1223.20	1366.99
<b>Depreciation</b>	155.20	249.10	35.13	80.63

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

31. The O&M Expenses claimed by the petitioner at the time of true-up for the

assets covered under the instant petition are allowed as under:-

Particulars	(₹ in lakh)			
	Asset-I		Asset-II	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
O&M expense	155.43	281.68	232.18	294.56

Particulars	(₹ in lakh)			
	Asset-III		Asset-IV	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
O&M expense	185.75	294.56	30.96	65.46

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

32. Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations provides the following components of the working capital for the transmission system:
- Maintenance Expenses** : 15% of Operation and Maintenance expenses
  - O & M Expenses**: one month of the allowed O&M Expenses
  - Receivables**: 2 months' of annual transmission charges

### **Rate of Interest on Working Capital**

33. Clause (3) of Regulation 18 of the 2009 Tariff Regulations provides for the rate of interest of working capital. Rate of interest on working capital has been considered as 13.50% (i.e. SBI base rate 10.00 plus 350 basis points) for computing IWC for all the assets.
34. The trued up Interest on working capital is given below:

(₹ in lakh)

Particulars	Asset-I		Asset-II	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Maintenance Spares	39.97	42.25	41.79	44.18
O & M expenses	22.20	23.47	23.22	24.55
Receivables	250.89	282.57	197.16	206.24
Total	313.06	348.29	262.17	274.97
Interest	<b>24.65</b>	<b>47.02</b>	<b>29.49</b>	<b>37.12</b>

(₹ in lakh)

Particulars	Asset-III		Asset-IV	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Maintenance Spares	41.79	44.18	9.29	9.82
O & M expenses	23.22	24.55	5.16	5.46
Receivables	195.36	205.07	52.48	58.49
Total	260.37	273.80	66.93	73.76
Interest	<b>23.43</b>	<b>36.96</b>	<b>4.52</b>	<b>9.96</b>

**Annual Fixed Cost for 2009-14 tariff period**

35. The trued up annual fixed cost for the Asset for the tariff period 2009-14 is summarized below:-

(₹ in lakh)

Particulars	Asset-I		Asset-II	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	200.32	401.73	199.08	254.81
Interest on Loan	258.29	484.29	272.61	325.86
Return on Equity	239.42	480.67	252.44	325.10
Interest on Working Capital	24.65	47.02	29.49	37.12
O&M Expenses	155.43	281.68	232.18	294.56
<b>Total</b>	<b>878.12</b>	<b>1695.40</b>	<b>985.81</b>	<b>1237.45</b>

(₹ in lakh)

Particulars	Asset-III		Asset-IV	
	2012-13 (pro-rata)	2013-14	2012-13 (pro-rata)	2013-14
Depreciation	155.20	249.10	35.13	80.63
Interest on Loan	217.17	327.38	45.29	99.07
Return on Equity	199.87	322.43	41.56	95.82
Interest on Working Capital	23.43	36.96	4.52	9.96
O&M Expenses	185.75	294.56	30.96	65.46
<b>Total</b>	<b>781.42</b>	<b>1230.43</b>	<b>157.45</b>	<b>350.93</b>

## **DETERMINATION OF ANNUAL FIXED COST FOR 2014-19**

36. The tariff for the instant transmission assets up to 2009-14 tariff period has been trued-up based on the actual COD of individual elements. To avoid multiplicity of petitions and granting multiple tariffs for the assets covered under the single project/transmission system for 2014-19 tariff period, the Commission, vide Regulation 6 of the 2014 Tariff Regulations, has brought in the concept of a single consolidated petition wherein a single petition is required to be filed by a petitioner in case of all the assets which have been put under commercial operation prior to 31.3.2014, so that a single tariff can be granted for all the assets covered under such a single project/transmission system. To determine a single transmission tariff for different assets, as per the 2014 Tariff Regulations, the concept of effective date of commercial operation and weighted average life has also been introduced in Regulation 27 of the 2014 Tariff Regulations. The consolidation of individual assets for single tariff has been done by adding up the admitted capital cost as on 31.3.2014 of individual assets. The AFC for the consolidated cost has been allowed as given below:-

- a) **Return on Equity:** The admitted gross normative equity as on 31.3.2014 of individual assets are added to arrive at the gross equity as on 1.4.2014 for the combined assets/project as whole.
  
- b) **Interest on Loan:** The admitted gross normative loan and cumulative repayment of loan as on 31.3.2014 of individual assets are added to get the gross normative loan and cumulative re-payment of loan as on

1.4.2014 for the combined assets/project as whole.

- c) **Depreciation:** The admitted gross capital cost and cumulative depreciation as on 31.3.2014 of individual assets are added to get the gross capital cost and cumulative depreciation as on 1.4.2014 for the combined assets. Lapsed life of the combined assets as on 1.4.2014 has been worked out by the concept of Effective COD and Weighted Average life as provided in Regulation 27 of 2014 Tariff Regulations, as detailed in the depreciation paragraph given below.
- d) **Interest on Working capital:** Since, the normative working capital is derived from the O&M Expenses and Receivables; it is being worked out accordingly.
- e) **O&M Expenses:** The entitled O&M Expenses as per 2014 Tariff Regulations of individual assets are worked out and added together to consider as O&M Expenses of the consolidated assets.

37. Though the instant assets are consolidated into one combined assets and single tariff is allowed, the petitioner has to maintain the identity of the individual assets. In future tariff petitions, the petitioner has to provide the details of individual assets like actual COD, effective COD, cut-off date, admitted capital cost, O&M Expenses claimed, etc. The petitioner is directed to make all future claims of additional capital expenditure or de-capitalization for the project, along with Auditor certificate by clearly mentioning the individual assets to which the claim has been made. Accordingly the relevant tariff forms should show the individual asset wise breakup.

38. The closing balance as on 31.03.2014 of individual assets consolidated to arrive the opening balance of the combined asset as given under.



(₹ in lakhs)

Particulars as on 31-03-2014	Asset-I	Asset-II	Asset-III	Asset-IV	Combined Asset as on 01.04.2014
Admitted Capital Cost	8517.74	5722.11	5656.72	1787.88	<b>21704.45</b>
Cumulative Depreciation	602.05	453.89	404.30	115.75	<b>1576.00</b>
Debt : Equity Ratio	70:30	70:30	70:30	70:30	<b>70:30</b>
Gross Loan	5962.42	4005.48	3973.70	1251.53	<b>15193.12</b>
Gross Equity	2555.32	1716.63	1703.01	536.35	<b>6511.32</b>
Cumulative Re-payment of Loan	602.05	453.89	404.30	115.75	<b>1576.00</b>

39. The petitioner has claimed the transmission charges for combined asset for the 2014-19 tariff period as under.

(₹ in lakhs)

Particulars	Combined Asset				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1135.27	1197.89	1224.92	1248.91	1259.29
Interest on Loan	1295.29	1299.21	1222.12	1136.08	1033.96
Return on Equity	1377.45	1477.92	1509.2	1536.06	1547.74
Interest on Working Capital	131.89	137.2	138.29	139.04	138.82
O&M Expenses	800.83	827.39	854.89	883.17	912.56
<b>Total</b>	<b>4740.73</b>	<b>4939.61</b>	<b>4949.42</b>	<b>4943.26</b>	<b>4892.37</b>

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

(₹ in lakhs)

Particulars	Combined Asset				
	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	120.12	124.11	128.23	132.48	136.88
O & M expenses	66.74	68.95	71.24	73.6	76.05
Receivables	790.12	823.27	824.9	823.88	815.4
Total	976.98	1016.33	1024.37	1029.96	1028.33
Interest	131.89	137.20	138.29	139.04	138.82
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%



### Capital Cost as on 1.4.2014

41. The admissibility of capital cost during the period 2014-19 has been dealt in accordance with Clause (1) & (3) (a) and (b) of Regulation 9 and Regulation 14 of the 2014 Tariff Regulations.
42. The capital cost allowed as on 31.3.2014, for the instant assets are clubbed together and the combined capital cost of the all the assets as on 31.3.2014 amounting ₹ **21704.45 Lakh**, has been considered as opening admitted capital cost as on 1.4.2014 in accordance with clause 9(3) of 2014 Tariff Regulation.
43. The petitioner, vide Auditor Certificates dated 19.12.2017 has claimed capital cost of individual assets which includes the additional capitalization for the 2014-19 tariff period. The summary of approved apportioned cost, capital cost admitted as on 01.04.2014 and additional capital expenditure claimed during 2014-19 period and the capital cost as on 31.03.2019 of all the assets are shown below.

(₹ in lakhs)

Name of the Asset	Apportioned Approved Cost	Admitted Capital cost as on 31.03.2014	Addition Capital Expenditure (2014- 19)					Capital cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-I	9567.08	8517.74	284.94	0.00	0.00	363.00	0.00	9165.68
Asset-II	8421.30	5722.11	1298.19	273.73	234.13	5.51	0.00	7533.67
Asset-III	8421.30	5676.72	1298.19	273.73	271.98	5.51	0.00	7526.12
Asset-IV	1851.51	1787.88	0.00	0.00	9.64	23.36	0.00	1820.88
<b>Total</b>	<b>28261.19</b>	<b>21704.45</b>	<b>2881.32</b>	<b>547.46</b>	<b>515.75</b>	<b>397.38</b>	<b>0.00</b>	<b>26046.35</b>

### Cost over-run

44. Against the apportioned approved cost of ₹ 28261.19 lakh, the capital cost



as on 31.3.2019 is ₹ 26322.01 lakh. Hence, there is no cost over-run for all the assets covered in the instant petition.

### **Initial Spares**

45. The initial spare were determined as per 2009 Tariff Regulations since the instant assets were put into commercial operation during 2009-14 period. The petitioner has submitted the year-wise discharge details of the initial spares for all the assets. Accordingly, excess initial spares have already been taken care of while determining 2009-14 true-up tariff in earlier paragraphs.

### **Additional Capital Expenditure**

46. The additional capital expenditure is dealt in accordance with Clauses (1) and (3) of Regulation 14 of 2014 Tariff Regulations. The petitioner has claimed the following ACE for 2014-19 tariff period vide Auditor certificates dated 19.12.2017:

(₹ in lakhs)						
<b>Asset</b>	<b>ACE for the year 2014-15</b>	<b>ACE for the year 2015-16</b>	<b>ACE for the year 2016-17</b>	<b>ACE for the year 2017-18</b>	<b>ACE for the year 2018-19</b>	<b>Total Add Cap claimed during 2014-19</b>
Asset-I	284.94	0.00	0.00	363.00	0.00	<b>647.94</b>
Asset-II	1298.19	273.73	234.13	5.51	0.00	<b>1811.56</b>
Asset-III	1298.19	273.73	271.98	5.51	0.00	<b>1849.41</b>
Asset-IV	0.00	0.00	9.64	23.36	0.00	<b>33.00</b>
<b>Total</b>	<b>2881.32</b>	<b>547.46</b>	<b>515.75</b>	<b>397.38</b>	<b>0.00</b>	<b>4341.91</b>

The petitioner has claimed the ACE as Balance & Retention Payments and Works Deferred for Execution under Regulation (14)(1)(i), (14)(1)(ii) and 14(3)(v) of Tariff Regulation 2014. The ACE claimed by the petitioner has been allowed subject to true up. Adjustment of discharge of initial spare and other liability, if any, shall be considered at the time of true up.

### Capital Cost summary from 1.4.2014 to 31.3.2019

47. In view of the above, the following cost has been considered as on 31.3.2019:

(₹ in lakh)

Asset	Capital cost allowed as on 01.04.2014	ACE for the year 2014-15	ACE for the year 2015-16	ACE for the year 2016-17	ACE for the year 2017-18	Capital Cost as on 31.03.2019 considered for tariff calculation
Asset-I	8517.74	284.94	0.00	0.00	363.00	9165.68
Asset-II	5722.11	1298.19	273.73	234.13	5.51	7533.67
Asset-III	5676.71	1298.19	273.73	271.98	5.51	7526.12
Asset-IV	1787.88	0.00	0.00	9.64	23.36	1820.88
<b>Total</b>	<b>21704.44</b>	<b>2881.32</b>	<b>547.46</b>	<b>515.75</b>	<b>397.38</b>	<b>26046.35</b>

### Debt: Equity Ratio

48. The debt equity ratio has been considered in accordance with clause 19 (1), (3) and (5) of 2014 Tariff Regulation. The debt and equity allowed for individual assets for determination of tariff for the period ending 31.03.2014 has been combined and considered for deciding opening debt and equity of the project as on 01.04.2014. The debt equity ratio of 70:30 has been considered for the Additional capital expenditure allowed during 2014-19 in accordance to clause 19(3) of 2014 Tariff Regulation.

49. The details of the debt: equity as on 1.4.2014 and 31.03.2019 for the project as whole is considered for the purpose of tariff for the 2014-19 tariff period is as follows:-

(₹ in lakh)

Combined Asset				
Particular	Capital cost as on 01.04.2014		Capital cost as on 31.3.2019	
	Amount	%	Amount	%
Debt	15193.12	70.00	18232.46	70.00
Equity	6511.32	30.00	7813.90	30.00
<b>Total</b>	<b>21704.45</b>	<b>100.00</b>	<b>26046.36</b>	<b>100.00</b>

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

50. The petitioner has claimed ROE at the rate of 19.61% for the 2014-19 period after grossing up the ROE of 20.961% with MAT rate as per the above said Regulation. The respondent BSES Rajdhani Power Limited has submitted that the Petitioner may be directed to furnish complete details in the working of effective tax rate along with tax audit report for financial year 2014-15 and also be directed to submit the details of deferred tax liability and its treatment in the books of accounts for the period 2014-19.
51. In response, PGCIL has replied that the Petitioner is availing tax benefits under provisions of section 80IA of Income tax act 1961 for computing normal income tax. However under Section 115JB of Income tax Act 1961 company is liable for payment of Minimum Alternate Tax (MAT) plus Surcharge and Cess as applicable. As per Regulation 25(3), any over/under recovery of grossed up rate on RoE shall be adjusted at the time of truing up of 2014-19 on the basis of actual tax paid including interest and additional demand by the IT authorities. The tax assessment order for 2014-15 is yet to be received and the effective tax rate as per the same shall be considered while filing the truing up of 2014-19. Further as per clause 49 of Tariff Regulation, 2014 the deferred tax liability before 1.4.2009 shall be recovered from the beneficiaries or the long term transmission customers/DICs as the case may be, as and when the same gets materialized. As the present asset is commissioned after 01.04.2009, the same is not applicable.
52. The ROE has been worked out in accordance with Regulations 24 and 25 of



the 2014 Tariff Regulations. The rate of pre-tax return on equity for all the years during 2014-19 period has been determined by grossing up the base rate of 15.50% with effective tax rate of 20.961%. This rate of pre-tax return on equity is subject to true up based on the effective tax rate of respective financial year applicable to the petitioner company. Accordingly, the RoE allowed is as follows:-

(₹ in lakh)					
Particulars	Combined Assets				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	6511.32	7375.72	7539.96	7694.68	7813.90
Addition due to Additional Capitalization	864.40	164.24	154.73	119.21	0.00
Closing Equity	7375.72	7539.96	7694.68	7813.90	7813.90
Average Equity	6943.52	7457.84	7617.32	7754.29	7813.90
Return on Equity (Base Rate )	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for the Financial year	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%	19.610%	19.610%
<b>Return on Equity (Pre-tax)</b>	<b>1361.62</b>	<b>1462.48</b>	<b>1493.76</b>	<b>1520.62</b>	<b>1532.31</b>

### **Interest on loan (IOL)**

53. We have considered the weighted average rate of IOL on the basis of rate prevailing as on 1.4.2014. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations as detailed below:-

- a) The actual loan portfolio of individual assets as considered for the true up purpose has been added together for arriving at the opening balance as on 1.4.2014. The loan portfolio as submitted by the petitioner has been considered for determining Weighted Average Rate of Interest.

- b) Gross amount of loan, repayment of installments and rate of interest on actual loans as mentioned in Form 9C of the petition have been considered.
- c) The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year.
- d) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the normative average loan during the year to arrive at the interest on loan.

54. The IOL has been worked out and allowed as follows.

(₹ in lakh)

Particulars	Combined Asset				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	15193.12	17210.05	17593.27	17954.30	18232.46
Cumulative Repayment upto previous Year	1576.00	2697.09	3881.14	5092.23	6327.31
Net Loan-Opening	13617.13	14512.96	13712.13	12862.07	11905.15
Addition due to Additional Capitalization	2016.92	383.22	361.03	278.17	0.00
Repayment during the year	1121.09	1184.05	1211.08	1235.08	1245.47
Net Loan-Closing	14512.96	13712.13	12862.07	11905.15	10659.69
Average Loan	14065.04	14112.54	13287.10	12383.61	11282.42
Weighted Average Rate of Interest on Loan	9.1502%	9.1592%	9.1576%	9.1412%	9.1395%
<b>Interest on Loan</b>	<b>1286.98</b>	<b>1292.60</b>	<b>1216.78</b>	<b>1132.01</b>	<b>1031.15</b>

### Depreciation

55. Depreciation has been dealt in accordance with the Regulation 27 of 2014 Tariff Regulation. As discussed in above paragraphs, the lapsed life of the combined assets as on 1.4.2014 has been worked out by the concept of Effective COD and Weighted Average life as provided in Regulation 27 of 2014 Tariff Regulations.

(i) **Effective Date of Commercial Operation (E-COD) of the project**

The Effective Date of Commercial Operation (E-COD) for the combined assets has been worked out based on the admitted capital cost of individual assets as on 31.3.2014 and the actual COD of individual Assets, as shown below:-

<b>Asset</b>	<b>Actual DOCO</b>	<b>Admitted Capital Cost as on 31-03-2014</b>	<b>Weight of the cost</b>	<b>No. of days from last COD</b>	<b>Weighted days</b>	<b>Effective COD (Latest COD - Total Weighted days)</b>
Asset-I	1-9-2012	8705.61	39.65%	30	11.90	<b>2-8-2012</b>
Asset II	1-6-2012	5753.83	26.21%	122	31.97	
Asset III	1-8-2012	5708.43	26.00%	61	15.86	
Asset IV	1-10-2012	1787.88	8.14%	0	0.00	
<b>Total</b>		<b>21955.75</b>	<b>100.00%</b>		<b>59.73</b>	

(ii) **Weighted Average Life (WAL) of the project.**

The combined asset, have multiple elements (i.e. Land, Building, Transmission line, Substation and PLCC) and each element may have different span of life. Therefore, in 2014 Tariff Regulations, the concept of Weighted Average Life (WAL) has been introduced which has been used as the useful life of the project as whole. The WAL has been determined based on the admitted capital cost of individual elements of assets as on 31-03-2014 and their respective life as stipulated in 2014- 19 Tariff Regulations. The element wise life as it was defined in Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in 2014 Regulation for the individual assets has been considered for determination of WAL for the project as whole. Accordingly, the WAL of the combined assets has been worked out as 27 years as under:-



<b>Particulars</b>	<b>Admitted Capital Cost as on 31-03-2014 for Combined Assets (a)</b>	<b>Life as per 2014 Regulation (b)</b>	<b>Weight (a) x (b)</b>
Freehold Land	1063.35	0	26583.75
Leasehold Land	0.00	0	
Building & Other Civil Works	1128.00	25	28199.90
Transmission Line	4403.05	35	154106.75
Sub-Station Equipments	14769.32	25	369233.04
PLCC	340.73	25	8518.25
<b>TOTAL</b>	<b>20641.10**</b>		<b>560057.94</b>
<b>Weighted Average life = Total of Weight / Capital cost of project (In Year)</b>	<b>27</b>		

\*\*While calculating weighted average life of the combined assets the admitted capital cost in respect of land has not been considered.

**(iii) Lapsed Life of the project as on 01.04.2014**

The E-COD as determined above shall be used only to determine the lapsed life as on 01.04.2014 for the combined assets. The lapsed life as on 01.04.2014 refers the number of completed years as on 01.04.2014 starting from E-COD. The lapsed life (in completed years) of the instant project as on 1.4.2014 has been worked out as 2 years.

**(iv) Remaining useful life of the project**

The remaining useful life of the project as on 1.4.2014 has been worked out as 25 years. (i.e. Weighted Average life minus lapsed life as on 01.04.2014) The usage of weighted average life of the project as determined above has been applied prospectively for determination of depreciation. (i.e. 01.04.2014 onwards) and no retrospective adjustment of depreciation in previous tariff period is required since the depreciation considered for the individual assets up to

31.03.2014 are added together to arrive the cumulative depreciation of the project as on 01.04.2014. The Cumulative Depreciation of the project as on 1.4.2014 has been computed as ₹ **1576.00** lakh.

56. The capital cost, E-COD, WAL and lapsed life for the combined assets as determined in above paragraphs have been considered for computation of depreciation for the period 2014-19. The lapsed life of the project as on 01.04.2014 is 2 years hence, the 12 years from the effective date of commercial operation is completing beyond the tariff period 2014-19. Hence, the depreciation for entire tariff period (i.e. 2014-19) has been worked out based on Straight Line Method and at rates specified in Appendix-II to 2014 Tariff Regulations.

57. The details of the depreciation allowed for the project as whole are given hereunder:-

Particulars	(₹ in lakh)				
	Combined Asset				
	2014-15	2014-15	2014-15	2014-15	2014-15
Opening Gross Block	21704.45	24585.77	25133.23	25648.98	26046.36
Additional Capital expenditure	2881.32	547.46	515.75	397.38	0.00
Closing Gross Block	24585.77	25133.23	25648.98	26046.36	26046.36
Average Gross Block	23145.11	24859.50	25391.10	25847.67	26046.36
Rate of Depreciation	4.8438%	4.7630%	4.7697%	4.7783%	4.7817%
Depreciable Value	19873.58	21416.53	21894.98	22305.89	22484.71
Remaining Depreciable Value	18297.58	18719.44	18013.83	17213.66	16157.40
<b>Depreciation</b>	<b>1121.09</b>	<b>1184.05</b>	<b>1211.08</b>	<b>1235.08</b>	<b>1245.47</b>

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

58. The O&M Expenses claimed by the petitioner are as under:-

Particulars	(₹ in lakhs)				
	2014-15	2014-15	2014-15	2014-15	2014-15
O & M Expenses claimed for combined asset	800.83	827.39	854.89	883.17	912.56

59. The petitioner has submitted that O&M Expenses for the period 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any. The scheme of wage revision applicable to CPSUs being binding on the petitioner, the petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 01.01.2017 onwards.
60. The respondent BRPL has submitted that the increase in the employee cost, if any, due to wage revision must be taken care by improvement in their productivity levels by the petitioner company so that the beneficiaries are not unduly burdened over and above the provisions made in the Tariff Regulations, 2014.
61. In response, the petitioner in its rejoinder has submitted that scheme of wage revision applicable to CPSUs being binding on the petitioner, the petitioner reserves the right to approach the Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike from 1.1.2017 onwards.
62. We have considered the submissions made by the petitioner. The O&M

Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, we would like to clarify that any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

63. The details of O&M Expenses allowed for the combined assets are given hereunder:-

Particulars	(₹ in lakhs)				
	2014-15	2014-15	2014-15	2014-15	2014-15
O & M Expenses claimed for combined asset	800.83	827.39	854.89	883.17	912.56

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

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

- a) **Maintenance Expenses** : Maintenance spares @ 15 % of Operation and Maintenance expenses specified in Regulation 28.
- b) **O & M Expenses** O&M expenses have been considered for one month of the O&M expenses
- c) **Receivables** The receivables have been worked out on the basis of 2 months' of annual fixed cost as worked out above.
- d) **Rate of Interest on Working Capital:** As per Clause 28 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, SBI Base Rate (10.00%) as on 01.04.2014 Plus

350 Bps i.e. 13.50 % have been considered as the rate of interest on working capital.

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

(₹ in lakh)

Particulars	Combined Asset				
	2014-15	2014-15	2014-15	2014-15	2014-15
Maintenance Spares	120.12	124.11	128.23	132.48	136.88
O & M expenses	66.74	68.95	71.24	73.60	76.05
Receivables	783.59	817.15	819.00	818.19	809.93
Total	970.45	1,010.21	1,018.47	1,024.27	1,022.86
Interest	<b>131.01</b>	<b>136.38</b>	<b>137.49</b>	<b>138.28</b>	<b>138.09</b>

### Annual Transmission Charges

66. The detailed computation of the various components of the annual fixed cost for the combined transmission assets for the tariff period 2014-19 is summarized below:-

(₹ in lakh)

Particulars	Combined Asset				
	2014-15	2014-15	2014-15	2014-15	2014-15
Depreciation	1121.09	1184.05	1211.08	1235.08	1245.47
Interest on Loan	1286.98	1292.60	1216.78	1132.01	1031.15
Return on Equity	1361.62	1462.48	1493.76	1520.62	1532.31
Interest on Working Capital	131.01	136.38	137.49	138.28	138.09
O&M Expenses	800.83	827.39	854.89	883.17	912.56
<b>Total</b>	<b>4701.54</b>	<b>4902.91</b>	<b>4914.00</b>	<b>4909.15</b>	<b>4859.57</b>

### Filing Fee and Publication Expenses

67. 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. BRPL has submitted that filing fee and other expenses may not be allowed. In accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations, the petitioner shall be entitled for reimbursement of the filing fee

and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis.

### **Licence Fee and RLDC Fees and Charges**

68. 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 / Goods and Services Tax**

69. The petitioner has sought to recover Service Tax/GST on transmission charges separately from the respondents, if at any time service tax/GST on transmission is withdrawn from negative list in future. We have considered the submission of the petitioner. Service tax has been subsumed by GST and hence petitioner's prayer is infructuous. The petitioner has submitted that the Commission should allow to recover GST from the beneficiaries, if imposed on transmission charges under the proposed GST when implemented by Government of India. GST is not levied on transmission service at present and we are of the view that petitioner's prayer is premature.

### **Sharing of Transmission Charges**

70. 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.

71. This order disposes of Petition No.108/TT/2018.

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

Sd/-  
**(P. K. Pujari)**  
**Chairperson**

