

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**PETITION NO. 39/RP/2016**

**Coram:**

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

**Date of Hearing: 19.09.2016  
Date of Order : 19.12.2016**

**In the matter of:**

Review of order dated 25.4.2016 of the Central Electricity Regulatory Commission in Petition No. 252/TT/2015 under Regulation 103(1) of the 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-122001 (Haryana)

**.....Petitioner**

**Versus**

1. GMR Kamalanga Energy Ltd.  
Skip House 25/1, Museum Road  
Bangalore, Karnataka 560025
2. Monnet Power Company Ltd.  
Monnet Marg, Mandir Hasaud,  
Raipur, Chattisgarh – 492101
3. Lanco Babandh Power Ltd.  
Plot No. 397, Phase III, 2nd Floor,  
Udyog Vihar, Gurgaon,  
Haryana -120016
4. IND Barath Energy (Utkal) Ltd.  
Plot No. 30-A, Road No. 1  
Film Nagar, Jublie Hills  
Hydrabad, Andhra Pradesh -500033
5. Navbharat Power Private Ltd.  
Navbharat Chambers, 6-3-1109/1,  
3rd Floor, Left Wing, Rajbhawan Road  
Somajiguda, Hyderabad, Andhra Pradesh - 500082



6. Jindal India Thermal Power Ltd.  
Plot No-12, Sector-B Pocket -1,  
Local Shopping Complex,  
VasantKunj, New Delhi -110070
7. Sterlite Energy Limited  
Sipcot Industrial Complex  
Tuticorin, Tamilnadu-628002
8. Bihar State Power (Holding) Company Ltd  
(formerly Bihar State Electricity Board -BSEB)  
Vidyutbhavan, bailey road, Patna – 800 001
9. West Bengal State Electricity Distribution Company  
Bidyut Bhawan, Bidhan Nagar  
Block DJ, sector-II, Salt Lake City  
Kolkata - 700 091
10. Grid Corporation of Orissa Ltd.  
Shahid Nagar, Bhubaneshwar- 751007
11. Damodar Valley Corporation  
DVC Tower, Maniktala  
Civic Centre, VIP Road, Kolkata-700054
12. Power Department  
Govt of Sikkim, Gangtok-737101
13. Jharkhand State Electricity Board  
Doranda, Ranchi-834002

....Respondent(s)

The following were present:

For Petitioner:       Shri Deepak Jain, Advocate, PGCIL  
                              Ms. Shantala Sankrit, Advocate, PGCIL  
                              Ms. Mahima Deepak, Advocate, PGCIL  
                              Ms. Tanvi Sharma, Advocate, PGCIL  
                              Shri S. S. Raju, PGCIL  
                              Shri Rakesh Prasad, PGCIL  
                              Shri Amit Yadav, PGCIL  
                              Shri S. K. Venketesan , PGCIL  
                              Shri R. P. Padhi, PGCIL

For Respondents:   None

## **ORDER**



This review petition is filed by Power Grid Corporation of India (PGCIL) seeking review of the order dated 25.4.2016 in Petition No. 252/TT/2015, wherein transmission tariff for (i) 765kV S/C Angul-Sundargarh (line-I) transmission line and its bays and with 1 no (anticipated) under (3X80) MVAR line reactor & 1 no 80 MVAR present spare reactor each at Angul & Sundargarh (referred as "Asset I"); (ii) 01 no. (3X110) MVAR Bus Reactor (2nd) and associated bay at Angul (referred as "Asset II"); (iii) 01 no. (3X500) MVA Transformer (3rd) Transformer and associated bay at Angul (referred as "Asset III"); (iv) 01 no. (3X500) MVA Transformer (4th) Transformer and associated bay at Angul (referred as "Asset IV"); and (v) LILO of one Circuit of Talcher Meramundali 400 kV D/C line at Angul Sub-station (referred as "Asset V") was allowed for the tariff period 2014-19 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred as "2014 Tariff Regulations ").

2. The instant assets were scheduled to be commissioned on 10.3.2013 as per the Investment Approval dated 10.9.2010, however Assets I, II, III, IV and V were commissioned on 27.1.2016, 1.4.2015, 25.1.2016, 1.4.2015 and 1.4.2014 respectively. Thus, there is time over-run of 35, 25, 35, 25 and 13 months in case of Assets I, II, III, IV and V respectively. The time over-run was attributed to delay in land acquisition, Right of Way issues and delay in obtaining of forest clearance. The time over-run in case of Assets I and V was condoned and time over-run in case of other assets was partly condoned. In case of Assets II, III and IV, time over-run of 12, 22 and 12 months respectively was not condoned and accordingly IDC and IEDC for the period was disallowed. The relevant portion of the order dated 25.4.2016 is extracted hereunder:-



" 20. The asset wise delay considered for each of the Asset I, Asset II, Asset III and Asset IV are as follows:-

a. As regards Asset I, there is a total time over-run of thirty-five months from SCOD to actual COD. We have considered time delay for Asset I on account of land acquisition at Angul (thirteen months) and Sundargarh (twenty-two months), ROW issues at Angul (twenty-six months) and Sundargarh (fifty-one months) and forest clearance (thirty-eight months). The commissioning of the assets have been delayed on account of above reasons. It is observed that the petitioner has made efforts, however, the delay occurred on account of reasons beyond the control of the petitioner. There is an overlapping of delay on account of the above reasons and accordingly, we hold that the time over-run of thirty-five months is not attributable to the petitioner.

b. As regards Asset II, there is a total time over-run of twenty-five months from SCOD to actual COD. We have considered time delay for Asset II on account of land acquisition at Angul (thirteen months) as admissible delay. We hold that the time over-run due to land acquisition is not attributable to the petitioner in this case and hence, the time over-run of thirteen months is condoned for Asset II and the remaining twelve months are disallowed. Accordingly, IDC and IEDC of twelve months are disallowed. The petitioner in its affidavit dated 11.3.2016 has submitted the break-up of IDC discharged on cash-basis. The IDC and IEDC disallowed is shown as below:-

IDC/IEDC as per CA certificate	Amount	Period from IDC/IEDC Infusion	Disallowed Time Delay	Disallowed IDC/IEDC
	( in ₹ lakh)	(in months)	( in months)	( in ₹ lakh)
IDC	295.61#	54*	12	65.69
IEDC	96.29##	55**		21.01
Total				86.70

# IDC cash discharged upto actual COD

## IEDC discharged upto actual COD

\* From the date of infusion of IDC (21.10.2010) to the actual COD (1.4.2015)

\*\* From the date of IA (10.9.2010) to the date of actual COD (1.4.2015)

22. As regards Asset III, there is a total time over-run of thirty-five months from SCOD to actual COD. We have considered time delay for Asset III on account of land acquisition at Angul (thirteen months) as admissible delay. We hold that the time over-run due to land acquisition is not attributable to the petitioner in this case and hence, time over-run of thirteen months is condoned for Asset III and the remaining twenty-two months are disallowed. Accordingly, IDC and IEDC of twenty-two months are disallowed. The IDC and IEDC disallowed is shown as below:-

IDC/IEDC as per CA certificate	Amount	Period from IDC/IEDC Infusion	Disallowed Time Delay	Disallowed IDC/IEDC
	( in ₹ lakh)	(in months)	( in months)	( in ₹ lakh)
IDC	564.15#	46*	22	269.81
IEDC	142.03##	65**		48.07
Total				317.88

# IDC cash discharged upto actual COD

## IEDC discharged upto actual COD

\* From the date of infusion of IDC (29.3.2012) to the actual COD (25.1.2016)



\*\* From the date of IA (10.9.2010) to the date of actual COD (25.1.2016)

24. As regards Asset IV, there is a total time over-run of twenty-five months from SCOD to actual COD. We have considered time delay for Asset IV on account of land acquisition at Angul (thirteen months) as admissible delay. We hold that the time over-run due to land acquisition is not attributable to the petitioner in this case and hence, time over-run of thirteen months is condoned for Asset IV and the remaining twelve months are disallowed. Accordingly, IDC and IEDC of twelve months are disallowed. The petitioner in its affidavit dated 11.3.2016 has submitted the break-up of IDC discharged on cash-basis. The IDC and IEDC disallowed is shown as below:-

IDC/IEDC as per CA certificate	Amount	Period from IDC/IEDC Infusion	Disallowed Time Delay	Disallowed IDC/IEDC
	( in ₹ lakh)	(in months)	( in months)	( in ₹ lakh)
IDC	382.34#	46*	12	84.96
IEDC	124.54##	65**		27.17
Total				112.14

# IDC cash discharged upto actual COD

## IEDC discharged upto actual COD

\* From the date of infusion of IDC (21.10.2010) to the actual COD (1.4.2015)

\*\* From the date of IA (10.9.2010) to the date of actual COD (1.4.2015)"

3. Aggrieved by the said order, the review petitioner has filed the instant review petition. The review petitioner has prayed for condonation of the full period of time over-run in case of Assets II, III and IV. The review petitioner has submitted that while disallowing the time over-run in case of Assets II, III and IV, the gravity of ROW issues was not considered by the Commission.

4. The grounds submitted by the review petitioner for review of the order dated 25.4.2016 are as under:-

- a) The Commission did not consider the severe ROW constraints faced from the beginning of the construction work of Angul Sub-station and associated transmission line in the areas related to Assets II, III and IV. The local villagers mixed up with anti-socials threatened the contractors and stopped the work inside the sub-station. The matter was taken up with the district administration and several correspondence was made



with the district administration and the police authorities. The details of the problems faced and the correspondence by the review petitioner made are given below in the table.

Srl.No.	Remarks	From	To
1.	Police protection during construction	PGCIL	Inspector In- charge, Banarpal, Dist. Angul
2.	Deployment of 25 Policemen to our 765/400 kV dated 8.2.2012	PGCIL	Superintendent of Police, Angul
3.	Preventing work by local miscreant dated 24.02.2012	PGCIL	Collector & District Magistrate, Angul
4.	Forcible stoppage of work at Fulapada Site by village from Kamarsahi dated 14.5.2012	PGCIL	Collector & District Magistrate, Angul
5.	Threatening by Tutu Gadnayak at the worksite of Powergrid dated 30.11 .2012	PGCIL	Inspector In- charge, Banarpal, Dist. Angul
6.	Unrest in village Phulpara and threat to Powergrid installation dated 8.8.2013	PGCIL	Superintendent of Police, Angul

- b) While issuing the impugned order in Petition 252/TT/2015, the gravity of ROW was not considered as all the complaints and letters regarding land acquisition, forest clearance and ROW were clubbed and attached together. Since the problems faced and the steps taken by the review petitioner are clearly given now, the delay on account of ROW issues should be condoned in the instant Review Petition.
- c) In order dated 25.4.2016, the time over-run due to delay in land acquisition was considered and condoned in case of Assets II, III and IV. The time over-run due to ROW issues was not considered by the Commission. The fact that in the absence of commissioning of the 765 kV line (i.e. Angul-Sundergarh), the corresponding ICTs and Bus reactors at Angul Sub-station cannot be put under regular service and declared as commercial operational was ignored.



- d) The Line-II of 765 kV Angul-Jharsuguda transmission line, covered in Petition No. 246/TT/2014, was commissioned on 1.4.2015 and the 765 kV voltage level was introduced in Angul 765/400 kV Sub-station. Assets II, III and IV are sub-station equipments in Angul-Jharsuguda and they could be charged only on commissioning of Line-II of 765 kV Angul-Jharsuguda transmission line which took place on 1.4.2015 and not anytime before that. Accordingly, the corresponding 765 kV sub-station equipments at Angul Sub-station were charged 1.4.2015.
- e) In a similar case, while dealing with the issue of COD of an ICT in Petition No. 79/TT/2012, the Commission observed that the COD of the ICT depended on the COD of the Neemrana-Manesar transmission line and gave liberty to the petitioner to approach the Commission after the commercial operation of Neemrana-Manesar transmission line. The time over-run in case of Neemrana-Manesar transmission line, covered in Petition No.69/TT/2012, was condoned. Accordingly, the petitioner filed review petition after commissioning of Neemrana-Manesar transmission line and the Commission had condoned the delay vide order dated 30.4.2015 in Petition No. 1/RP/2015.

5. The review petition was admitted on 6.9.2016 and notices were issued to the respondents directing to submit reply. However, none of the respondents have filed any reply.

6. During the hearing on 19.9.2016, learned counsel for the review petitioner reiterated the submissions made in the review petition. He submitted that the time over-run in case of the instant assets is due to delay in land acquisition, delay in



forest clearance and ROW issues. Learned counsel submitted that the delay in land acquisition was only condoned and the time over-run due to ROW issues was not considered in the impugned order. Learned counsel for the review petitioner further submitted that Assets II and IV, which are Bus Reactor and Transformer at Angul Sub-station, can be commissioned only alongwith the corresponding Angul-Jharsuguda transmission line, covered in Petition No.246/TT/2014. Angul-Jharsuguda transmission line was commissioned on 1.4.2015 and accordingly Asset II and IV were commissioned on 1.4.2015. Learned counsel for the review petitioner further submitted that Asset III, which is a transformer at Angul can be commissioned only alongwith the associated 765 kV S/C Angul-Sundergarh (line-I) transmission line, i.e. Asset I in the instant petition. The Angul-Sundergarh transmission line was commissioned on 27.1.2016 and Asset III was commissioned on 25.1.2016. The review petitioner has submitted that the time over-run in case of the transmission lines has been condoned however the time over-run in case of the related Bus Reactor and Transformer has not been condoned. The Commission should take into consideration the delay due to RoW issues and condone the time over-run in commissioning of Assets II, III and IV.

### **Analysis and Decision**

7. We have heard the learned counsel of the review petitioner and have considered the documents on record. The time over-run in case of Asset II, III and IV was disallowed in order dated 25.4.2016 in Petition No. 252/TT/2015 as the petitioner did not submit the fact that the commissioning of Asset II, III and IV was linked to line-II of 765 kV Angul-Jharsuguda and Line-I of 76 5kV Angul-Sundergarh transmission line. It is observed that Asset II and Asset IV are associated with 765 kV Angul-Jharsuguda transmission line (covered under Petition No. 246/TT/2014)





and Asset III is associated with 765 kV Angul-Sundargarh transmission line (covered in Petition No.252/TT/2015 as 'Asset I'). Asset II and Asset IV can be commissioned alongwith or after the commissioning of 765 kV Angul-Jharsuguda transmission line and similarly Asset IV alongwith or after commissioning of 765 kV Angul-Sundergarh transmission line. The 765 kV Angul-Jharsuguda transmission line was scheduled to be commissioned on 1.14.2013 and it was commissioned on 4.4.2015 and there was time over-run of 24 months and 3 days and the same was condoned in order dated 19.12.2016 in Petition No.246/TT/2014. Similarly, the 765 kV Angul-Sundergarh transmission line was scheduled to be commissioned on 1.4.2013 and it was commissioned on 27.1.2016 and the time over-run of 35 months was condoned in order dated 25.4.2016 in Petition No.252/TT/2016. As the time over-run in commissioning of 765 kV Angul-Jharsuguda transmission line and 765 kV Angul-Sundergarh transmission line is condoned, we are of the view that the time over-run in commissioning of the associated bus reactors and transformers also require to be condoned. Not condoning the time over-run in commissioning of Assets II, III and IV is an apparent mistake which needs to be rectified. Accordingly, in exercise of the power of review under Section 94 of the Electricity Act, 2003 read with Regulation 103 of the Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, we condone the time over-run in commissioning of Assets II, III and IV.

8. The review petitioner has claimed the date of commercial operation of Asset II, Asset III and Asset IV as 1.4.2015, 25.1.2016 and 1.4.2015 respectively, however it is observed that the transmission line associated with Asset II, III and IV were commissioned on 4.4.2015, 27.1.2016 and 4.4.2015 respectively. As the Asset III can be commissioned alongwith or after commissioning of the 765 kV S/C Angul-Sundergarh transmission line and Asset II and IV can be commissioned alongwith or



after commissioning of the 765 kV S/C Angul-Jharsuguda transmission line, the date of commercial operation of Asset III is considered as 27.1.2016 and not 25.1.2016, similarly the date of commercial operation of Asset II and IV is considered as 4.4.2015 and not 1.4.2015 as claimed by the review petitioner.

9. It is further observed that paragraph numbers in order dated 25.4.2016 were inadvertently numbered wrongly. This error in numbering the paragraphs in order dated 25.4.2016 is corrected in the instant order. The revised paragraph numbers are as given below:-

<b>Srl. No.</b>	<b>Para number in order dated 25.4.2016</b>	<b>Page no.</b>	<b>Corrected Para No.</b>
1	12	25	34
2	13	25	35
3	14	26	36
4	15	27	37
5	16	29	38
6	17	30	39
7	18	30	40
8	19	30	41
9	20	33	42
10	21	34	43
11	22	34	44
12	23	35	45
13	24	35	46
14	25	38	47
15	26	39	48
16	25	39	49
17	26	40	50
18	27	40	51
19	28	40	52
20	29	42	53
21	30	44	54
22	31	51	55
23	32	51	56
24	2	51	57
25	33	51	58



26	34	52	49
27	35	52	50

10. The consequential effects of allowing the time over-run in case of Assets II, III and IV necessitate amendment of revised paras 33, 35, 37, 41, 45, 46, 51 and 52 of the order dated 25.4.2016. Accordingly, these paras have been modified as under:-

“33. The cut-off date for both the Asset I, Asset II, Asset III, Asset IV and Asset V works out to be 31.3.2019, 31.3.2018, 31.3.2019, 31.3.2018 and 31.3.2016 respectively. The additional capitalization claimed by the petitioner is within the cut-off date. It is observed that total estimated completion costs of the subject assets including the additional capitalizations are within the approved revised apportioned costs. Accordingly, additional capitalization for all the subject assets is allowed under Regulation 14(1)(i) of 2014 Tariff Regulations as below:-

Asset	Approved apportioned cost as per FR	Approved apportioned cost as per RCE	Capital cost as on COD	Additional capital expenditure			Estimated completion cost as on 31.3.2019
				2014-15	2015-16	2016-17	
Asset I	41113.97	60652.20	55000.25#(56168.86-264.36-904.25)	0	817.78@( 553.42+2 64.36)	3304.25@ (2400.00+ 904.25)	<b>59122.28</b>
Asset II	2840.34	3657.10	2655.13 (2759.91-104.78)	0	994.65 (889.87+1 04.78)	0.00	<b>3649.78</b>
Asset III	8064.93	5876.99	3807.72 (4169.27-23.98- 59.71)	0	523.98 (500.00+2 3.98)	1257.90 (1198.19+ 59.71)	<b>5867.46</b>
Asset IV	8064.93	5679.25	3444.43 (3569.60-125.17)	0	2223.72 (2098.55+ 125.17)	0.00	<b>5668.15</b>
Asset V	3070.83	4095.20	3211.07## (3299.98-88.91)	718.97@ @ (630.06+8 8.91)	66.70	92.72	<b>4089.46</b>

# After deducting IDC of ₹264.36 lakh and ₹904.25 lakh during additional capitalization in 2015-16 and 2016-17 respectively

## After deducting IDC of ₹88.91 lakh during additional capitalization in 2014- 15

@ Addition of IDC of ₹264.36 lakh and ₹904.25 lakh discharged during 2015-16 and 2016-17 respectively @@ Addition of IDC of ₹88.91 lakh discharged during 2014-15 "



"35. The petitioner has considered debt:equity ratio as 70:30 as on COD for the subject asset. We have considered debt:equity ratio of 70:30 as on COD and for additional capitalization during 2014-15, 2015-16 and 2016-17 for all the subject assets. The details of the debt:equity as on the date of COD and 31.3.2019 of each subject asset considered for the purpose of tariff computation for the 2014-19 tariff period is as follows:-

Asset		As on COD		Additional capitalization during 2014-19		As on 31.3.2019	
		Amount	(%)	Amount	(%)	Amount	(%)
Asset I	Debt	38500.19	70.00	2885.42	70.00	41385.61	70.00
	Equity	16500.07	30.00	1236.61	30.00	17736.67	30.00
	<b>Total</b>	<b>55000.25</b>	<b>100.00</b>	<b>4122.03</b>	<b>100.00</b>	<b>59122.28</b>	<b>100.00</b>
Asset II	Debt	1858.59	70.00	696.26	70.00	2554.85	70.00
	Equity	796.54	30.00	298.40	30.00	1094.93	30.00
	<b>Total</b>	<b>2655.13</b>	<b>100.00</b>	<b>994.65</b>	<b>100.00</b>	<b>3649.78</b>	<b>100.00</b>
Asset III	Debt	2859.91	70.00	1247.32	70.00	4107.22	70.00
	Equity	1225.67	30.00	534.56	30.00	1760.24	30.00
	<b>Total</b>	<b>4085.58</b>	<b>100.00</b>	<b>1781.88</b>	<b>100.00</b>	<b>5867.46</b>	<b>100.00</b>
Asset IV	Debt	2411.10	70.00	1556.60	70.00	3967.71	70.00
	Equity	1033.33	30.00	667.12	30.00	1700.45	30.00
	<b>Total</b>	<b>3444.43</b>	<b>100.00</b>	<b>2223.72</b>	<b>100.00</b>	<b>5668.15</b>	<b>100.00</b>
Asset V	Debt	2247.78	70.00	614.87	70.00	2862.65	70.00
	Equity	963.29	30.00	263.52	30.00	1226.81	30.00
	<b>Total</b>	<b>3211.07</b>	<b>100.00</b>	<b>878.39</b>	<b>100.00</b>	<b>4089.46</b>	<b>100.00</b>

"37. 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 petitioner has also prayed that they will approach the Commission for suitable revision in the norms of O&M Expenses for



claiming the impact of such increase. 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:-

#### Asset I

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Gross loan opening	38500.19	39072.63	41385.61	41385.61
Cumulative Repayment upto previous year	0.00	519.57	3554.00	6675.65
Net Loan-Opening	38500.19	38553.06	37831.61	34709.95
Additions during the year	572.45	2312.98	0.00	0.00
Repayment during the year	519.57	3034.42	3121.66	3121.66
Net Loan-Closing	38553.06	37831.61	34709.95	31588.29
Average Loan	38526.62	38192.33	36270.78	33149.12
Rate of Interest (%)	8.8304	8.8212	8.8067	8.7962
<b>Interest on loan</b>	<b>604.19</b>	<b>3369.01</b>	<b>3194.27</b>	<b>2915.88</b>

#### Asset II

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Gross loan opening	1858.59	2554.85	2554.85	2554.85
Cumulative Repayment upto previous year	0.00	165.54	358.25	550.95
Net Loan-Opening	1858.59	2389.31	2196.60	2003.89
Additions during the year	696.26	0.00	0.00	0.00
Repayment during the year	165.54	192.71	192.71	192.71
Net Loan-Closing	2389.31	2196.60	2003.89	1811.18
Average Loan	2123.95	2292.95	2100.25	1907.54
Rate of Interest (%)	8.3430	8.3364	8.3386	8.3446
<b>Interest on loan</b>	<b>176.23</b>	<b>191.15</b>	<b>175.13</b>	<b>159.18</b>



**Asset III**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Gross loan opening	2859.91	3226.69	4107.22	4107.22
Cumulative Repayment upto previous year	0.00	40.77	317.36	627.16
Net Loan-Opening	2859.91	3185.92	3789.86	3480.06
Additions during the year	366.79	880.53	0.00	0.00
Repayment during the year	40.77	276.59	309.80	309.80
Net Loan-Closing	3185.92	3789.86	3480.06	3170.26
Average Loan	3022.92	3487.89	3634.96	3325.16
Rate of Interest (%)	8.8139	8.8085	8.7972	8.7847
<b>Interest on loan</b>	<b>47.32</b>	<b>307.23</b>	<b>319.77</b>	<b>292.11</b>

**Asset IV**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Gross loan opening	2411.10	3967.71	3967.71	3967.71
Cumulative Repayment upto previous year	0.00	239.25	538.53	837.81
Net Loan-Opening	2411.10	3728.45	3429.17	3129.89
Additions during the year	1556.60	0.00	0.00	0.00
Repayment during the year	239.25	299.28	299.28	299.28
Net Loan-Closing	3728.45	3429.17	3129.89	2830.62
Average Loan	3069.78	3578.81	3279.53	2980.26
Rate of Interest (%)	8.8584	8.8557	8.8563	8.8745
<b>Interest on loan</b>	<b>270.44</b>	<b>316.93</b>	<b>290.45</b>	<b>264.48</b>

**Asset V**

(₹ in lakh)

Particulars	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross loan opening	2247.78	2751.06	2862.65	2862.65	2862.65
Cumulative Repayment upto previous year	0.00	188.53	400.24	616.16	832.09
Net Loan-Opening	2247.78	2562.53	2462.41	2246.49	2030.56
Additions during the year	503.28	111.59	0.00	0.00	0.00
Repayment during the year	188.53	211.71	215.92	215.92	215.92



Particulars	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Net Loan-Closing	2562.53	2462.41	2246.49	2030.56	1814.64
Average Loan	2405.16	2512.47	2354.45	2138.53	1922.60
Rate of Interest (%)	7.9875	8.0889	8.0741	8.0406	7.9688
<b>Interest on loan</b>	192.11	203.23	190.10	171.95	153.21

"41. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. The ROE allowed for the instant transmission asset is given below:-

#### Asset I

Particulars	(₹ in lakh)			
	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Equity	16500.07	16745.40	17736.67	17736.67
Additional Capitalization	245.33	991.28	0.00	0.00
Closing Equity	16745.40	17736.67	17736.67	17736.67
Average Equity	16622.73	17241.04	17736.67	17736.67
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
Tax rate for the year (%)	21.342	21.342	21.342	21.342
Rate of Return on Equity (Pre Tax) (%)	19.705	19.705	19.705	19.705
<b>Return on Equity (Pre Tax)</b>	<b>581.72</b>	<b>3397.35</b>	<b>3495.01</b>	<b>3495.01</b>



**Asset II**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Equity	796.54	1094.93	1094.93	1094.93
Additional Capitalization	298.40	0.00	0.00	0.00
Closing Equity	1094.93	1094.93	1094.93	1094.93
Average Equity	945.74	1094.93	1094.93	1094.93
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
Tax rate for the year (%)	21.342	21.342	21.342	21.342
Rate of Return on Equity (Pre Tax) (%)	19.705	19.705	19.705	19.705
<b>Return on Equity (Pre Tax)</b>	<b>185.34</b>	<b>215.76</b>	<b>215.76</b>	<b>215.76</b>

**Asset III**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Equity	1225.67	1382.87	1760.24	1760.24
Additional Capitalization	157.19	377.37	0.00	0.00
Closing Equity	1382.87	1760.24	1760.24	1760.24
Average Equity	1304.27	1571.55	1760.24	1760.24
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
Tax rate for the year (%)	21.342	21.342	21.342	21.342
Rate of Return on Equity (Pre Tax) (%)	19.705	19.705	19.705	19.705
<b>Return on Equity (Pre Tax)</b>	<b>45.64</b>	<b>309.68</b>	<b>346.86</b>	<b>346.86</b>

**Asset IV**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Equity	1033.33	1700.45	1700.45	1700.45
Additional Capitalization	667.12	0.00	0.00	0.00
Closing Equity	1700.45	1700.45	1700.45	1700.45
Average Equity	1366.89	1700.45	1700.45	1700.45
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
Tax rate for the year (%)	21.342	21.342	21.342	21.342
Rate of Return on Equity (Pre Tax) (%)	19.705	19.705	19.705	19.705
<b>Return on Equity (Pre Tax)</b>	<b>267.88</b>	<b>335.08</b>	<b>335.08</b>	<b>335.08</b>

**Asset V**

(₹ in lakh)

Particulars	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	963.29	1178.98	1226.81	1226.81	1226.81





Particulars	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Additional Capitalization	215.69	47.83	0.00	0.00	0.00
Closing Equity	1178.98	1226.81	1226.81	1226.81	1226.81
Average Equity	1071.14	1202.90	1226.81	1226.81	1226.81
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax rate for the year (%)	20.961	21.342	21.342	21.342	21.342
Rate of Return on Equity (Pre Tax) (%)	19.610	19.705	19.705	19.705	19.705
<b>Return on Equity (Pre Tax)</b>	<b>210.05</b>	<b>237.04</b>	<b>241.75</b>	<b>241.75</b>	<b>241.75</b>

"45. As regards Asset I, we have computed depreciation considering capital expenditure of ₹55000.25 lakh and additional capitalization of ₹817.78 lakh and ₹3304.25lakh for 2015-16 and 2016-17 respectively. As regards Asset II, we have computed depreciation considering capital expenditure of ₹2655.13 lakh and additional capitalization of ₹994.65 lakh for 2015-16. As regards Asset III, we have computed depreciation considering capital expenditure of ₹4085.58 lakh and additional capitalization of ₹523.98 lakh and ₹1257.90 lakh for 2015-16 and 2016-17 respectively. As regards Asset IV, we have computed depreciation considering capital expenditure of ₹3444.43 lakh and additional capitalization of ₹2223.72 lakh for 2015-16. As regards Asset V, we have computed depreciation considering capital expenditure of ₹3211.07 lakh and additional capitalization of ₹718.97 lakh, ₹66.70 lakh and ₹92.72 lakh for 2014-15, 2015-16 and 2016-17 respectively.

46. The weighted average useful life of the asset has been considered as 25 years in accordance with the above regulation. The details of the depreciation allowed are given hereunder:-



**Asset I**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Gross block	55000.25	55818.03	59122.28	59122.28
Additional Capitalization	817.78	3304.25	0.00	0.00
Closing Gross block	55818.03	59122.28	59122.28	59122.28
Average Gross block	55409.14	57470.16	59122.28	59122.28
Rate of Depreciation (%)	5.28	5.28	5.28	5.28
Depreciable Value	49868.23	51723.14	53210.05	53210.05
Weighted Balance Useful life of the assets	34.00	33.00	32.00	31.00
Elapsed Life of the assets at beginning of the year	0.00	1.00	2.00	3.00
Remaining Depreciable Value	49868.23	51203.57	49656.05	46534.40
<b>Depreciation</b>	<b>519.57</b>	<b>3034.42</b>	<b>3121.66</b>	<b>3121.66</b>

**Asset II**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Gross block	3444.43	5668.15	5668.15	5668.15
Additional Capitalization	2223.72	0.00	0.00	0.00
Closing Gross block	5668.15	5668.15	5668.15	5668.15
Average Gross block	4556.29	5668.15	5668.15	5668.15
Rate of Depreciation (%)	5.28	5.28	5.28	5.28
Depreciable Value	4100.66	5101.34	5101.34	5101.34
Weighted Balance Useful life of the assets	25.00	24.00	23.00	22.00
Elapsed Life of the assets at beginning of the year	0.00	1.00	2.00	3.00
Remaining Depreciable Value	4100.66	4862.08	4562.80	4263.52
<b>Depreciation</b>	<b>239.25</b>	<b>299.28</b>	<b>299.28</b>	<b>299.28</b>

**Asset III**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Gross block	4085.58	4609.56	5867.46	5867.46
Additional Capitalization	523.98	1257.90	0.00	0.00
Closing Gross block	4609.56	5867.46	5867.46	5867.46
Average Gross block	4347.57	5238.51	5867.46	5867.46
Rate of Depreciation (%)	5.28%	5.28%	5.28%	5.28%
Depreciable Value	3912.81	4714.66	5280.71	5280.71
Weighted Balance Useful life of the assets	25.00	24.00	23.00	22.00
Elapsed Life of the assets at beginning of the year	0.00	1.00	2.00	3.00
Remaining Depreciable Value	3912.81	4673.89	4963.35	4653.55
<b>Depreciation</b>	<b>40.77</b>	<b>276.59</b>	<b>309.80</b>	<b>309.80</b>



**Asset IV**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Gross block	3444.43	5668.15	5668.15	5668.15
Additional Capitalization	2223.72	0.00	0.00	0.00
Closing Gross block	5668.15	5668.15	5668.15	5668.15
Average Gross block	4556.29	5668.15	5668.15	5668.15
Rate of Depreciation (%)	5.28	5.28	5.28	5.28
Depreciable Value	4100.66	5101.34	5101.34	5101.34
Weighted Balance Useful life of the assets	25.00	24.00	23.00	22.00
Elapsed Life of the assets at beginning of the year	0.00	1.00	2.00	3.00
Remaining Depreciable Value	4100.66	4860.76	4561.48	4262.21
<b>Depreciation</b>	<b>240.57</b>	<b>299.28</b>	<b>299.28</b>	<b>299.28</b>

**Asset V**

(₹ in lakh)

Particulars	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Gross block	3211.07	3930.04	4089.46	4089.46	4089.46
Additional Capitalization	718.97	159.42	0.00	0.00	0.00
Closing Gross block	3930.04	4089.46	4089.46	4089.46	4089.46
Average Gross block	3570.56	4009.75	4089.46	4089.46	4089.46
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Depreciable Value	3213.50	3608.78	3680.51	3680.51	3680.51
Weighted Balance Useful life of the assets	33.00	32.00	31.00	30.00	29.00
Elapsed Life of the assets at beginning of the year	0.00	1.00	2.00	3.00	4.00
Remaining Depreciable Value	3213.50	3420.25	3280.27	3064.35	2848.43
<b>Depreciation</b>	<b>188.53</b>	<b>211.71</b>	<b>215.92</b>	<b>215.92</b>	<b>215.92</b>

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

**Asset I**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
O & M Expenses	5.63	32.75	33.85	34.97
Maintenance Spares	10.14	58.97	60.95	62.97
Receivables	302.68	1740.21	1744.26	1699.16
Total	318.45	1831.93	1839.05	1797.09
Rate of Interest (%)	13.500	13.500	13.500	13.500
<b>Interest</b>	<b>42.99</b>	<b>247.31</b>	<b>248.27</b>	<b>242.61</b>



**Asset II**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
O & M Expenses	7.23	7.51	7.76	8.01
Maintenance Spares	13.01	13.52	13.97	14.43
Receivables	105.11	118.09	115.88	113.70
Total	125.35	139.11	137.60	136.15
Rate of Interest (%)	13.500	13.500	13.500	13.500
<b>Interest</b>	<b>16.83</b>	<b>18.78</b>	<b>18.58</b>	<b>18.38</b>

**Asset III**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
O & M Expenses	2.21	12.87	13.30	13.74
Maintenance Spares	3.98	23.17	23.94	24.74
Receivables	27.47	179.52	194.56	190.77
Total	33.67	215.56	231.80	229.25
Rate of Interest (%)	13.500	13.500	13.500	13.500
<b>Interest</b>	<b>4.54</b>	<b>29.10</b>	<b>31.29</b>	<b>30.95</b>

**Asset IV**

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
O & M Expenses	12.39	12.87	13.30	13.74
Maintenance Spares	22.31	23.17	23.94	24.74
Receivables	158.71	189.37	185.75	182.26
Total	193.40	225.41	222.99	220.73
Rate of Interest (%)	13.500	13.500	13.500	13.500
<b>Interest</b>	<b>25.97</b>	<b>30.43</b>	<b>30.10</b>	<b>29.80</b>

**Asset V**

(₹ in lakh)

Particulars	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	11.07	11.44	11.82	12.21	12.61
Maintenance Spares	19.93	20.60	21.28	21.99	22.72
Receivables	124.09	135.31	135.40	133.13	130.79
Total	155.10	167.35	168.50	167.33	166.12
Rate of Interest (%)	13.500	13.500	13.500	13.500	13.500
<b>Interest</b>	<b>20.94</b>	<b>22.59</b>	<b>22.75</b>	<b>22.59</b>	<b>22.43</b>



"54. 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:-

### Asset I

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
<b>Gross Block</b>	55000.25	55818.03	59122.28	59122.28
Opening Gross Block	817.78	3304.25	0.00	0.00
Additional Capitalization	55818.03	59122.28	59122.28	59122.28
Closing Gross Block	55409.14	57470.16	59122.28	59122.28
Average Gross Block	55000.25	55818.03	59122.28	59122.28
<b>Depreciation</b>				
Rate of Depreciation (%)	5.28	5.28	5.28	5.28
Depreciable Value	49868.23	51723.14	53210.05	53210.05
Elapsed Life of the assets at beginning of the year	34.00	33.00	32.00	31.00
Weighted Balance Useful life of the assets	0.00	1.00	2.00	3.00
Remaining Depreciable Value	49868.23	51203.57	49656.05	46534.40
Depreciation	519.57	3034.42	3121.66	3121.66
<b>Interest on Loan</b>				
Gross Normative Loan	38500.19	39072.63	41385.61	41385.61
Cumulative Repayment upto Previous Year	0.00	519.57	3554.00	6675.65
Net Loan-Opening	38500.19	38553.06	37831.61	34709.95
Additions	572.45	2312.98	0.00	0.00
Repayment during the year	519.57	3034.42	3121.66	3121.66
Net Loan-Closing	38553.06	37831.61	34709.95	31588.29
Average Loan	38526.62	38192.33	36270.78	33149.12
Weighted Average Rate of Interest on Loan (%)	8.8304	8.8212	8.8067	8.7962
Interest	604.19	3369.01	3194.27	2915.88
<b>Return on Equity</b>				
Opening Equity	16500.07	16745.40	17736.67	17736.67
Additions	245.33	991.28	0.00	0.00
Closing Equity	16745.40	17736.67	17736.67	17736.67
Average Equity	16622.73	17241.04	17736.67	17736.67
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT Rate for the year 2013-14(%)	21.342	21.342	21.342	21.342
Rate of Return on Equity (%)	19.705	19.705	19.705	19.705
Return on Equity (Pre Tax)	581.72	3397.35	3495.01	3495.01
<b>Interest on Working Capital</b>				



Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
O & M Expenses	5.63	32.75	33.85	34.97
Maintenance Spares	10.14	58.97	60.95	62.97
Receivables	302.68	1740.21	1744.26	1699.16
Total	318.45	1831.93	1839.05	1797.09
Interest	42.99	247.31	248.27	242.61
<b>Annual Transmission Charges</b>				
Depreciation	519.57	3034.42	3121.66	3121.66
Interest on Loan	604.19	3369.01	3194.27	2915.88
Return on Equity	581.72	3397.35	3495.01	3495.01
Interest on Working Capital	42.99	247.31	248.27	242.61
O & M Expenses	67.61	393.15	406.32	419.78
<b>Total</b>	<b>1816.08</b>	<b>10441.24</b>	<b>10465.54</b>	<b>10194.93</b>

## Asset II

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
<b>Gross Block</b>				
Opening Gross Block	2655.13	3649.78	3649.78	3649.78
Additional Capitalization	994.65	0.00	0.00	0.00
Closing Gross Block	3649.78	3649.78	3649.78	3649.78
Average Gross Block	3152.46	3649.78	3649.78	3649.78
<b>Depreciation</b>				
Rate of Depreciation (%)	5.28	5.28	5.28	5.28
Depreciable Value	2837.21	3284.80	3284.80	3284.80
Elapsed Life of the assets at beginning of the year	25.00	24.00	23.00	22.00
Weighted Balance Useful life of the assets	0.00	1.00	2.00	3.00
Remaining Depreciable Value	2837.21	3119.26	2926.56	2733.85
<b>Depreciation</b>	<b>165.54</b>	<b>192.71</b>	<b>192.71</b>	<b>192.71</b>
<b>Interest on Loan</b>				
Gross Normative Loan	1858.59	2554.85	2554.85	2554.85
Cumulative Repayment upto Previous Year	0.00	165.54	358.25	550.95
Net Loan-Opening	1858.59	2389.31	2196.60	2003.89
Additions	696.26	0.00	0.00	0.00
Repayment during the year	165.54	192.71	192.71	192.71
Net Loan-Closing	2389.31	2196.60	2003.89	1811.18
Average Loan	2123.95	2292.95	2100.25	1907.54
Weighted Average Rate of Interest on Loan (%)	8.3430	8.3364	8.3386	8.3446
Interest	176.23	191.15	175.13	159.18
<b>Return on Equity</b>				



Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Opening Equity	796.54	1094.93	1094.93	1094.93
Additions	298.40	0.00	0.00	0.00
Closing Equity	1094.93	1094.93	1094.93	1094.93
Average Equity	945.74	1094.93	1094.93	1094.93
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT Rate for the year 2013-14(%)	21.342	21.342	21.342	21.342
Rate of Return on Equity (%)	19.705	19.705	19.705	19.705
Return on Equity (Pre Tax)	185.34	215.76	215.76	215.76
<b>Interest on Working Capital</b>				
O & M Expenses	7.23	7.51	7.76	8.01
Maintenance Spares	13.01	13.52	13.97	14.43
Receivables	105.11	118.09	115.88	113.70
Total	125.35	139.11	137.60	136.15
Rate of Interest	13.500	13.500	13.500	13.500
Interest	16.83	18.78	18.58	18.38
<b>Annual Transmission Charges</b>				
Depreciation	165.54	192.71	192.71	192.71
Interest on Loan	176.23	191.15	175.13	159.18
Return on Equity	185.34	215.76	215.76	215.76
Interest on Working Capital	16.83	18.78	18.58	18.38
O & M Expenses	86.74	90.12	93.11	96.20
<b>Total</b>	<b>630.68</b>	<b>708.52</b>	<b>695.29</b>	<b>682.23</b>

### Asset III

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
<b>Gross Block</b>				
Opening Gross Block	4085.58	4609.56	5867.46	5867.46
Additional Capitalization	523.98	1257.90	0.00	0.00
Closing Gross Block	4609.56	5867.46	5867.46	5867.46
Average Gross Block	4347.57	5238.51	5867.46	5867.46
<b>Depreciation</b>				
Rate of Depreciation (%)	5.28	5.28	5.28	5.28
Depreciable Value	3912.81	4714.66	5280.71	5280.71
Elapsed Life of the assets at beginning of the year	25.00	24.00	23.00	22.00
Weighted Balance Useful life of the assets	0.00	1.00	2.00	3.00
Remaining Depreciable Value	3912.81	4673.89	4963.35	4653.55



Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Depreciation	40.77	276.59	309.80	309.80
<b>Interest on Loan</b>				
Gross Normative Loan	2859.91	3226.69	4107.22	4107.22
Cumulative Repayment upto Previous Year	0.00	40.77	317.36	627.16
Net Loan-Opening	2859.91	3185.92	3789.86	3480.06
Additions	366.79	880.53	0.00	0.00
Repayment during the year	40.77	276.59	309.80	309.80
Net Loan-Closing	3185.92	3789.86	3480.06	3170.26
Average Loan	3022.92	3487.89	3634.96	3325.16
Weighted Average Rate of Interest on Loan (%)	8.8139	8.8085	8.7972	8.7847
Interest	47.32	307.23	319.77	292.11
<b>Return on Equity</b>				
Opening Equity	1225.67	1382.87	1760.24	1760.24
Additions	157.19	377.37	0.00	0.00
Closing Equity	1382.87	1760.24	1760.24	1760.24
Average Equity	1304.27	1571.55	1760.24	1760.24
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT Rate for the year 2013-14(%)	21.342	21.342	21.342	21.342
Rate of Return on Equity (%)	19.705	19.705	19.705	19.705
Return on Equity (Pre Tax)	45.64	309.68	346.86	346.86
<b>Interest on Working Capital</b>				
O & M Expenses	2.21	12.87	13.30	13.74
Maintenance Spares	3.98	23.17	23.94	24.74
Receivables	27.47	179.52	194.56	190.77
Total	33.67	215.56	231.80	229.25
Rate of Interest	13.500	13.500	13.500	13.500
Interest	4.54	29.10	31.29	30.95
<b>Annual Transmission Charges</b>				
Depreciation	40.77	276.59	309.80	309.80
Interest on Loan	47.32	307.23	319.77	292.11
Return on Equity	45.64	309.68	346.86	346.86
Interest on Working Capital	4.54	29.10	31.29	30.95
O & M Expenses	26.55	154.49	159.62	164.91
<b>Total</b>	<b>164.83</b>	<b>1077.10</b>	<b>1167.35</b>	<b>1144.63</b>





## Asset IV

(₹ in lakh)

Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
<b>Gross Block</b>				
Opening Gross Block	3444.43	5668.15	5668.15	5668.15
Additional Capitalization	2223.72	0.00	0.00	0.00
Closing Gross Block	5668.15	5668.15	5668.15	5668.15
Average Gross Block	4556.29	5668.15	5668.15	5668.15
<b>Depreciation</b>				
Rate of Depreciation (%)	5.28	5.28	5.28	5.28
Depreciable Value	4100.66	5101.34	5101.34	5101.34
Elapsed Life of the assets at beginning of the year	25.00	24.00	23.00	22.00
Weighted Balance Useful life of the assets	0.00	1.00	2.00	3.00
Remaining Depreciable Value	4100.66	4860.76	4561.48	4262.21
<b>Depreciation</b>	<b>239.25</b>	<b>299.28</b>	<b>299.28</b>	<b>299.28</b>
<b>Interest on Loan</b>				
Gross Normative Loan	2411.10	3967.71	3967.71	3967.71
Cumulative Repayment upto Previous Year	0.00	239.25	538.53	837.81
Net Loan-Opening	2411.10	3728.45	3429.17	3129.89
Additions	1556.60	0.00	0.00	0.00
Repayment during the year	239.25	299.28	299.28	299.28
Net Loan-Closing	3728.45	3429.17	3129.89	2830.62
Average Loan	3069.78	3578.81	3279.53	2980.26
Weighted Average Rate of Interest on Loan (%)	8.8584	8.8557	8.8563	8.8745
<b>Interest</b>	<b>270.44</b>	<b>316.93</b>	<b>290.45</b>	<b>264.48</b>
<b>Return on Equity</b>				
Opening Equity	1033.33	1700.45	1700.45	1700.45
Additions	667.12	0.00	0.00	0.00
Closing Equity	1700.45	1700.45	1700.45	1700.45
Average Equity	1366.89	1700.45	1700.45	1700.45
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
MAT Rate for the year 2013-14(%)	21.342	21.342	21.342	21.342
Rate of Return on Equity (%)	19.705	19.705	19.705	19.705
Return on Equity (Pre Tax)	<b>267.88</b>	<b>335.08</b>	<b>335.08</b>	<b>335.08</b>
<b>Interest on Working Capital</b>				
O & M Expenses	12.39	12.87	13.30	13.74
Maintenance Spares	22.31	23.17	23.94	24.74
Receivables	158.71	189.37	185.75	182.26
Total	193.40	225.41	222.99	220.73



Particulars	2015-16 (pro-rata)	2016-17	2017-18	2018-19
Rate of Interest	13.500	13.500	13.500	13.500
Interest	25.97	30.43	30.10	29.80
<b>Annual Transmission Charges</b>				
Depreciation	239.25	299.28	299.28	299.28
Interest on Loan	270.44	316.93	290.45	264.48
Return on Equity	267.88	335.08	335.08	335.08
Interest on Working Capital	25.97	30.43	30.10	29.80
O & M Expenses	148.70	154.49	159.62	164.91
<b>Total</b>	<b>952.24</b>	<b>1136.21</b>	<b>1114.53</b>	<b>1093.55</b>

### Asset V

(₹ in lakh)

Particulars	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
<b>Gross Block</b>					
Opening Gross Block	3211.07	3930.04	4089.46	4089.46	4089.46
Additional Capitalization	718.97	159.42	0.00	0.00	0.00
Closing Gross Block	3930.04	4089.46	4089.46	4089.46	4089.46
Average Gross Block	3570.56	4009.75	4089.46	4089.46	4089.46
<b>Depreciation</b>					
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Depreciable Value	3213.50	3608.78	3680.51	3680.51	3680.51
Elapsed Life of the assets at beginning of the year	33.00	32.00	31.00	30.00	29.00
Weighted Balance Useful life of the assets	0.00	1.00	2.00	3.00	4.00
Remaining Depreciable Value	3213.50	3420.25	3280.27	3064.35	2848.43
Depreciation	188.53	211.71	215.92	215.92	215.92
<b>Interest on Loan</b>					
Gross Normative Loan	2247.78	2751.06	2862.65	2862.65	2862.65
Cumulative Repayment upto Previous Year	0.00	188.53	400.24	616.16	832.09
Net Loan-Opening	2247.78	2562.53	2462.41	2246.49	2030.56
Additions	503.28	111.59	0.00	0.00	0.00
Repayment during the year	188.53	211.71	215.92	215.92	215.92
Net Loan-Closing	2562.53	2462.41	2246.49	2030.56	1814.64
Average Loan	2405.16	2512.47	2354.45	2138.53	1922.60
Weighted Average Rate of Interest on Loan (%)	7.9875	8.0889	8.074	8.0406	7.9688
Interest	192.11	203.23	190.10	171.95	153.21
<b>Return on Equity</b>					
Opening Equity	963.29	1178.98	1226.81	1226.81	1226.81
Additions	215.69	47.83	0.00	0.00	0.00
Closing Equity	1178.98	1226.81	1226.81	1226.81	1226.81



Particulars	2014-15 (pro-rata)	2015-16	2016-17	2017-18	2018-19
Average Equity	1071.14	1202.90	1226.81	1226.81	1226.81
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for the year 2013- 14(%)	20.961	21.342	21.342	21.342	21.342
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.705
Return on Equity (Pre Tax)	210.05	237.04	241.75	241.75	241.75
<b>Interest on Working Capital</b>					
O & M Expenses	11.07	11.44	11.82	12.21	12.61
Maintenance Spares	19.93	20.60	21.28	21.99	22.72
Receivables	124.09	135.31	135.40	133.13	130.79
Total	155.10	167.35	168.50	167.33	166.12
Interest	20.94	22.59	22.75	22.59	22.43
<b>Annual Transmission Charges</b>					
Depreciation	188.53	211.71	215.92	215.92	215.92
Interest on Loan	192.11	203.23	190.10	171.95	153.21
Return on Equity	210.05	237.04	241.75	241.75	241.75
Interest on Working Capital	20.94	22.59	22.75	22.59	22.43
O & M Expenses	132.89	137.31	141.87	146.58	151.44
<b>Total</b>	<b>744.52</b>	<b>811.89</b>	<b>812.39</b>	<b>798.80</b>	<b>784.74</b>

11. This order disposes of Petition No. 39/RP/2016. All other terms contained in order dated 25.4.2016 in Petition No. 252/TT/2015 remain unaltered.

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

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

