

**CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

**Petition No. 46/TT/2014**

**Coram:**

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

**Date of Hearing : 05.04.2016**

**Date of Order : 29.07.2016**

**In the matter of:**

Determination of transmission tariff of Assets (05 nos.) under Common Scheme for 765kV Pooling Stations and Network for NR, Import by NR from ER and from NER/SR/WR via ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2009 in Western Region for tariff block 2009-14 period.

**And in the matter of**

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

**.....Petitioner**

**Vs**

1. Madhya Pradesh Power Management Company Ltd.,  
Shakti Bhawan, Rampur  
Jabalpur-482 008.
2. Maharashtra State Electricity Distribution Company Limited,  
Prakashgad, 4<sup>th</sup> Floor,  
Andheri (East),  
Mumbai-400 052.



3. Gujarat UrjaVikas Nigam Ltd.,  
Sardar Patel VidyutBhawan,  
Race Course Road,  
Vadodara-390 007.
4. Electricity Department, Government of Goa,  
VidyutBhawan, Panaji,  
Near Mandvi Hotel, Goa-403 001.
5. Electricity Department,  
Administration of Daman and Diu,  
Daman-396 210.
6. Electricity Department,  
Administration of Dadra Nagar Haveli,  
U.T., Silvassa-396 230.
7. Chhattisgarh State Electricity Board,  
P.O. Sunder Nagar, Dangania, Raipur  
Chhattisgarh-492 013.
8. Madhya Pradesh Audyogik Kendra  
Vikas Nigam (Indore) Ltd.,  
3/54, Press Complex, Agra-Bombay Road,  
Indore -452 008.

.....**Respondents**

For Petitioner :Shri M.M. Mondal, PGCIL  
Shri S.K. Venkatesan, PGCIL  
ShriSubhash C. Taneja, PGCIL  
Shri S. S. Raju, PGCIL  
ShriRakesh Prasad, PGCIL

For Respondents : None

**ORDER**

The instant petition has been filed by Power Grid Corporation of India Ltd.  
(PGCIL)for determination of tariff of Asset I: LILO point (at Dharmajaygarh near



Korba WR SS) – Ranchi portion of 765 kV S/C Ranchi-WR pooling station line alongwith bays at Ranchi 765 kV Sub-station; Asset II: 765 kV 3x80 MVAR Bus Reactor I along with bays at Ranchi 765 kV Sub-station; Asset III: 765 kV 3x/80 MVAR Bus Reactor II along with bays at Ranchi 765 kV Sub-station; Asset IV: 400 kV 125 MVAR Bus Reactor I along with bays at Ranchi 765 kV Sub-station and Asset V: 400 kV 125 MVAR Bus Reactor II along with bays at Ranchi 765 kV Sub-station under Common Scheme for 765 kV Pooling Stations and Network for NR, Import by NR from ER and from NER/SR/WR via ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Western Region for tariff block 2009-14 period in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter "the 2009 Tariff Regulations").

2. The Investment Approval (IA) for the transmission project was accorded by the Board of Directors of the petitioner company in its 212<sup>th</sup> meeting held on 6.8.2008, at an estimated cost of ₹707533 lakh, including IDC of ₹71360 lakh (based on 1<sup>st</sup> Quarter, 2008 price level).

3. The petitioner vide affidavit dated 2.6.2014 has submitted that Asset-I was commissioned on 1.4.2014 and Asset-II was anticipated to be commissioned by 1.6.2014. Asset III, IV and V were commissioned on 1.2.2014.

4. The provisional tariff was allowed vide order dated 23.6.2014 for Assets III, IV and V, which have been commissioned in the 2009-14 tariff period under



Regulation 5 of the 2009 Tariff Regulations and Assets I and II commissioned during 2014-19 tariff period under Regulation 7(7) of the 2014 Tariff Regulations. The Commission directed the petitioner to file a separate petition covering all assets in accordance with the 2014 Tariff Regulations for determination of tariff for the tariff period 2014-19. The petitioner vide affidavit dated 2.7.2014 and 31.3.2016 has submitted that tariff for Assets I and II is claimed in Petition No. 27/TT/2016 as per 2014 Tariff Regulations and prayed to grant tariff for Asset III, IV and V in the instant petition. Accordingly, the instant petition covers only three assets i.e. Assets-III, IV and V, which were commissioned on 1.2.2014.

5. The petitioner, vide affidavit dated 31.3.2016, has submitted the Revised Cost Estimate (RCE) of the project as approved by the Board of Directors on 9.3.2016. Accordingly, the Revised Cost Estimate (RCE) of the project is ₹657054 lakh including IDC of ₹67714 lakh (based at December 2015 price level).

6. The revised scope of work as mentioned in RCE is given below:-

**Transmission Lines**

- a. Maithon-Gaya 400 kV Quad D/C Line along with multi-circuit portion in Common forest stretch.
- b. Gaya-Sasaram 765 kV S/C Line.
- c. Gaya-Balia 765 kV S/C Line.
- d. Balia-Lucknow 765 kV S/C Line.
- e. Ranchi-WR Pooling Station 765 kV S/C Line.
- f. Lucknow 765/400 kV new substation-Lucknow 400/220 kV existing substation 400 kV Quad D/C Line.



- g. Ranchi 765/400 kV new substation-Ranchi 400/220 kV existing substation 400 kV Quad 2x D/C Line.
- h. LILO of Both circuits of Allahabad-Mainpuri 400 kV D/C Line at Fatehpur 765/400 kV substation of POWERGRID.
- i. LILO of Barh-Balia 400 kV Quad D/C Line at Patna.

### **Sub-stations**

- a. Augmentation of Maithon 400/220 kV Sub-station
  - (i) 2 nos. of 400 kV line bays (for determining Maithon-Gaya D/C line)
  - (ii) 2 nos. of 400 kV line bays (for determining Mejia-Maithon D/C line)
- b. New 765/400 kV Sub-station at Gaya
  - (i) 3x1500 MVA, 765/400 kV Transformer alongwith associated bays
  - (ii) 2 nos. of 765 kV line bays (for Gaya-Sasaram/Fatehpur & Gaya-Balia 765 kV lines)
  - (iii) 4 nos. of 400 kV line bays (for Maithon-Gaya line & Kodarma-Gaya line)
- c. New 765/400 kV Sub-station at Sasaram
  - (i) 1x1500MVA,765/400 kV Transformer alongwith associated bays
  - (ii) 2 nos. of 400 kV bays (for Biharshariff-Sasaram 400 kV quad D/C line)
- d. Augmentation of Biharshariff 400/220 kV sub-station
  - (i) 2 nos. of 400 kV bays (for Biharshariff-Sasaram 400 kV quad D/C line)
- e. New 765/400 kV Sub-station at Fatehpur
  - (i) 2x1500MVA, 765/400 kV Transformer alongwith associated bays
  - (ii) 2 nos. of 765 kV line bays (for Sasaram-Fatehpur & Fatehpur-Agra 765 kV lines)



- (iii) 4 nos. of 400 kV line bays(for LILO of Allahabad-Mainpuri 400 kV D/C line)
- f. Augmentation of 400 kV Agra Sub-station to 765 kV  
(i) 2x1500MVA,765/400 kV Transformer alongwith associated bays  
(ii) 1 no. of 765 kV line bays (for Fatehpur-Agra 765 kV line)
- g. Augmentation of 400 kV BaliaSub-station to 765 kV  
(i) 2x1500MVA, 765/400 kV Transformer alongwith associated bays  
(ii) 2 nos. of 765 kV line bays (for Gaya-Balia & Balia-Lucknow 765 kV lines)
- h. New 765/400 kV Sub-station at Lucknow  
(i) 2x1500MVA,765/400 kV Transformer along with associated bays  
(ii) 1 no. of 765 kV line bays (for Balia-Lucknow 765 kV lines)  
(iii) 2 nos. of 400 kV bays (for Lucknow 765/400 kV new Sub-station – Lucknow 400/220 kV existing Sub-station 400 kV quad D/C line)
- i. Augmentation of existing Lucknow 400/220 kV sub-station  
(i) 2 nos. of 400kV bays (for Lucknow 765/400 kV new Sub-station – Lucknow 400/220 kV existing Sub-station 400kV quad D/C line)
- j. New 2x1500 MVA,765/400 kV Sub-station at Ranchi  
(i) 1 no. of 765 kV line bays (for Ranchi-WR Pooling 765kV S/C line)  
(ii) 4 nos. of 400 kV line bays(for Ranchi 400 kV new sub-station- Ranchi 400/220 kV existing sub-station 400 kV quad 2xD/C line)
- k. Augmentation of Ranchi 400/220 kV Sub-Station  
(i) 6 nos. of 400 kV bays(4 nos. for Ranchi 765/400 kV new Sub-station- Ranchi 400/220 kV existing Sub-station 400 kV quad 2xD/C line and 2 nos. for Raghunathpur TPS-Ranchi line)
- l. 765/400 kV WR Pooling sub-station  
(i) 1 no. of 765 kV line bays (for Ranchi –WR Pooling 765 kV S/C line)
- m. Augmentation of Patna 400/220 kV sub-station  
(i) 4 nos. of 400 kV line bays (for LILO of Barh- Balia 400 kV Quad line)



7. The petitioner was directed, vide ROP dated 5.4.2016, to submit Auditor Certificate for the three assets by combining into a single asset as the assets were commissioned on the same date. The petitioner, vide affidavit dated 16.6.2016, has submitted Auditor Certificate dated 17.4.2016 for Asset III, IV and V separately and also submitted tariff forms for Combined Asset (consisting of Assets III, IV and V).

8. This order has been prepared considering the petitioner's affidavits dated 7.3.2014, 31.5.2014, 30.6.2014, 31.3.2016, 1.4.2016, 4.4.2016 and 17.6.2016.

9. The petitioner has claimed transmission charges for the Combined Assets under:-

(₹ in lakh)	
Particulars	2013-14
Depreciation	53.52
Interest on Loan	70.71
Return on equity	67.95
Interest on Working Capital	6.33
O & M Expenses	37.09
<b>Total</b>	<b>235.60</b>

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

(₹ in lakh)	
Particulars	2013-14
Maintenance Spares	33.38
O & M expenses	18.55
Receivables	235.61
<b>Total</b>	<b>287.54</b>
Interest	6.33
Rate of Interest	13.20%



11. The petitioner has served the petition on the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003 ("the Act"). No comments/objections have been received from the public in response to the notice in newspaper. Reply to the petition has been filed by M. P. Power Management Company Limited (MPPMCL), Respondent No.1, vide affidavit dated 7.3.2014 and Maharashtra State Electricity Distribution Company Limited (MSEDCL), Respondent No. 2, vide affidavit dated 5.5.2014. MPPMCL has submitted that Assets I and II are anticipated to be commissioned during the 2014-19 tariff period and hence tariff should be allowed based on the 2014 Tariff Regulations. The MSEDCL has raised the issues like additional capitalization, reimbursement of publication expenditure, license fee and cost-variation. The objections raised by the MSEDCL in its reply are addressed in the relevant paragraphs of this order. As regards MPPMCL's objection, it is clarified that the petitioner was directed to claim tariff for Assets I and II as per the 2014 Tariff Regulations and accordingly, the petitioner has filed under the 2014 Tariff Regulations.

12. Having heard the representatives of the petitioner present at the hearing and perused the material on record, we proceed to dispose of the petition.

### **Capital cost**

13. Regulation 7 of the 2009 Tariff Regulations provides as follows:-

**“(1) Capital cost for a project shall include:-**





- (a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.
- (b) capitalized initial spares subject to the ceiling rates specified in regulation 8; and
- (c) additional capital expenditure determined under regulation 9.

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff.”

14. Details of apportioned approved cost as per the IA and as per RCE, capital cost as on actual COD and additional capitalization in respect of the Combined Asset is summarized below:-

Asset	Apportioned approved cost as per IA	Apportioned approved cost as per RCE	Cost incurred up to COD	Additional Capital Expenditure				Total estimation completion cost
				2013-14	2014-15	2015-16	2016-17	
Asset III	5749.82	5137.86	3558.15	14.36	718.83	75.88	429.99	4797.21
Asset IV	2050.65	2436.21	1679.71	4.10	191.64	60.3	341.71	2277.46
Asset V	2050.65	2437.79	1681.06	4.10	191.64	60.3	341.71	2278.81
<b>Combined Asset</b>	<b>9851.12</b>	<b>10011.86</b>	<b>6918.92</b>	<b>22.56</b>	<b>1102.11</b>	<b>196.48</b>	<b>1113.41</b>	<b>9353.48</b>

(₹ in lakh)



15. The capital cost claimed as on COD is inclusive of initial spares amounting to ₹205.95 lakh for sub-station. According to Auditor Certificate, the expenditure up to 31.3.2015 has been verified from the books of accounts of the project. Balance expenditure is on the basis of details furnished by the Management.

### **Cost over-run**

16. The total estimated completion cost of ₹9353.48 lakh of the Combined Asset is within the revised approved apportioned cost of ₹10011.86 lakh and hence there is no cost over-run in case of the instant asset.

### **Time over-run**

17. As per IA dated 29.8.2008, the instant assets are scheduled to be commissioned within 48 months from the date of IA. Accordingly, the scheduled date of commissioning works out to 1.9.2012. The assets were commissioned on 1.2.2014. Thus, there is a time over-run of 17 months. The petitioner has submitted that the time over-run is due to delay getting approvals, delay in obtaining the sub-station land at Ranchi and law and order problems. The detailed reasons submitted by the petitioner for the time over-run are as follows:-

a) Delay in getting forest approvals

The forest case application and formal proposal for forest approval was submitted by the petitioner in July, 2007. As per the standard procedure, the forest clearance normally takes about 300 days and accordingly, forest clearance should have been available by April, 2008. However, the final clearance/approval from CCF (Land



Management), Raipur towards diversion of forest land was received in November, 2013 i.e. after roughly six years. Hence, there was a delay of more than 5 years in obtaining forest clearance. The petitioner, vide affidavit dated 17.11.2015, has submitted documentary evidence in support of reasons for delay and chronology of activities related to time over-run and it is as given below:-

Sl.No	Activities	Date
1	Forest Case application & formal proposal submitted	04.07.2007
2	Submission of proposal to DFO, Champa	15.03.2008
3	Submission of proposal to DFO, Korba	24.03.2008
4	Submission of proposal to DFO, Jashpur	20.01.2009
5	Submission of Proposal to DO, Dharmjaigarh (After revision due to diversion in DB coal block. (original on 2.4.2008)	09.03.2009
6	Forwarding of proposal to CF, Bilaspur by DFO, Korba (After combining proposals of all 4 divisions)	09.03.2009
7	Forwarding proposal to CCF, Raipur from CF to Bilaspur	25.05.2009
8	1 <sup>st</sup> : query asked by CCF, Raipur a) Deposit of 2% of project cost as " corporate social responsibility" b) Regarding existence of elephant corridor/national park etc. within 10 Km radius c) Preparation of Medicinal plantation scheme	09.06.2009
9	Reply for the above forwarded by DFO, Korba to CCF, Raipur	29.08.2009
10	2 <sup>nd</sup> query regarding irrigated/un-irrigated proposals towards compensatory afforestation forwarded from CCF to DFO Korba (Combining Officer)	04.11.2009
11	Combining officer forwarded the same query to concerned DFOs	13.11.2009
12	Reply for the above with revised CA scheme forwarded to CCF Raipur	08.02.2010
13	3 <sup>rd</sup> query reg-DFA, Revision of CA scheme, 0.8 density from CCF Raipur to the combining officer, DFO Korba	22.03.2010
14	Reply of the above queries forwarded to CCF by CF, Bilaspur	23.10.2010
15	CCF, queried reg. lat., Long. Of CA area, what are the present species in that area, species to be planted in that area, certificate of DFO reg non-availability of irrigated land & reg. FDA in the proposed area.	03.11.2010
16	Reply of the above queries forwarded to CCF Raipur from DFO, Korba	21.12.2010
17	Proposal forwarded to CG Govt. by CCF, Raipur	06.01.2011
18	Proposal forwarded to CG Govt. by MOEF, New Delhi	05.03.2011
19	1 <sup>st</sup> Site visit of representative of RMOEF, Bhopal	04.05.2011
20	1 <sup>st</sup> FAC	26.08.2011
21	2 <sup>nd</sup> FAC	27.01.2012
22	3 <sup>rd</sup> FAC	15.05.2012
23	2 <sup>nd</sup> Site visit of representative of MOEF, New Delhi	29.06.2012



24	4 <sup>th</sup> FAC	11.10.2012
25	6 <sup>th</sup> FAC	24.11.2012
26	7 <sup>th</sup> FAC	22.12.2012
27	Stage- I forest approval recd from MOEF,New Delhi	28.01.2013
28	Stage- I forest approval recd from CCF, Raipur	01.03.2013
29	Demand note for NPV & CA obtained from DFO Korba	25.03.2013
30	Demand note for medicinal plantation obtained from DFO, Korba	09.04.2013
31	Compliance towards Stage-I approval along with cost towards NPV & CA submitted to DFO Korba	13.04.2013
32	Compliance towards Stage-I approval forwarded by DFO Korba to CF Bilaspur	29.04.2013
33	Compliance towards Stage-I approval forwarded by CF Bilaspur to CCF Raipur	04.08.2013
34	Compliance towards Stage-I approval forwarded by CCF Raipur to MOEF,NEW DELHI	02.07.2013
35	Stage-II forest approval recd from MOEF, New Delhi	01.08.2013
36	Stage-II forest approval recd from CCF, raipur	08.08.2013
37	Tree cutting proposal forwarded by DFO, Korba to CF Bilaspur	07.09.2013
38	Tree cutting permission obtained from CCF(Production),raipur	24.09.2013
39	Tree cutting permission obtained from CCF(Production),raipur	01.10.2013
40	Compliance towards Stage-II approval forwarded by DFO Korba to CF Bilaspur	09.10.2013
41	Compliance towards Stage –II approval forwarded by CF Bilaspur to CCF raipur	18.10.2013
42	Final approval received from CCF( Land Management)/Raipur towards diversion of forest land	06.11.2013

b) Delay in obtaining possession of Sub-station land at Ranchi

After depositing payment for land to revenue authority of Government of Jharkhand, it took almost 37 months for obtaining physical possession of the land. Further, inadvertently, a small piece of land in the middle of the sub-station land was not included by State Government authorities. While the rest of the land was handed over on 29.4.2011, the small piece was handed over on 12.12.2012. It took almost 36 months for acquiring physical possession of land after the depositing the payment to the State Government authorities i.e. after about 19 months of getting possession of initial piece of land. Brief chronology of events related to land acquisition is mentioned below:-



80% of cost of land deposited by petitioner	26.3.2008
Section IV & VI notification	23.8.2008 & 18.11.2008
Section VII issued by appropriate authority	16.12.2008 & 29.3.2009
Section IX issued	24.9.2009
Section XI issued	12.7.2010
Physical possession of land	29.4.2011
Physical possession of left out land	12.12.2012

c) Delay due to law & order problem at Ranchi Sub-station site

Though the possession of the land was given to the petitioner, law & order problem due to Naxal threats hindered execution of infrastructure works at site. The location of the sub-station land was isolated and inadequate deployment of police force at site further delayed execution of works. As the area is infested by Maoist groups, there were several disturbances such as bandh, de-mobilisation and re-mobilisation of construction gangs, etc. While the delay attributable to this factor cannot be quantified, the same caused an adverse impact on the progress of work. The petitioner has mentioned that the naxal attacks started on 15.1.2011 and immediate correspondences was done by the petitioner and the police was deployed on 14.9.2012. The petitioner has also furnished documentary evidence in support of the disturbance and the action taken by it to counter the same. These factors jeopardized various ongoing works. The major events are chronologically listed as under:-

Date	Remark
15.1.2011	FIR lodged after violent havoc caused by Maoist at petitioner's construction site.
15.1.2011	Petitioner's management apprised of incidents by Maoists disrupting the construction works in and around Ranchi Sub-station.
17.1.2011	Internal report of petitioner highlighting the miscreants attacks on site workers.
17.1.2011	Letter from contractor to petitioner, mentioning the incident involving Maoists where



	labours were beaten up, pistol shots fired and the construction equipment looted during execution of petitioner's project in Koderma, near Ranchi (Jharkhand)
18.1.2011	Petitioner's letter to Secretary (Power), Jharkhand Govt. for assistance of local administration to peacefully complete projects in Ranchi district.
17.4.2012	Letter from contractor to petitioner, mentioning the incident involving Maoists where labours were beaten up, pistol shots fired and the construction equipment looted during execution of petitioner's project in Koderma, near Ranchi (Jharkhand)
14.7.2012	Petitioner's letter to DIG, Police, Ranchi, requesting the police deployment for protection of labour gangs working for petitioner in Ranchi district.
23.8.2012	Letter of SP, Ranchi for deployment of protection of labour gangs working for petitioner in Ranchi district.
6.9.2012	Office order from DM, Ranchi directing the police deployment for protection of labour gangs working for petitioner
11.9.2012	
14.9.2012	Letter of Deputy to IG, Police, Ranchi confirming the police deployment of protection of labour gangs working for petitioner in Ranchi district.

d) Hindrance and delay due to bandh calls time to given by various Naxal groups.

There had been repeated bandh call given by naxal groups and various acts of terror performed by Naxals/miscreants in the state of Jharkhand which almost jeopardize various ongoing works.

18. We have considered the submissions made by the petitioner regarding time over-run. We are not going into the issue of time over-run in commissioning of Assets I and II as they are not considered in the instant petition. The petitioner has attributed the time over-run due to delay in forest clearance, delay in possession of sub-station land and law and order problems. The assets considered in the instant petition are Bus Reactors alongwith bays in 765 kV Ranchi Sub-station and as such the delay in obtaining the forest clearance is not applicable in the case of Assets III, IV and V. The time over-run in case of other assets covered in the project was condoned vide order dated 21.3.2016 in Petition No. 105/TT/2014. On perusal of the documents submitted by the petitioner, it is observed that possession of major part of land was acquired on 29.4.2011. It appears that a small piece of land in the



middle of the sub-station land was not included by State Government authorities. While the rest of the land was handed over on 29.4.2011, the small piece of land was handed over only on 12.12.2012. Thus, it took almost 36 months to acquire physical possession of land after depositing the payment in respect thereof to the State Government authorities while remaining parcel of land ad-measuring 1.92 acres was handed over after further delay of nearly 19 months. It is further observed from the submissions of the petitioner that the area is infested by Maoist groups, there were several disturbances such as bandh, de-mobilisation and re-mobilisation of construction gangs, etc. The petitioner has also furnished documentary evidence in support of the disturbance and the action taken by it to counter the same.

19. The Hon'ble Appellate Tribunal for Electricity in its judgment dated 27.4.2011 in Appeal No.72/2010 has laid down the principle to be followed to determine the liability for time over-run in three scenarios as under:-

- (a) Due to factors entirely attributable to the project developer;
- (b) Due to the factors beyond the control of project developer; and
- (c) Not covered under (a) and (b).

In the first scenario, the additional cost due to time over-run would be entirely borne by the project developer and the LD amount, if any, would be retained by them. In the second scenario, the additional cost due to time over-run shall be capitalized, however, the benefit of LD and the insurance proceeds, if any, to be reduced from the capital cost. In the last scenario, the additional cost due to time over-run



including LD and insurance proceeds should be shared between the project developer and the beneficiaries.

20. We are of the view that the delay in getting possession of sub-station land and law & order problem is beyond the control of the petitioner and it is condoned. The instant case, falls under the second scenario enunciated by Hon'ble Appellate Tribunal for Electricity. Accordingly, the IDC and IEDC during the period is capitalized.

### **Treatment of IDC**

21. The petitioner has claimed Interest during Construction (IDC) of ₹708.68 lakh. The petitioner has submitted the IDC statement. Based on the information submitted by the petitioner, vide affidavit dated 16.6.2016, IDC has been worked out on cash basis amounting to ₹719.40 lakh. However, petitioner has submitted that IDC amount discharged upto COD is ₹708.68 lakh. Thus, IDC of ₹708.68 lakh is being allowed for the assets.

### **Treatment of IEDC**

22. The petitioner has claimed Incidental Expenditure during Construction (IEDC) of ₹543.64 lakh. Further, petitioner vide affidavit dated 16.6.2016 has submitted that IEDC discharged up to COD is ₹543.64 lakh. The percentage on Hard Cost as indicated in the Abstract Cost Estimate has been considered as the allowable limit to the IEDC. In the current petition, 5% of the Hard Cost (i.e. ₹283.33 lakh) is the maximum limit for allowing IEDC. The IEDC claim of ₹543.64 lakh





exceeds the abstract cost estimate, i.e. 5 % of the hard cost, as on COD. Hence, ₹260.31 lakh (i.e. ₹543.64-₹283.33 lakh) has been disallowed from the capital cost as on COD.

**Treatment of initial spares**

23. Regulation 8 of the 2009 Tariff Regulations provides that initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:-

Transmission line	0.75%
Transmission sub-station	2.5%
Series compensation devices & HVDC Station	3.5%

24. As per Auditor Certificate dated 17.4.2016, the petitioner has claimed initial spares of ₹205.95 lakh pertaining to sub-station. Further, petitioner vide affidavit dated 16.6.2016 has submitted the year-wise details of liability discharged as under:-

**(₹ In lakh)**

Period	Initial spare liability discharged
Expenditure on initial spare up to COD and included in Auditor Certificate up to COD	191.16
Estimated expenditure on initial spare in 2016-17 (add cap)	14.79
<b>Total</b>	<b>205.95</b>

25. Based on the estimated capital cost up to “cut-off” date as mentioned in Auditor certificate dated 17.4.2016, the ceiling limit of initial spare as defined in Regulation 8 of the 2009 Tariff Regulations works out to ₹210.94 lakh. Since, the



initial spares claimed by the petitioner are within ceiling limit, ₹191.16 lakh which is discharged as on COD and is included in COD cost has been allowed as cost towards initial spare. However, the actual entitlement of initial spare as per regulation will be regularized as per actual completion cost as on “cut-off” date at the time determination of tariff for 2014-19 period and the variance if any shall be adjusted in the year in which the “cut-off” date falls.

**Capital cost as on COD**

26. The capital cost, as on COD, considered for the purpose of tariff computation is as follows:-

(₹ In lakh)

Asset	Capital cost as on COD	IEDC disallowed on COD	Capital cost as on COD considered for tariff calculation
1	2	3	4 = (2-3)
Combined Asset	6918.92	260.31	6658.61

**Projected additional capital expenditure**

27. Clause (1) of Regulation 9 of the 2009 Tariff Regulations provides as under:-

“Additional Capitalisation: (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of Regulation 8;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law.”



28. Clause (11) of Regulation 3 of the 2009 Tariff Regulations defines “cut-off” date as under:-

“cut-off date” means 31<sup>st</sup> March of the year closing after 2 years of the year of commercial operation of the project, and in case the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31<sup>st</sup> March of the year closing after 3 years of the year of commercial operation”.

29. Cut-off date for the combined assets is 31.3.2017.

30. Additional capital expenditure claimed by the petitioner during 2014-15, 2015-16 and 2016-17 falls within the “cut-off” date but beyond 2009-14 tariff period, therefore, additional capital expenditure upto 31.3.2014 has been considered for the purpose of tariff calculation. The additional capital expenditure during 2014-15, 2015-16 will be considered during the 2014-19 period as per the 2014 Tariff Regulations.

31. The additional capitalization incurred/projected to be incurred in the contextual asset is mainly on account of Balance/Retention Payments and they are as given below:-

(₹ In lakh)

Asset	2013-14	2014-15	2015-16
Asset-III	348.58	1045.78	348.59
Asset-IV	146.26	292.52	48.76
Asset-V	149.11	298.23	49.70

### **Capital Cost as on 31.3.2014**

32. Considering the admitted capital cost as on COD and admissible additional capital expenditure, capital cost as on 31.3.2014 works out as follows:-



(₹in lakh)

Particulars	Capital cost allowed as on COD	Add cap for 2013-14	Total cost as on 31.3.2014
Combined Asset	6658.61	22.56	6681.17

### **Debt- equityratio**

33. Regulation 12 of the 2009 Tariff Regulations provides as under:-

“12. Debt-Equity Ratio (1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

**Explanation-** The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the generating station or the transmission system.

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

34. Details of debt-equity in respect of the asset as on the date of commercial operation and as on 31.3.2014 are as follows:-



(₹ in lakh)			
Particulars	%	As on COD	As on 31.3.2014
Debt	70.00	4661.03	4676.82
Equity	30.00	1997.58	2004.35
Total	100.00	6658.61	6681.17

35. Additional capital expenditure has been considered in the debt-equity ratio of 70:30.

### **Return on equity**

36. Regulation 15 of the 2009 Tariff Regulations provides as under:-

“15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (3) of this regulation:

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in Appendix-II:

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be:

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where t is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee as the case may be, shall recover the shortfall or refund the excess Annual Fixed charge 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;



Provided further that Annual Fixed charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective financial year during the tariff period shall be tried up in accordance with Regulation 6 of these regulations".

37. Return on equity has been computed @ 20.96% p.a. on average equity. The MAT Rate for the financial year 2013-14 is considered for computing return on equity.

38. The petitioner's prayer to recover the shortfall or refund the excess Annual Fixed Charges, on account on return on equity due to change in applicable Minimum Alternate Tax/Corporate Income Tax rate as per the Income Tax Act, 1961 of the respective financial year directly without making any application before the Commission shall be dealt under Regulation 15(5) as stated above.

39. The details of return on equity calculated are as follows:-

(₹in lakh)	
Particulars	2013-14
Opening Equity	1997.58
Addition due to Additional Capitalization	6.77
Closing Equity	2004.35
Average Equity	2000.97
Return on Equity (Base Rate )	<b>15.50%</b>
Tax rate for the year 2013-14 (MAT)	20.96%
Rate of Return on Equity (Pre Tax )	19.610%
<b>Return on Equity (Pre Tax)</b>	<b>65.40</b>

### **Interest on loan**

40. Regulation 16 of the 2009 Tariff Regulations provides as under:-

"16. **Interest on loan capital**(1)The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.



(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.”



41. In the calculations, the interest on loan has been worked out as detailed below:-

- i. Gross amount of loan, repayment of installments and rate of interest have been considered as per Form 13 given in the affidavit dated 16.6.2016.
- ii. The Normative repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period.
- iii. Weighted average rate of interest on actual average loan worked out as per (i) above, is applied on the notional average loan during the year to arrive at the interest on loan.

42. Detailed calculations in support of the weighted average rates of interest have been given in Annexure to this order.

43. Based on the above, interest on loan has been calculated are given as under:-

(₹ in lakh)	
<b>Particulars</b>	<b>2013-14</b>
Gross Normative Loan	4661.03
Cumulative Repayment upto Previous Year	0.00
Net Loan-Opening	4661.03
Addition due to Additional capitalisation	15.79
Repayment during the year	51.24
Net Loan-Closing	4625.58
Average Loan	4643.30
Weighted Average Rate of Interest on Loan	8.7947%
Interest	<b>68.06</b>

### **Depreciation**

44. Regulation 17 of the 2009 Tariff Regulations provides as under:-





“17. **Depreciation**(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

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

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site;

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

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

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

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

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.”

45. The combined asset in the instant petition will complete 12 years in 2013-14 and thus depreciation has been calculated annually, based on Straight Line Method and at rates specified in Appendix-III to the 2009 Tariff Regulations. Accordingly, depreciation has been worked out on the basis of capital expenditure as on the date of commercial operation and additional capital expenditure incurred/projected to be



incurred thereafter, wherein depreciation for the first year has been calculated on pro-rata basis for the part of year.

46. Based on the above, the depreciation has been considered are as follows:-

<b>(₹ in lakh)</b>	
<b>Particulars</b>	<b>2013-14</b>
Opening Gross Block	6658.61
Addition during 2009-14 due to Projected Additional Capitalisation	22.56
Closing Gross Block	6681.17
Average Gross Block	6669.89
Rate of Depreciation	4.6090%
Depreciable Value	5244.09
Remaining Depreciable Value	5244.09
Depreciation	<b>51.24</b>

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

47. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for O&M Expenses based on the type of sub-station and line. Norms prescribed in respect of the elements covered in the instant petition are as under:-

<b>(₹ in lakh)</b>	
<b>Element</b>	<b>2013-14</b>
765 kV bay (₹ lakh/bay)	91.64
400 kV bay (₹ lakh/bay)	65.46

48. As per Regulation 19(g) of the 2009 Tariff Regulations ₹37.09lakh are allowed for the Combined Asset for two months.

### **Interest on working capital**



49. The petitioner is entitled to claim interest on working capital as per the 2009 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

**(i) Receivables**

As per Regulation 18(1) (c) (i) of the 2009 Tariff Regulations, receivables as a component of working capital will be equivalent to two months fixed cost. The petitioner has claimed the receivables on the basis of 2 months' annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

**(ii) Maintenance spares**

Regulation 18(1)(c)(ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M expenses from 1.4.2009. The value of maintenance spares has accordingly been worked out.

**(iii) O & M Expenses**

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.



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

The SBI Base rate (9.70%) as on 1.4.2013 plus 350 BPS i.e. 13.20% has been considered as the rate of interest on working capital.

50. Necessary computations in support of interest on working capital areas follows:-

(₹ in lakh)	
Particulars	2013-14
Maintenance Spares	33.38
O & M expenses	18.55
Receivables	227.94
Total	279.87
Interest	6.16

**Transmission charges**

51. The transmission charges being allowed for the assets are as follows:-

(₹ in lakh)	
Particulars	2013-14
Depreciation	51.24
Interest on Loan	68.06
Return on equity	65.40
Interest on Working Capital	6.16
O & M Expenses	37.09
<b>Total</b>	<b>227.94</b>

**Filing fee and the publication expenses**

52. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. MSEDCL has submitted that filing fee and publication expenses may not be allowed. The petitioner shall be entitled for reimbursement of the publication expenses in connection with the present petition,



directly from the beneficiaries on pro-rata basis in accordance with Regulation 42 of the 2009 Tariff Regulations.

### **Licence fee**

53. The petitioner has submitted that in O&M norms for tariff block 2009-14, the cost associated with license fees had not been captured and the license fee may be allowed to be recovered separately from the respondents. MSEDCL have submitted that the Commission may pass such orders in respect to petitioner's request for reimbursement for licence fee, as it thinks just and proper to avoid unnecessary burden on beneficiaries and ultimately on end consumers. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (1) (b) of the 2009 Tariff Regulations.

### **Service tax**

54. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. MSEDCL has submitted that as the petitioner itself submitted that service tax on transmission has been put in the negative list it will be too early to make any comment on such an issue. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

### **Sharing of Transmission Charges**

55. 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.

56. This order disposes of Petition No. 46/TT/2014.

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

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

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

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



**Annexure****CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN**

(₹ in lakh)

	<b>Details of Loan</b>	<b>2013-14</b>
<b>1</b>	<b>Bond XXX</b>	
	Gross loan opening	<b>240.00</b>
	Cumulative Repayment uptoCOD/previous year	<b>20.00</b>
	Net Loan-Opening	220.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	220.00
	Average Loan	220.00
	Rate of Interest	8.80%
	Interest	19.36
	Rep Schedule	12 annual installments from 29.09.2013
<b>2</b>	<b>Bond XXIX</b>	
	Gross loan opening	<b>18.00</b>
	Cumulative Repayment uptoCOD/previous year	<b>1.50</b>
	Net Loan-Opening	16.50
	Additions during the year	0.00
	Repayment during the year	1.50
	Net Loan-Closing	15.00
	Average Loan	15.75
	Rate of Interest	9.20%
	Interest	1.45
	Rep Schedule	12 annual installments from 12.03.2013
<b>3</b>	<b>Bond XXXVII</b>	
	Gross loan opening	<b>17.00</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	17.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	17.00
	Average Loan	17.00
	Rate of Interest	9.25%
	Interest	1.57
	Rep Schedule	12 annual installments from 26.12.2015
<b>4</b>	<b>Bond XXXII</b>	



	Gross loan opening	<b>12.00</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	12.00
	Additions during the year	0.00
	Repayment during the year	1.00
	Net Loan-Closing	11.00
	Average Loan	11.50
	Rate of Interest	8.84%
	Interest	1.02
	Rep Schedule	12 annual installments from 29.03.2014
<b>5</b>	<b>Bond XXXIX</b>	
	Gross loan opening	<b>373.81</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	373.81
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	373.81
	Average Loan	373.81
	Rate of Interest	9.40%
	Interest	35.14
	Rep Schedule	Bullet Payment on 29.03.2027
<b>6</b>	<b>Bond XXXVI</b>	
	Gross loan opening	<b>350.00</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	350.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	350.00
	Average Loan	350.00
	Rate of Interest	9.35%
	Interest	32.73
	Rep Schedule	15 annual installments from 29.08.2016
<b>7</b>	<b>Bond XXXIII</b>	
	Gross loan opening	<b>500.00</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	500.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	500.00
	Average Loan	500.00
	Rate of Interest	8.64%
	Interest	43.20
	Rep Schedule	12 annual installments from 08.07.2014





<b>8</b>	<b>Bond XXXIV</b>	
	Gross loan opening	<b>545.00</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	545.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	545.00
	Average Loan	545.00
	Rate of Interest	8.84%
	Interest	48.18
	Rep Schedule	12 annual installments from 21.10.2014
<b>9</b>	<b>Bond XXXV</b>	
	Gross loan opening	<b>245.00</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	245.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	245.00
	Average Loan	245.00
	Rate of Interest	9.64%
	Interest	23.62
	Rep Schedule	12 annual installments from 31.05.2015
<b>10</b>	<b>Bond XLI</b>	
	Gross loan opening	<b>305.00</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	305.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	305.00
	Average Loan	305.00
	Rate of Interest	8.85%
	Interest	26.99
	Rep Schedule	12 annual installments from 19.10.2016
<b>11</b>	<b>SBI (2012-13)</b>	
	Gross loan opening	<b>397.89</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	397.89
	Additions during the year	15.79
	Repayment during the year	0.00
	Net Loan-Closing	413.68
	Average Loan	405.79
	Rate of Interest	10.25%
	Interest	41.59



	Rep Schedule	22 annual installments from 31.08.2016
<b>12</b>	<b>Bond XL</b>	
	Gross loan opening	<b>600.00</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	600.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	600.00
	Average Loan	600.00
	Rate of Interest	9.30%
	Interest	55.80
	Rep Schedule	12 annual installments from 28.06.2016
<b>13</b>	<b>Bond XXXI</b>	
	Gross loan opening	<b>345.00</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	345.00
	Additions during the year	0.00
	Repayment during the year	28.75
	Net Loan-Closing	316.25
	Average Loan	330.63
	Rate of Interest	8.90%
	Interest	29.43
	Rep Schedule	12 annual installments from 25.02.2014
<b>14</b>	<b>Bond XLIII</b>	
	Gross loan opening	<b>730.87</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	730.87
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	730.87
	Average Loan	730.87
	Rate of Interest	7.93%
	Interest	57.96
	Rep Schedule	12 annual installments from 20.05.2017
<b>15</b>	<b>IFC A- Loan</b>	
	Gross loan opening	<b>163.67</b>
	Cumulative Repayment uptoCOD/previous year	<b>0.00</b>
	Net Loan-Opening	163.67
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	163.67
	Average Loan	163.67
	Rate of Interest	3.27%



	Interest	5.35
	Rep Schedule	21 semi annually installments from 15.09.2017
	<b>Total Loan</b>	
	Gross loan opening	4843.24
	Cumulative Repayment uptoCOD/previous year	21.50
	Net Loan-Opening	2584.31
	Additions during the year	15.79
	Repayment during the year	31.25
	Net Loan-Closing	4806.28
	Average Loan	4814.01
	Rate of Interest	<b>8.7947%</b>
	<b>Interest</b>	423.38

