

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**PETITION NO. 113/TT/2013**

**Coram:**

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

**Date of Hearing: 27.01.2016**

**Date of Order : 18.03.2016**

**In the matter of:**

Determination of transmission tariff of 400 kV 1X63 MVAR Bus Reactor along with associated 400 kV bays at Satna Sub-station and 400 kV D/C Quad Bassi-Jaipur (RPVNL) line associated with Vindhyachal-IV and Rihand-III (1000MW) Generation project in Western Region for 2009-14 block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999

**And in the Matter of:**

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

**.....Petitioner**

**Versus**

1. Madhya Pradesh Power Management Company Ltd.  
Shakti Bhawan, Rampur  
Jabalpur - 482 008
2. Maharashtra State Electricity Distribution Co. Ltd.  
Prakashgad, 4th Floor  
Andheri (East), Mumbai - 400 052
3. Gujarat Urja Vikas Nigam Ltd.  
Sardar Patel Vidyut Bhawan,  
Race Course Road  
Vadodara - 390 007



4. Electricity Department Govt. Of Goa  
Vidyut Bhawan, Panaji,  
Near Mandvi Hotel, Goa - 403 001
5. Electricity Department  
Administration of Daman & 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  
Chhatisgarh-492013
8. Madhya Pradesh Audyogik Kendra  
Vikas Nigam (Indore) Ltd.  
3/54, Press Complex, Agra-Bombay Road,  
Indore- 452 008
9. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,  
Vidyut Bhawan, Vidyut Marg,  
Jaipur - 302005.
10. Ajmer Vidyut Vitran Nigam Ltd.,  
400 kV GSS Building (Ground Floor), Ajmer Road,  
Heerapura, Jaipur.
11. Jaipur Vidyut Vitran Nigam Ltd.,  
400 kV GSS Building (Ground Floor), Ajmer Road,  
Heerapura, Jaipur.
12. Jodhpur Vidyut Vitran Nigam Ltd.,  
400 kV GSS Building (Ground Floor), Ajmer Road,  
Heerapura, Jaipur
13. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan, Kumar House Complex Building II,  
Shimla - 171 004.
14. Punjab State Electricity Board,  
The Mall, Patiala - 147 001.
15. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector - 6  
Panchkula (Haryana) - 134 109
16. Power Development Department,



Govt. of Jammu and Kashmir  
Mini Secretariat, Jammu.

17. Uttar Pradesh Power Corporation Ltd.,  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow - 226 001.
18. Delhi Transco Ltd.,  
Shakti Sadan, Kotla Road,  
New Delhi - 110 002
19. BSES Yamuna Power Ltd.,  
Shakti Kiran Building, Karkardooma,  
Delhi – 110 092.
20. BSES Rajdhani Power Ltd.,  
BSES Bhawan, Nehru Place,  
New Delhi.
21. North Delhi Power Ltd.,  
Power Trading & Load Dispatch Group,  
Cennet Building,  
Adjacent to 66/11kV Pitampura - Grid Building,  
Near PP Jewellers,  
Pitampura, New Delhi - 110 034
22. Chandigarh Administration,  
Sector - 9, Chandigarh
23. Uttarakhand Power Corporation Ltd.,  
Urja Bhawan, Kanwali Road,  
Dehradun
24. North Central Railway,  
Allahabad
25. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi - 110 002

**.....Respondents**

The following were present:

For Petitioner:           Shri M.M. Mondal, PGCIL  
                                  Shri S.K Venkatesan, PGCIL  
                                  Smt. Sangeeta Edwards, PGCIL  
                                  Shri S.C. Taneja, PGCIL  
                                  Shri Rakesh Prasad, PGCIL  
                                  Shri S.S. Raju, PGCIL



Shri Anshul Garg, PGCIL  
Shri Jasbir Singh, PGCIL

For Respondents: None

### **ORDER**

The petition has been preferred by Power Grid Corporation of India Limited (“the petitioner”) for determination of tariff of 400 kV 1X63 MVAR Bus Reactor along with associated 400 kV bays at Satna Sub-station (COD:1.4.2013) (hereinafter referred as “Asset-I”) and 400 kV D/C Quad Bassi-Jaipur (RPVNL) line (COD:1.1.2014) (hereinafter referred as “Asset-II”) associated with Vindhyachal-IV and Rihand-III (1000MW) Generation project in Western Region (hereinafter referred to as “the transmission assets”) under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) for the period from COD to 31.3.2014.

2. The respondents are distribution licensees, who are procuring transmission service from the petitioner, mainly the beneficiaries of Western and Northern Region.

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

a) The administrative approval and expenditure sanction to the project was accorded by the Board of Directors of POWERGRID vide Memorandum Ref. C/CP/Vin-IV & Rih-III dated 17.3.2010 at an estimated cost of ₹467299 lakh including an IDC of ₹29779 lakh based on 3<sup>rd</sup> Quarter, 2009 price level. The project was scheduled to be commissioned within 32 months from the date of investment approval i.e. 1.12.2012. The scope of work covered under the scheme is as follows:-



## **Part –I Generation specific transmission system**

### **A- Rihand-III: For NR only.**

#### Transmission Line

- (i) Rihand –III Vindhyachal Pooling station 765 kV 2xS/C ( initially to be operated at 400 kV)

#### Sub-station

- (i) 765/400 kV Vindhyachal Pooling station (Extension)

### **B- Vindhyachal-IV : For WR only**

#### Transmission Line

- (i) Vindhyachal-IV-Vindhyachal Pooling station 400 kV D/C (Quad) line

#### Substation

- (i) 765/400 kV Vindhyachal Pooling Station (Extension)

## **Part-II: Common System for both WR and NR**

#### Transmission Line

- (i) Vindhyachal Pooling station –satna 765 kV 2xS/C line
- (ii) Satna-Gwalior 765 kV 2xS/C line
- (iii) Sasan-Vindhyachal Pooling station 765 kV S/C line
- (iv) Sasan-Vindhyachal Pooling station 400 kV D/C line

#### Sub-stations

- (i) Establishment of new 765/400 kV, 2x1500 MVA sub-station at Vindhyachal Pooling Station

### **(ii) Extension of 765/400 kV Satna Sub-station**

- (iii) Extension of 765/400 kV Gwalior Sub-station
- (iv) Extension of 765/400 kV Sasan Sub-station

### **Part-III: NR Strengthening in regional pool**

#### Transmission Lines

(i) Gwalior- Jaipur (RVPN) 765 kV S/C line

**(ii) Bassi- Jaipur (RVPN) 400 kV D/C (Quad) line**

#### Sub-stations

(i) Extension of 765/400 kV Gwalior Sub-station

(ii) Extension of 765/400 kV Jaipur (RVPN) Sub-station

(iii) Extension of 400/220 kV Bassi Sub-station

b) As per the investment approval, the project was scheduled to be commissioned within 32 months from the date of Investment Approval. The date of Investment Approval was 17.3.2010 and accordingly the schedule date of completion of work is 1.12.2012.

c) The petitioner initially claimed the transmission tariff for the instant transmission assets with actual COD of 1.4.2013 for Asset-I and an anticipated COD of 1.7.2013 of Asset-II, based on estimated capital expenditure incurred up to the anticipated date of commercial operation and estimated additional capital expenditure projected to be incurred from anticipated date of commercial operation to 31.3.2014, vide affidavit dated 14.5.2013.

d) The petitioner, vide affidavit dated 3.3.2016, has submitted the actual date of commercial operation of Asset-II as 1.1.2014. The petitioner, vide affidavits dated 12.12.2014 and 3.3.2016, has requested to determine the transmission tariff of the transmission asset in the instant petition. The

petitioner has submitted, vide affidavit dated 3.3.2016, the revised Auditor Certificates as per revised date of commercial operation and also revised tariff forms pertaining to these assets. The assets covered in the instant petition are as below:

(i) 400 kV 1X63 MVAR Bus Reactor along with associated 400 kV bays at Satna Sub-station (COD: 1.4.2013)

(ii) 400 kV D/C Quad Bassi-Jaipur (RPVNL) line (COD: 1.1.2014)

e) The petitioner has submitted the CEA inspection certificates for the instant assets vide affidavit dated 3.3.2016.

f) 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. No comments/objections have been received from the public in response to the notice in newspapers.

g) Ajmer Vidyut Vitran Nigam Ltd. (AVVNL), Respondent No. 10, Jaipur Vidyut Vitran Nigam Ltd. (JVVNL), Respondent No. 11, and Jodhpur Vidyut Vitran Nigam Ltd. (JdVVNL), Respondent No. 12, (referred to as "Rajasthan Discoms") have filed reply to the petition vide a common affidavit dated 26.6.2013. Rajasthan Discoms have raised certain objections regarding the anticipated COD of the transmission asset, variation in the cost of elements of the assets and the O&M charges. Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL), Respondent No. 2, has filed reply to the petition vide affidavit dated 1.8.2013 requesting to conduct prudence check on various parameters of the capital cost, additional capital expenditure,



interest charges, time and cost overrun in the instant transmission assets. The petitioner has not submitted any rejoinder to the replies filed by the aforesaid respondents. The petitioner has submitted the actual COD, Auditor Certificates, revised tariff forms and other details for the instant transmission assets vide affidavits dated 14.4.2014, 12.12.2014 and 3.3.2016..

h) The hearing in this matter was held on 27.1.2016. Having heard the representatives of the parties and perused the records we proceed to dispose of the petition. While doing so, we also take care of the submissions of the respondents in their replies and address them in the relevant paragraphs.

4. The transmission charges claimed by the petitioner based on the actual date of commercial operation are as below:-

(₹ in lakh)

Particulars	2013-14	2013-14
	Asset-I	Asset-II (pro-rata)
Depreciation	28.23	150.95
Interest on Loan	32.45	141.25
Return on Equity	31.45	167.90
Interest on Working Capital	5.61	14.65
O & M Expenses	65.46	79.55
<b>Total</b>	<b>163.20</b>	<b>554.30</b>

### **Capital Cost**

5. Regulation 7 of the 2009 Tariff Regulations provides that:-

**“(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) capitalised 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”

6. The details of apportioned approved cost, capital cost as on the date of commercial operation, and additional capital expenditure incurred for the assets covered in the instant petition, claimed by the petitioner, are summarized below:-

(₹ in lakh)

Asset	Apportioned approved cost as per FR	Actual cost incurred as on COD*	Additional capital expenditure during 2013-14	Total completion cost up to 31.3.2014
Asset-I	2063.51	472.66	123.92	596.58
Asset-II	14841.46	11305.38	220.88	11526.26

\*inclusive of IDC/IEDC and initial spares discharged up to COD

7. The petitioner has claimed an incidental expenditure during construction (IEDC) and interest during construction (IDC) of Nil and ₹6.42 lakh respectively in Asset-I and ₹153.02 lakh and ₹1109.00 lakh respectively in Asset-II as on date of commercial operation. The petitioner has submitted the details of IDC discharged up to SCOD, from SCOD to actual COD and from actual COD to 31.3.2014. The petitioner has also submitted the year wise details of liability discharged

corresponding to initial spares. The admissible capital cost of the transmission asset as on COD is worked out in the subsequent paragraphs taking into consideration the initial spares and IEDC and IDC amount.

### **Cost Variation**

8. The completion cost of the transmission assets up to 31.3.2014 is within the approved apportioned cost. There is a cost variation in certain elements. Rajasthan Discoms have requested the petitioner to explain the vast variations observed in the approved costs and estimated completion costs of the assets individually. Further, MSEDCL has requested not to allow any expenditure incurred for commissioning of the project due to reasons which were within the control of petitioner.

9. The petitioner in response to query has submitted, vide affidavit dated 12.12.2014, the reasons for cost variation in respect of the transmission assets. The petitioner has submitted that the over estimation of cost to the tune of 66.48% in Asset-I is due to change in quantity of the Bus Reactors. Only one no. of 63 MVAR Bus Reactor was considered while awarding the contract against two no. of Bus Reactors envisaged in FR. The petitioner has submitted that the cost variation in Asset-II is due to increased actual payment made to RVPNL on account of overhead charges. The actual payment done is ₹3694 lakh whereas FR cost estimate is ₹865 lakh. Further, the petitioner has submitted the following item-wise reasons to justify the cost variation:-

Items	FR Cost (₹ in lakh)	Cost as per form 5B (₹ in lakh)	Variation	Reasons for variation
Structure for Switchyard	114.18	140.33	29.90%	The awarded cost is received as per competitive bidding and as per FR, the items are composite in nature. The variation is mainly due to extension of 400 kV bays at Satna Sub-station to accommodate bus reactor which include associated civil works.
Auxillary System	17.31	34.64	17.32%	The awarded cost is received as per competitive bidding and auxiliary system comprises of Fire-Fighting System, Power/Control cables, battery and battery charges, LT distribution system. The variation is mainly because as per FR, the cost is composite in nature and as per actual, the cost is apportioned as per 400 kV works.
Conductors and wire accessories	92.23	125.5	36%	High bid prices
Switchgear (CT/PT etc.)	667.73	954.06	42.88%	Other than the high bid prices, difference is in civil works in equipment erection (FR- ₹3 crore, Actual ₹4.14 crore)
Control Relay & Protection panel	62	75.71	22.11%	High bid prices
Power & Control Cable	45	162.62	261.36%	Other than the high bid prices, difference is in Sub-station auxiliary (FR-₹45 lakh, Actual ₹176 lakh)

10. We have considered the submissions made by the petitioner regarding cost variation in case of the instant transmission assets. It is noticed that the cost estimates of the petitioner are differing from actual expenditure. We are of the view that the petitioner should adopt a more prudent procedure to make cost estimates of different elements of the transmission projects more realistic.

### **Time over-run**

11. As per investment approval, the project is to be commissioned within 32 months from the date of investment approval. The date of investment approval is 17.3.2010 and accordingly the schedule date of commercial operation works out to be 1.12.2012. Asset-I was put under commercial operation on 1.4.2013 and Asset-II on 1.1.2014. Thus, there is a delay of around 4 months in commissioning of Asset-I and around 13 months in Asset-II. Rajasthan Discoms have requested not to allow any IDC for the delay as the same is due to inefficiency of the petitioner. Further, MSEDCL has requested the Commission to impose penalty for the delay in commissioning of assets.

12. The petitioner has submitted the reasons for delay in commissioning of the transmission asset. The petitioner has submitted, vide affidavit dated 12.12.2014, that the delay is due to annulment of bidding process leading to retendering of packages for both Asset-I & Asset-II and ROW issues in respect of Asset II.

13. Let us consider the first issue of delay on account of annulment of bidding process for Asset I and II:

- a. The petitioner has submitted that the Vindhya-Chal-IV and Rihand-III Transmission System comprises of eight nos. of long transmission lines and nine number of extension/new substations. The scope of work under the said transmission system was further divided into packages based on the definite scope of works falling under various categories viz., 'Supply-cum-Installation' and 'Supply' packages etc. for the purpose of competitiveness, efficiency, availability of prospective bidders, project execution schedule, combination/clubbing of equipment/ services that can

be advantageously engineered and independence with regard to its work content and clarity in terminal points for interfacing. The bidding process for these packages was carried out in staggered manner to match the project execution schedule.

- b. The petitioner has submitted that the package for Asset-I was made by combining Bus Reactors at Vindhyachal Pooling station and Bus Reactors at Satna Sub-station. The bidding process was initiated in February, 2010. However, due to deletion of one number of 400 kV line bays at Vindhyachal Pooling station, the package considered for the purpose of bidding was changed. Consequently, the bidding procedure was required to be reinitiated by the petitioner and accordingly the Invitation for Bids (IFB) was issued on 6.8.2010 and the contract was placed on 28.2.2011 after a span of one year.
- c. The petitioner further submitted that the delay in 400 kV bays at Satna Sub-station and Bassi Sub-station under Asset-I and Asset-II respectively, the petitioner submits that the package was designed as a part of extension of 765kV Satna, 765kV Gwalior and 400kV Bassi Sub-stations including 765 kV equipments. The bidding procedure was initially commenced with IFB issued on 23.9.2010. Since the procurement for 765kV were in nascent stage in India and to encourage better participation by major substation erection contractors in 765kV, the petitioner decided to exclude the supply of 765kV circuit breakers from the scope of work and procure them under separate package. Accordingly, the earlier bidding process was annulled and fresh bids for the subject package were



immediately invited for which IFB was published on 9.02.2011 and the contract was placed on 20.9.2011.

- d. The petitioner has also submitted with respect to the delay in award of tower package for Asset-II, that the bidding process for the packages under the said transmission system was carried out in staggered manner to match the project execution schedule and accordingly, the IFB for the tower package for 400kV D/C Quad Bassi-Jaipur (RPVNL) line was issued on 24.5.2010 and the contract was placed on 18.1.2011.
- e. The petitioner has claimed that the annulment of bidding processes and again starting the bidding processes afresh for Reactor and Sub-station packages has caused an unavoidable initial delay.

14. We have considered the submission of the petitioner regarding delay due to annulment of bidding process. It is observed that the annulment of bidding process was on account of change in designed packages of Reactors at Vindhyachal Sub-station in Asset-I, rebidding of equipments to encourage better participation in 765 KV system causing consequent delay in 400 KV bays at Satna Sub-station and Bassi Sub-station under Asset-I and Asset-II respectively and staggered manner bidding process in Asset 2. As regards the bidding process of Asset 1, the bidding process was initiated by the petitioner in February, 2010. However, due to deletion of one number of 400 kV line bays at Vindhyachal Pooling station, the package was redesigned by the petitioner. The deletion of one number of bay was subsequent development and as such, the petitioner was constrained to redesign packages. We are of the view the delay of 4 months shall be condoned in Asset-I



by considering generic timeline of three to four months for tendering process. Further, with regard to rebidding of equipments to encourage better participation in 765 KV system for Asset-I & Asset-II and staggered manner bidding process for Asset-II, we are of the view that the petitioner was aware of this fact from the beginning at the time of investment approval. As per industrial practice, these factors are taken care at the time of development and investment decision of new 765 kV system and Board of the Company approves the same by considering all these factors. In light of the above, the petitioner's claim for condoning delay on this count for is not justified. The delay from September, 2010 to February, 2011 is not condoned in case of Asset-II.

15. The petitioner has submitted that the delay of 13 months for commissioning of Asset-II is mainly due to ROW problems at location nos. 42/3 to 43/0, 21/0, 9/2 to 9A/1, 1/0, 2/0, 25/0, 26/0, 42/0 to 43/0. The petitioner has submitted the documents in support of the difficulties in development of the transmission system due to ROW problems. It is observed that the ROW issues have persisted from November, 2011 to July, 2013. Thus, the time over-run of 8 months from scheduled date of commissioning to July, 2013 on account of ROW issues is condoned. The remaining 5 months delay is not being condoned in case of Asset-II, as discussed in para 14. Accordingly, IDC and IEDC for 4 months in case of Asset-I and 8 months in case of Asset-II are capitalized.

Interest During Construction (IDC) and Incidental Expenditure During Construction (IEDC)

16. The petitioner was directed to submit the details of IDC on cash basis paid up to COD. The petitioner has submitted, vide affidavit dated 3.3.2016, the details of IDC discharged on cash basis up to COD and thereafter. The details of IDC discharged up to COD and thereafter, as submitted by the petitioner, are as follows:-

**Asset-I:**

(₹ in lakh)

<b>IDC discharged on cash basis</b>	
IDC discharged up to COD 1.4.2014	0.00
Accrual IDC up to COD (discharged during 2013-14)	6.42
<b>Total IDC</b>	<b>6.42</b>

**Asset-II:**

(₹ in lakh)

<b>IDC discharged on cash basis</b>	
IDC discharged up to COD 1.1.2014	1010.98
Accrual IDC up to COD (discharged during 2013-14)	68.75
Accrual IDC up to COD (discharged during 2014-15)	29.27
<b>Total IDC</b>	<b>1109.00</b>

The petitioner has further clarified that the accrued IDC discharged during 2013-14 is not included in the additional capital expenditure certified by the Auditor's Certificate dated 23.2.2016 for Asset-I and dated 20.11.2015 for Asset-II.

17. The petitioner has also submitted, vide affidavit dated 3.3.2016, the details of IDC accrued up to SCOD and from SCOD to actual COD, as below:-

(₹ in lakh)

<b>Asset</b>	<b>IDC up to SCOD</b>	<b>IDC from SCOD to Actual COD</b>	<b>Total IDC</b>	<b>IEDC up to SCOD</b>	<b>IEDC from SCOD to Actual COD</b>	<b>Total IEDC</b>
Asset-I	5.06	1.36	<b>6.42</b>	0.00	0.00	<b>0.00</b>
Asset-II	788.62	320.38	<b>1109.00</b>	108.82	44.20	<b>153.02</b>





The petitioner has submitted that the entire IEDC amount has been discharged on COD.

18. In view of the observations made in para 14 and 15, the IDC and IEDC is being adjusted in the capital cost as shown below:-

**Asset-I:**

(₹ in lakh)	
<b>IDC/IEDC allowed</b>	
IDC discharged up to COD 1.4.2013	0.00
Accrual IDC up to COD (discharged during 2013-14)	6.42
<b>Total IDC allowed</b>	<b>6.42</b>
IEDC claimed	Nil
Total IEDC allowed	Nil

**Asset-II:**

(₹ in lakh)	
<b>IDC on accrual basis</b>	
up to SCOD (1.12.12)	788.62
SCOD to Actual COD (1.1.14)	320.38
Total IDC	
<b>IDC disallowed for 5 months due to time over-run</b>	
From Sept. 2010 to Feb 2011	123.22

<b>IEDC on accrual basis</b>	
up to SCOD (1.12.12)	108.82
SCOD to Actual COD (1.1.14)	44.20
<b>Total IEDC</b>	<b>153.02</b>
<b>IEDC disallowed for 5 months due to time over-run</b>	
From Sept. 2010 to Feb 2011	17.00

19. Based on the above computations, IDC is Nil up to COD in case of Asset-I and ₹887.76 lakh (₹1010.98 lakh- ₹123.22 lakh) up to COD in case of Asset-II is

being capitalised. The remaining IDC is adjusted in the additional capital expenditure of the corresponding year when it is being discharged.

20. Further, IEDC is Nil in Asset-I and ₹136.02 lakh (₹153.02 lakh- ₹17.00 lakh) is being capitalised in Asset-II.

### **Initial Spares**

21. Regulation 8 of 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%
Sub-station	2.50%
Series compensation devices & HVDC Station	3.50%

22. The petitioner has claimed the initial spares of ₹16.99 lakh and ₹46.14 lakh pertaining to sub-station in case of Asset-I and Asset-II respectively and ₹80.05 lakh pertains to transmission line in Asset-II. The petitioner has submitted the Auditor's Certificate dated 23.2.2016 for Asset-I and 20.11.2015 for Asset-II in support of the claim. The petitioner has further submitted the details of liability discharged corresponding to the initial spares vide affidavit dated 3.3.2016 and has used the same in the claim of capital cost as on COD for the transmission assets. The petitioner has submitted the year-wise liability discharged in respect of the initial spares, as tabulated below:-

### **Asset-I:**

(₹ in lakh)	
Liabilities discharged in respect of initial spares	Sub-Station
Up to COD and included in Auditor Certificate up to COD	4.55

Estimated for 2013-14 (Add Cap)	3.34
Estimated for 2014-15 (Add Cap)	4.62
Balance	4.48
<b>Total</b>	<b>16.99</b>

**Asset-II:**

(₹ in lakh)

Liabilities discharged in respect of initial spares	Transmission Line & Sub-station
Up to COD and included in Auditor Certificate up to COD	27.79
COD to Feb,2016	91.02
Balance	7.38
<b>Total</b>	<b>126.19</b> <b>(TL=₹80.05 lakh, S/S= ₹46.14 lakh)</b>

The petitioner has not submitted the break-up of initial spares for sub-station and transmission line in Asset-II. The same has been considered up to COD and from COD to 31.3.2014 on pro-rata basis of the total corresponding initial spares.

23. The cut-off date in accordance with the 2009 Tariff Regulations falls beyond the 31.3.2014 which is beyond the scope of the 2009 Tariff Regulations. The capital cost and tariff for 2014-19 tariff period is yet to be determined. Therefore, the admissible initial spares have been worked out by considering the capital cost upto 31.3.2014. Details of the excess initial spares up to 31.3.2014, worked out are as under:-

(₹ in lakh)

Particulars	Formula	Asset-I S/S	Asset-II	
			TL	S/S
Capital cost as on cut-off date claimed by the petitioner	(a)	596.58	10733.32	822.21
Capital Cost restricted up to 31.3.2014 (including restriction of	(b)	596.58	10575.87	810.16



Particulars	Formula	Asset-I S/S	Asset-II	
			TL	S/S
IDC/IEDC)				
Initial Spares claimed (up to 31.3.2014)	(c)	7.89	24.56	14.15
Ceiling limit as per Regulation 8 of 2009 regulations	(e)	2.50%	0.75%	2.50%
Initial spares worked out	$(f) = (b-c) / (1/(1-e)-1)$	15.09	79.73	20.41
<b>Excess initial spares claimed up to 31.3.2014</b>	<b>(h)=(c)-(f)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

The excess initial spares during 2014-19 period will be excluded from the capital cost and additional capitalization included by the petitioner.

24. The undischarged liabilities due to initial spares included in additional capitalization during 2014-15 and 2015-16 will be subject to admissibility of additional capitalization during next tariff period as per the 2014 Tariff Regulations. The petitioner has liberty to claim the balance initial spares based on additional capital expenditure during next tariff period. Accordingly, the capital cost on COD is worked out by considering IDC and excess initial spares as on COD is as below:-

**Asset-I:**

(₹ in lakh)

Particulars	Capital Cost on COD	IDC/IEDC adjusted on cash basis	Capital cost on COD after deducting IDC/IEDC and excess initial spares, if any
Land - Freehold	-	-	-
Land - Leasehold	-	-	-
Building Civil Works & Colony	-	-	-
Transmission Line	-	-	-
Sub Station	479.08	6.42	472.66
PLCC	-	-	-
<b>Total</b>	<b>479.08</b>	<b>6.42</b>	<b>472.66</b>

\*incl. IDC= Nil, IEDC= Nil, initial spares = ₹4.55 lakh



**Asset-II:**

(₹ in lakh)

Particulars	Capital Cost on COD	IDC/IEDC adjusted on cash basis and time overrun	Capital cost on COD after deducting IDC/IEDC and excess initial spares, if any
Land – Freehold	-	-	-
Land – Leasehold	-	-	-
Building Civil Works & Colony	-	-	-
Transmission Line	10,592.80	221.31	10,371.49
Sub Station	708.40	14.80	693.60
PLCC	102.20	2.14	100.06
<b>Total</b>	<b>11403.40</b>	<b>238.25</b>	<b>11,165.16</b>

\*incl. IDC= 887.76 lakh (₹1010.98 lakh- ₹123.22 lakh) IEDC= ₹136.02 lakh (₹153.02 lakh- ₹17.00 lakh), initial spares = ₹27.79 lakh

**Additional Capital Expenditure**

25. 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.”

26. Further, 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”.

As per the above definition, the cut-off date is 31.3.2015 for Asset-I and 31.3.2017 for Asset-II.



27. The petitioner has claimed additional capital expenditure of ₹117.50 lakh for Asset-I and ₹152.13 lakh for Asset-II for the period from COD to 31.3.2014. The additional capital expenditure claimed is towards balance and retention payments.

28. MSEDCL has requested to conduct prudence check of the claimed additional capital expenditure as there is huge variation between the original estimates and the actual expenditure. In response to query regarding balance and retention payments, the petitioner has submitted the details of all such payments done from COD to 31.3.2014.

29. It is observed that the additional capital expenditure claimed is within the cut-off date and is on account of balance/retention payments, hence the same is allowed as mentioned below:-

(₹ in lakh)				
Asset	Approved apportioned cost	Capital Cost as on COD	Additional Capital expenditure during 2013-14	Capital cost as on 31.3.2014
Asset-I	2063.51	472.66	123.92* (117.50+6.42)	596.58
Asset-II	14841.46	11165.16	220.88* (152.13+68.75)	11386.04

\*including the IDC discharged during the year 2013-14

30. The debt-equity ratio of 70:30 is claimed by the petitioner for the additional capital expenditure in accordance with the Regulation 12 (3) of 2009 Tariff Regulations and hence the same has been considered towards financing of the additional capital expenditure.

### **Debt: Equity**

31. 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:

.....

(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.”

32. The debt:equity ratio of 70:30 has been considered as on the date of commercial operation for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations. The details of the debt:equity considered for the purpose of tariff for 2009-14 tariff period is as follows:-

**Asset-I:**

( ₹ in lakh)

Funding	Claimed		Admissible	
	As on COD	%	As on COD	%
Debt	330.86	70.00	330.86	70.00
Equity	141.80	30.00	141.80	30.00
<b>Total</b>	<b>472.66</b>	<b>100.00</b>	<b>472.66</b>	<b>100.00</b>

**Asset-II:**

( ₹ in lakh)

Funding	Claimed		Admissible	
	As on COD	%	As on COD	%
Debt	7913.77	70.00	7815.61	70.00
Equity	3391.61	30.00	3349.55	30.00
<b>Total</b>	<b>11305.38</b>	<b>100.00</b>	<b>11165.16</b>	<b>100.00</b>

32. The normative debt:equity ratio of 70:30 has been considered for the estimated additional capitalization in accordance with the 2009 Tariff Regulations as under:

**Asset-I:**

(₹ in lakh)

Funding	As on COD	%	Additional capital expenditure during 2009-14	%	As on 31.3.2014	(%)
Debt	330.86	70.00	86.74	70.00	417.61	70.00
Equity	141.80	30.00	37.18	30.00	178.97	30.00
<b>Total</b>	<b>472.66</b>	<b>100.00</b>	<b>123.92</b>	<b>100.00</b>	<b>596.58</b>	<b>100.00</b>

**Asset-II:**

(₹ in lakh)

Funding	As on COD	%	Additional capital expenditure during 2009-14	%	As on 31.3.2014	(%)
Debt	7815.61	70.00	154.62	70.00	7970.22	70.00
Equity	3349.55	30.00	66.26	30.00	3415.81	30.00
<b>Total</b>	<b>11165.16</b>	<b>100.00</b>	<b>220.88</b>	<b>100.00</b>	<b>11386.04</b>	<b>100.00</b>

**Return on Equity (“ROE”)**

33. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provide as follows:-

“(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 year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.”

34. Regulation 15 of the 2009 Tariff Regulations provides for grossing up of ROE with the actual tax rate for the purpose of ROE. The petitioner has prayed that it may be allowed to recover the shortfall or refund the excess due to change in MAT rate. The petitioner has submitted the MAT rate applicable during the various years of 2009-14 tariff period.

(₹ in lakh)

Return on Equity	Asset-I	Asset-II
	2013-14	2013-14 (pro-rata)
Opening Equity	141.80	3349.55
Additions	37.18	66.26
Closing Equity	178.97	3415.81
Average Equity	160.39	3382.68
Return on Equity (Base Rate) (%)	15.500	15.500
MAT Rate for respective year (%)	20.961	20.961
Rate of Return on Equity (%)	19.610	19.610
Return on Equity	31.45	165.84

### **Interest on Loan (“IoL”)**

35. Clause (5) and (6) of Regulation 16 of the 2009 Tariff Regulations provides for the methodology for working out weighted average rate of IoL as under:-

“(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.”

36. MSEDCL has requested to conduct prudence check on the average interest rates considered for calculation of interest on long term loans.

37. The weighted average rate of IoL has been considered on the basis of actual loan portfolio and the rate of interest submitted by the petitioner. The IoL has been worked out in accordance with Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest for 2009-14 tariff period are placed at Annexure-1 and the IoL has been worked out and allowed as follows:-

Interest on Loan	(₹ in lakh)	
	Asset-I 2013-14	Asset-II 2013-14 (pro-rata)
Gross Normative Loan	330.86	7815.61
Cumulative Repayment upto Previous Year	0.00	0.00
Net Loan-Opening	330.86	7815.61
Additions	86.74	154.62
Repayment during the year	28.23	149.10
Net Loan-Closing	389.38	7821.12
Average Loan	360.12	7818.37
Weighted Average Rate of Interest on Loan (%)	9.0121	7.1377
Interest on Loan	32.45	139.51

## Depreciation

38. The depreciation has been worked out as per the methodology provided in the Regulation 17 of the 2009 Tariff Regulations which provides as under:-

### **“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.

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.

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 upto 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.”

39. The depreciation allowed for the instant assets as per the above said Regulations is shown below:-

(₹ in lakh)

Depreciation	Asset-I	Asset-II
	2013-14	2013-14 (pro-rata)
Opening Gross Block	472.66	11165.16
Additional Capitalization	123.92	220.88
Closing Gross Block	596.58	11386.04
Average Gross Block	534.62	11275.60
Rate of Depreciation (%)	481.16	10148.04
Elapsed life	25	34
Balance Useful life of the asset	0	0
Remaining Depreciable Value	481.16	10148.04
Depreciation during the year	28.23	149.10

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

40. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. Normative O&M Expenses in respect of the transmission assets covered in the instant petition are as under:-

(₹ in lakh)

O&M Expenses	Asset-I	Asset-II
	2013-14	2013-14 (pro-rata)
<b>400 kV Bays:</b>		
No. of Bays	1	4
Norms (₹ lakh/Bay)	65.46	65.46
<b>Transmission Line:</b>		
D/C (4 or more sub cond.) (km)	-	48
Norms (₹ lakh/km)	-	56.35
<b>Total O&amp;M Expenses (₹ lakh)</b>	<b>65.46</b>	<b>79.55</b>

41. The petitioner has submitted that O&M Expenses for the period 2009-14 was arrived at on the basis of normalized actual O&M Expenses during the period 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O&M Expenses for the tariff period 2009-14. The petitioner has further

submitted that it would approach the Commission for additional manpower cost on account of wage revision (if any) during the tariff block 2009-14 for claiming in the tariff. The Rajasthan Discoms have submitted that the petitioner has claimed O&M charges higher than those specified in the 2009 Tariff Regulations.

42. While specifying the norms for the O & M Expenses for the 2009 Tariff Regulations, we have given effect to impact of pay revision by factoring 50% on account of pay revision of the employees of PSUs after extensive consultations with the stakeholders, as one time compensation for employee cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. In this order, we have allowed O&M Expenses as per the existing norms.

**Interest on Working Capital (“IWC”)**

43. The IWC has been worked out as per the methodology provided in the Regulation 18 of the 2009 Tariff Regulations. The IWC allowed is as under:-

(₹ in lakh)

Interest on Working Capital	Asset-I	Asset-II
	2013-14	2013-14 (pro-rata)
O & M expenses	5.45	26.51
Maintenance Spares	9.82	47.73
Receivables	27.20	365.68
Total	42.47	439.91
Rate of Interest (%)	13.20	13.20
Interest on Working Capital	5.61	14.52

## APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

44. Based on the foregoing, the annual fixed charges for the transmission assets for the 2009-14 tariff period is summarised below:-

Particulars	(₹ in lakh)	
	Asset-I 2013-14	Asset-II 2013-14 (pro-rata)
<b>Depreciation</b>		
Opening Gross Block	472.66	11165.16
Additional Capitalisation	123.92	220.88
Closing Gross Block	596.58	11386.04
Average Gross Block	534.62	11275.60
Rate of Depreciation	5.28	5.29
Depreciable Value	481.16	10148.04
Balance Useful life of the asset	25	34
Elapsed Life	0	0
Remaining Depreciable Value	481.16	10148.04
Depreciation during the year	28.23	149.10
Cumulative depreciation (incl. of AAD)	28.23	149.10
<b>Interest on Loan</b>		
Gross Normative Loan	330.86	7815.61
Cumulative Repayment upto Previous Year	0.00	0.00
Net Loan-Opening	330.86	7815.61
Additions	86.74	154.62
Repayment during the year	28.23	149.10
Net Loan-Closing	389.38	7821.12
Average Loan	360.12	7818.37
Weighted Average Rate of Interest on Loan (%)	9.0121	7.1377
Interest on Loan	32.45	139.51
<b>Return on Equity</b>		
Opening Equity	141.80	3349.55
Additions	37.18	66.26
Closing Equity	178.97	3415.81
Average Equity	160.39	3382.68
Return on Equity (Base Rate )	15.500	15.500
MAT rate for the respective year	20.961	20.961
Rate of Return on Equity	19.610	19.610
Return on Equity	31.45	165.84
<b>Interest on Working Capital</b>		
O & M expenses	5.45	26.51
Maintenance Spares	9.82	47.73
Receivables	27.20	365.68
Total	42.47	439.91
Rate of Interest	13.20	13.20

Particulars	Asset-I	Asset-II
	2013-14	2013-14 (pro-rata)
Interest on Working Capital	5.61	14.52
<b>Annual Transmission Charges</b>		
Depreciation	28.23	149.10
Interest on Loan	32.45	139.51
Return on Equity	31.45	165.84
Interest on Working Capital	5.61	14.52
O & M Expenses	65.46	79.55
Total	163.20	548.52

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

48. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. MSEDCL has raised concern about the reimbursement of such expenses. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition directly from the beneficiaries on pro-rata basis in accordance with Regulation 42 of the 2009 Tariff Regulations.

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

49. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Tariff Regulations for 2009-14 tariff period. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with Regulations 42A (1) (a) of the 2009 Tariff Regulations for 2009-14 tariff period.

### **Service Tax**

50. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. MSEDCL has raised concern about the petitioner's prayer for reimbursement of service tax in future. We are of the view that the petitioner's prayer is premature.

### **Sharing of Transmission Charges**

51. 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.

52. This order disposes of Petition No. 113/TT/2013.

Sd/-

**(Dr. M.K. Iyer)**  
**Member**

Sd/-

**(A.S. Bakshi)**  
**Member**



**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST****Asset-I:**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XL-DOCO-	9.30	152.25	0.00	152.25
BOND - XLI-DOCO-	8.85	65.00	0.00	65.00
BOND - XLII-ADDCAP FOR 2013-2014 ADD CAP.-	8.80	0.00	4.49	4.49
BOND - XLII-ADDCAP FOR 2013-2014 ADD. CAP.-	8.80	0.00	82.25	82.25
BOND - XLII-DOCO-	8.80	113.61	0.00	113.61
<b>Total</b>		<b>330.86</b>	<b>86.74</b>	<b>417.60</b>

**WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2009-14 TARIFF PERIOD**

(₹ in lakh)

Particulars	2013-14
Gross Opening Loan	330.86
Cumulative Repayments of Loans upto Previous Year	0.00
<b>Net Loans Opening</b>	<b>330.86</b>
Add: Draw(s) during the Year	86.74
Less: Repayments of Loan during the year	0.00
<b>Net Closing Loan</b>	<b>417.60</b>
Average Net Loan	374.23
Rate of Interest on Loan (%)	9.0121%
<b>Interest on Loan</b>	<b>33.73</b>

**Asset-II:**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXII-DOCO.-	8.84	24.00	0.00	24.00
BOND-XXXIV-DOCO.-	8.84	800.00	0.00	800.00
BOND XXXVI-DOCO.-	9.35	160.00	0.00	160.00
BOND XXXVII-DOCO.-	9.25	3117.82	0.00	3117.82
BOND XXXVIII-DOCO.-	9.25	80.00	0.00	80.00
BOND XXXIX-DOCO.-	9.40	167.00	0.00	167.00
SBI (21.03.2012)-DOCO.-	10.25	400.00	0.00	400.00
BOND XL-DOCO.-	9.30	100.00	0.00	100.00
BOND - XLI-DOCO.-	8.85	80.00	0.00	80.00
BOND - XLII-ADDCAP FOR 2013-2014 Add. Cap-	8.80	0.00	106.49	106.49
BOND - XLII-ADDCAP FOR 2013-2014 Add. Cap.-	8.80	0.00	48.12	48.12
BOND - XLII-DOCO.-	8.80	24.90	0.00	24.90
IFC (IFC -A LOAN) (31419-00)-DOCO.-62.41	3.28	250.01	0.00	250.01
IFC (IFC - B LOAN) (31419-01)-DOCO.-62.41	2.43	680.02	0.00	680.02
IFC (ICFF LOAN) (31419-02)-DOCO.-62.41	3.28	380.01	0.00	380.01
FC - BOND (17.01.2013)-DOCO.-62.41	4.10	1650.00	0.00	1650.00
<b>Total</b>		<b>7913.76</b>	<b>154.61</b>	<b>8068.37</b>

**WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2009-14 TARIFF PERIOD**

(₹ in lakh)

<b>Particulars</b>	<b>2013-14</b>
Gross Opening Loan	7913.76
Cumulative Repayments of Loans upto Previous Year	0.00
<b>Net Loans Opening</b>	<b>7913.76</b>
Add: Draw(s) during the Year	154.61
Less: Repayments of Loan during the year	2.00
<b>Net Closing Loan</b>	<b>8066.37</b>
Average Net Loan	7990.07
Rate of Interest on Loan (%)	7.1377%
<b>Interest on Loan</b>	<b>570.31</b>

