

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 139/TT/2015

Coram:

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

**Date of Hearing : 14.03.2016
Date of Order :23.03.2016**

In the matter of:

Determination of transmission tariff for Bay Extension at 765/400kV Vadodara (POWERGRID) GIS under System Strengthening in North/West Part of Western Region for IPP Projects in Chhattisgarh (IPP-E) in Western Region for the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

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

.....**Petitioner**

Versus

1. Madhya Pradesh Power Management Company Limited
Shakti Bhawan, Rampur
Jabalpur –482 008
2. Maharashtra State Electricity Distribution Co. Limited
4th Floor, Prakashgad, Plot no. 9,
Andheri (East),
Mumbai – 400 052
3. Gujarat UrjaVikas Nigam Limited
Sardar Patel VidyutBhawan,
Race Course Road, Vadodara – 390 007
4. Electricity Department
Govt. of Goa



VidyutBhawan, 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
Chhattisgarh – 492 013
8. Madhya Pradesh Audyogik Kendra
VikasNigam(Indore) Ltd.
3/54, Press Complex, Agra-Bombay Road,
Indore – 452 008

.....**Respondents**

The following were present:-

For Petitioner: Shri S.S. Raju, PGCIL
 ShriRakesh Prasad, PGCIL
 ShriJasbir Singh, PGCIL
 ShriAryamanSaxena, PGCIL
 Shri M.M. Mondal, PGCIL

For Respondent: None.

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. ("the petitioner") for determination of tariff for Bay Extension at 765/400kV Vadodara (POWERGRID) GIS under System Strengthening in North/West Part of Western Region for IPP Projects in Chhattisgarh (IPP-E) in Western Region under Central Electricity Regulatory Commission (Terms and Conditions



of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from COD(Asset-I(A): 8.6.2015, Asset-I(B): 29.6.2015) to 31.3.2019.

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

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

(a) The investment approval for the project was accorded by Board of Directors of the petitioner company vide C/CP/Chhattisgarh IPP dated 27.12.2011 at an estimated cost of ₹174665 lakh, which included IDC of ₹11143 lakh. Further, RCE for the project was accorded by Board of Directors of the petitioner company dated 9.3.2016 at an estimated cost of ₹222871 lakh including IDC of ₹17264 lakh. The revised approved apportioned cost for the Asset-I(A) and Asset-I(B) is ₹2766.54 lakh and ₹2766.54 lakh respectively.

(b) The scope of the instant project is as under:-

Transmission Lines:

- (i) Aurangabad (POWERGRID)- Padghe (POWERGRID) 765kV D/C
- (ii) Padghe (POWERGRID)-Padghe/Kudus(MSETCL) 400 kV D/C (Quad) Line
- (iii) Vadodara-Asoj 400kV D/c (Quad) Line

Sub-stations:

- (i) Establishment of 765/400 kV, 2*1500 MVA Padghe GIS Sub-station.



- (ii) Bay Extensions at 765/400kV
Aurangabad(POWERGRID),Vadodara(POWERGRID) and
Asoj(GETCO) substation
- (iii) Extension of 400kV Padghe/Kudus(MSETCL) Sub-station

Reactive Compensation

(i) 765/400 kV Padghe sub-station

- 765 kV, 3x80 MVAR line reactors- 2 nos
- 765 kV, 3x80 MVAR bus reactor- 1 no

(ii) 765/400 kV Aurangabad sub-station(Extension)

- 765 kV, 3x80 MVAR line reactors- 2 Nos

- (c) The petitioner vide affidavit dated 18.3.2016 has submitted that the asset has been split into two parts as follows:-

Asset as filed in the Petition	COD as per Petition
Bay Extensions at 765/400 kV Vadodara(POWERGRID) GIS for 400 kV D/C Vadodara-Asoj transmission line	1.7.2015 (Anticipated)

Asset as commissioned	Actual COD
Asset-I(A) - 400 kV Bay at Vadodara GIS for 400 kV D/C Vadodara GIS for Vadodara-Asoj ckt#1	8.6.2015
Asset-I(B) - 400 kV Bay at Vadodara GIS for 400 kV D/C Vadodara GIS for Vadodara-Asoj ckt#2	29.6.2015

- (d) The petitioner has submitted WRLDC certificate in support of the claim of commercial operation. The petitioner has also submitted the SLD of the transmission asset.

- (e) The petitioner has claimed the transmission charges as under:-



(₹ in lakh)

Asset-I(A)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Depreciation	47.82	83.13	91.70	93.23
Interest on Loan	54.77	90.43	92.76	86.28
Return on Equity	53.06	92.47	102.06	103.77
Interest on Working Capital	5.97	9.16	9.74	9.76
O&M Expenses	43.34	55.02	56.84	58.73
Total	204.96	330.21	353.10	351.77

(₹ in lakh)

Asset-I(B)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Depreciation	44.52	83.13	91.70	93.23
Interest on Loan	50.91	90.38	92.70	86.29
Return on Equity	49.41	92.47	102.06	103.77
Interest on Working Capital	5.55	9.16	9.73	9.76
O&M Expenses	40.23	55.02	56.84	58.73
Total	190.62	330.16	353.03	351.78

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

(₹ in lakh)

Asset-I(A)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Maintenance Spares	7.99	8.25	8.53	8.81
O & M Expenses	4.44	4.59	4.74	4.89
Receivables	41.97	55.04	58.85	58.63
Total	54.40	67.88	72.12	72.33
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest	7.34	9.16	9.74	9.76
Pro-rata Interest on working capital	5.97	9.16	9.74	9.76

(₹ in lakh)

Asset-I(B)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Maintenance Spares	7.99	8.25	8.53	8.81
O & M Expenses	4.44	4.59	4.74	4.89
Receivables	42.05	55.03	58.84	58.63
Total	54.48	67.87	72.11	72.33



Asset-I(B)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest	7.35	9.16	9.73	9.76
Pro-rata Interest on working capital	5.55	9.16	9.73	9.76

4. The AFC for the instant asset was allowed under Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the POC charges vide order dated 7.7.2015. The petitioner was directed to file certain information in the said order. In response the petitioner has submitted additional information vide affidavit dated 18.3.2016.

5. The petitioner has served the petition to the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 ("the Act"). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 14.3.2016. None of the respondents have filed their reply. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

Date of Commercial Operation (COD)

6. The petitioner has claimed the date of the commercial operation of Asset-I(A) as 8.6.2015 and Asset-I(B) as 29.6.2015. Regulation 4(3) of the 2014 Tariff Regulations provides as follows:-



“4. Date of Commercial Operation: The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

xxx

(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end:

xxx

xxx”

7. The petitioner has submitted WRLDC Certificate indicating completion of successful trial operation. Accordingly, the commercial operation date of Asset-I(A) has been considered as 8.6.2015 and that of Asset-I(B) as 29.6.2015 and the tariff is worked out from COD of the assets to 31.3.2019.

Capital Cost

8. The petitioner has claimed the capital cost vide Auditor Certificate dated 25.11.2015 as follows:-

(₹ in lakh)		
Name of Asset	Capital cost claimed as on COD (Auditor's Certificate)	Capital Cost claimed for tariff after adjustment of IDC/IEDC
Asset-I(A)	790.19	775.07
Asset-I(B)	790.19	781.66
Total	1580.38	1556.73

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

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



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

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

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

10. The capital cost has been considered for the purpose of tariff after prudence check as discussed in subsequent paragraphs.

Time over-run

11. As per the investment approval dated 27.12.2011, the scheme was scheduled to be commissioned within 32 months from the date of investment approval. Accordingly, the schedule completion date works out to 1.9.2014. The



petitioner has submitted, vide affidavit dated 18.3.2016, that the asset was split into two parts and Asset-I(A) and Asset-I(B) were commissioned on 8.6.2015 and 29.6.2015 respectively. The petitioner has submitted that there is a time over-run of 9 months and 8 days in case of Asset-I(A) and 9 months and 29 days for Asset-I(B).

12. The petitioner has submitted, vide affidavit dated 18.3.2016, the following reasons for delay:-

- a) **Delay in acquisition of land-** The petitioner has submitted that, requisition to collector was made in June 2009. In July and September 2011, objection was given by the petitioners. Section 6 notification was issued in December, 2011. In January, 2012, Notice under Section 9(3) (4) of LAQ was issued. Due to delay in normal land acquisition, the petitioner wrote communication to the LAQ to arrange meeting for consent award under section 11(2) of the Act. In September 2012, consent agreements and undertaking were submitted to the office of LAQ. In April, 2013, Court Case was filed in Hon'ble Gujarat High Court by the affected farmers (SCA No.: 2674 of 2013). Hon'ble Gujarat High Court issued order in favour of the farmers. Land possession was obtained only in August, 2013. Due to the initial delay of several months, the schedule of construction activities had to be shifted accordingly.
- b) **Delay due to rains and floods in Vadodara-** The petitioner submitted that, Rain and flooding in Vadodara in September 2014 hampered construction activities. Delay in land acquisition has resulted in consequent delay of supply of material, civil works and erection.

13. Regulation 12 of the 2014 Tariff Regulations, provides as follows:-



12. Controllable and Uncontrollable factors: The following shall be considered as controllable and uncontrollable factors leading to cost escalation impacting Contract Prices, IDC and IEDC of the project :

- (1) The “controllable factors” shall include but shall not be limited to the following:
 - (a) Variations in capital expenditure on account of time and/or cost over-runs on account of land acquisition issues;
 - (b) Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or force majeure events; and
 - (c) Delay in execution of the project on account of contractor, supplier or agency of the generating company or transmission licensee.
- (2) The “uncontrollable factors” shall include but shall not be limited to the following:
 - (i) Force Majeure events; and
 - (ii) Change in law.

Provided that no additional impact of time overrun or cost over-run shall be allowed on account of non-commissioning of the generating station or associated transmission system by SCOD, as the same should be recovered through Implementation Agreement between the generating company and the transmission licensee:

Provided further that if the generating station is not commissioned on the SCOD of the associated transmission system, the generating company shall bear the IDC [and IEDC] 6 or transmission charges if the transmission system is declared under commercial operation by the Commission in accordance with second proviso of Clause 3 of Regulation 4 of these regulations till the generating station is commissioned:

Provided also that if the transmission system is not commissioned on SCOD of the generating station, the transmission licensee shall arrange the evacuation from the generating station at its own arrangement and cost till the associated transmission system is commissioned."

14. We have considered the submissions of the petitioner. As per Regulation 12 of the 2014 Tariff Regulations land acquisition issue is a controllable factor. However, the land acquisition has to be dealt on a case to case basis. In the



instant case, the time over-run in case of the assets is mainly due to land acquisition issues. The petitioner has approached the Collector & DM on 22.6.2009 for suitable government land for pooling station. The petitioner was issued the land possession letter on 13.8.2013. It took almost 50 months for the petitioner to get possession of the required land. We are of the view that the delay in getting possession of the land was beyond the control of the petitioner and it cannot be attributed to the petitioner.

15. The Hon'ble Appellate Tribunal for Electricity in its judgment dated 27.4.2011 in Appeal No.72/2010 while dealing with the issue of time over-run in commissioning of the assets has laid down the principles 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 could be shared between the project developer and the beneficiaries.



16. As observed early, we are of the view that the time over-run of 9 months and 8 days in commissioning of Asset-I(A) and 9 months and 29 days in case of Asset-I(B) was mainly on account of land acquisition and it is beyond the control of the petitioner. As per the judgement of Hon'ble Tribunal, the additional cost due to time over-run not attributable shall be capitalized. Accordingly, the time over-run in case of the instant assets is condoned and IDC and IEDC for the period of time over-run is capitalised.

Cost over-run

17. The petitioner was directed vide provisional order dated 7.7.2015 to submit the reason for cost variation in the following heads:

SI No	Investment Approval			Actual		
	Item	Quantity (nos.)	Amount (₹ in lakh)	Quantity (nos.)	Actual amount (₹ in lakh)	% age (cost)
1	Switchgear	32	259.69	15	2486.33	957.42
2	Control, Relay & Protection Panel	8	63.01	6	104.90	166.50
3	Outdoor Lightning	1	8.00	1	42.50	531.25
4	Auxiliary System	1	30.00	1	391.86	1306.20

18. The petitioner vide affidavit dated 18.3.2016, submitted that, as per Form-5 of the petition, revised rate and hence estimated cost as per RCE for the item mentioned above is already specified and the same is over and above the estimated completion cost.



Sl No.	As per RCE			Actual		
	Item	Quantity (nos.)	Amount (₹ in lakh)	Quantity (nos.)	Amount (₹ in lakh)	% age variation
1	Switchgear (CT, PT, Circuit Breaker, Isolator etc.)	15	2864.47	15	2486.33	-13.2
2	Control, Relay and Protection Panel	6	120.86	6	104.90	-13.2
3	Outdoor Lighting	1	48.96	1	42.5	-13.2
4	Auxiliary System	1	451.46	1	391.86	-13.2

19. We have considered the submissions of the petitioner. As per RCE dated 9.3.2015 there is no cost over-run for the said assets.

IDC and IEDC

20. The petitioner was directed vide provisional order dated 7.7.2015 to submit the computation of IDC from date of infusion of debt fund upto SCOD as per Regulation 11(A) of the 2014 Tariff Regulations and from SCOD to actual COD of the asset. Further, the petitioner was directed to submit the details of IEDC during the period of delay in commissioning of the Asset (i.e. SCOD to actual COD). The details submitted by the petitioner is as follows:-

(₹ in lakh)				
Asset	Components	Infusion of Debt Fund to SCOD	SCOD to Actual COD	Total
Asset-I(A)	IDC	10.94	44.15	55.09
	IEDC	0.32	18.41	18.73
Asset-I(B)	IDC	10.94	44.15	55.09
	IEDC	0.32	18.41	18.73



21. The petitioner further submitted the statement showing the IDC discharged upto COD and accrued IDC as follows:-

(₹ in lakh)		
Details	Asset-I(A)	Asset-I(B)
IDC discharged upto COD	39.97	46.56
Accrual IDC upto COD to be discharged in 2015-16	15.12	8.53
Total	55.09	55.09

22. We have considered the revised apportioned approved cost as per RCE for the computation of tariff. As observed in para 16 above, the time over-run in case of the instant assets is condoned. According IDC and IEDC has been worked out considering IDC and IEDC discharged as under:-

(₹ in lakh)		
Details	Asset-I(A)	Asset-I(B)
IDC discharged upto COD	39.97	46.56
IEDC discharged upto COD	15.12	8.53
Total	55.09	55.09

Treatment of Initial spares:

23. Regulation 13(d) of the 2014 Tariff Regulations provides that initial spares shall be capitalised as a percentage of plant and machinery cost upto cut-off date, subject to following ceiling norms:-

- “(d) Transmission system
 - (i) Transmission line - 1.00%
 - (ii) Transmission Sub-station (Green Field) - 4.00%
 - (iii) Transmission Sub-station (Brown Field) - 6.00%
 - (iv) Series Compensation devices and HVDC Station - 4.00%
 - (v) Gas Insulated Sub-station (GIS) - 5.00%
 - (vi) Communication system - 3.5%”



24. The petitioner has claimed initial spares of ₹101.00 lakh and ₹101.00 lakh for sub-station for Asset-I(A) and Asset-I(B) respectively. The petitioner was directed to submit whether entire amount pertaining to initial spares is included in the cost of respective element upto COD, if not, submit year wise details of payment pertaining to initial spares. The petitioner vide affidavit dated 18.3.2016 submitted that, liability pertaining to initial spares discharged is as given below:

(₹ in lakh)	
Asset-I(A) & Asset-I(B)	Sub-station
Initial Spares up to COD	67.77
Estimated 2015-16 (to be discharged)	33.23
Total	101.00

25. The calculation for the treatment of initial spares for sub-station has been shown in the table given below:-

(₹ in lakh)					
Description Sub-station (including PLCC)	Capital cost as on cut-off date	Initial spares claimed	Ceiling limits as per Regulation 8 of the 2009 Tariff Regulation	Initial spares worked out and allowed	Excess initial spares claimed
	(a)	(b)	(c)	$(d) = ((a - b) * c) / (100 - c)\%$	$(e) = (d) - (b)$
Asset-I(A)	1755.40	101.00	4.00%	68.93	32.07
Asset-I(B)	1755.40	101.00	4.00%	68.93	32.07

26. The petitioner has claimed capital cost of Asset-I(A) is ₹775.07 lakh(after adjustment of IDC on cash basis)and Asset-I(B) is ₹781.66 lakh (after adjustment of IDC on cash basis) as on COD in the petition. We have considered the capital



cost of Asset-I(A) as ₹743.00lakh and Asset-I(B) is ₹749.59 lakh as on COD of the assets (after adjustment of IDC, IEDC as discharged and initial spares) for determination of tariff for the 2014-19 tariff period.

(₹ in lakh)		
Particulars	Asset-I(A)	Asset-I(B)
Claimed as per Auditor's Certificate	790.19	790.19
Accrued IDC Deducted	15.12	8.53
Capital Cost excluding accrued IDC	775.07	781.66
Initial Spares deducted	32.07	32.07
Capital Cost Approved	743.00	749.59

Additional Capital Expenditure

27. The petitioner has proposed additional capitalization of Asset-I(A) as ₹655.56 lakh (after adjustment of IDC on cash basis), ₹267.03 lakh and ₹57.74 lakh for the years 2015-16, 2016-17 and 2017-18 respectively. For Asset-I(B) the additional capitalization proposed is ₹648.97 lakh(after adjustment of IDC on cash basis), ₹267.03 lakh and ₹57.74 lakh. The additional capitalization claimed is towards balance and retention payment under Regulation 14(1)(i) of 2014 Tariff Regulations.

28. We have considered the submissions of the petitioner. The total estimated completion cost including additional capitalization for the 2014-19 tariff period is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations. The details are as follows:-



(₹ in lakh)

Name of Asset	Approved apportioned Cost	Capital cost as on COD	Additional capitalization projected				Total additional capitalization	Total capital cost including additional capitalization as on 31.3.2019
			2015-16	2016-17	2017-18	2018-19		
Asset-I(A)	2766.54	743.00	655.56	267.03	57.74	0.00	980.33	1723.33
Asset-I(B)	2766.54	749.59	648.97	267.03	57.74	0.00	973.74	1723.33
Total	5533.08	1492.60	1304.53	534.06	115.48	0.00	1954.07	3446.67

Debt:EquityRatio

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

“19. Debt-Equity Ratio: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff;
- the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;
- any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.”

30. The petitioner has considered debt: equity ratio as 70:30 as on COD. We have considered debt: equity ratio of 70:30 as on COD and for additional capitalization during the 2015-17tariff period. The details of the debt: equity as on the date of COD of the assets and 31.3.2019 considered for the purpose of tariff computation for the 2014-19 tariff period is as follows:-

(₹ in lakh)

Asset-I(A)	As on COD		Additional capitalization during 2014-19		As on 31.3.2019	
	Amount	(%)	Amount	(%)	Amount	(%)
Debt	520.10	70.00	686.23	70.00	1206.33	70.00
Equity	222.90	30.00	294.10	30.00	517.00	30.00
Total	743.00	100.00	980.33	100.00	1723.33	100.00



(₹ in lakh)

Asset-I(B)	As on COD		Additional capitalization during 2014-19		As on 31.3.2019	
	Amount	(%)	Amount	(%)	Amount	(%)
Debt	524.72	70.00	681.62	70.00	1206.33	70.00
Equity	224.88	30.00	292.12	30.00	517.00	30.00
Total	749.59	100.00	973.74	100.00	1723.33	100.00

Interest on Loan ("IOL")

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

“(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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

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

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

32. We have considered the weighted average rate of IOL on the basis of rate prevailing as on 1.4.2014. Further, the petitioner has prayed to allow it to bill and adjust impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2014-19 period, if any from the respondents. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The petitioner's prayer to bill and adjust the impact on interest on loan due to change in interest rate on account of floating rate of



interest applicable during the 2014-19 tariff period from the respondents will be considered at the time of truing up. The details of weighted average rate of interest are placed at **Annexure-I** and the IOL has been worked out as follows:-

(₹ in lakh)

Asset-I(A)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Gross loan opening	520.10	978.99	1165.92	1206.33
Cumulative Repayment upto previous year	0.00	46.46	127.90	217.91
Net Loan-Opening	520.10	932.53	1038.02	988.43
Additions during the year	458.89	186.92	40.42	0.00
Repayment during the year	46.46	81.44	90.01	91.53
Net Loan-Closing	932.53	1038.02	988.43	896.89
Average Loan	726.32	985.28	1013.22	942.66
Rate of Interest (%)	8.9946	8.9930	8.9899	8.9914
Interest	53.19	88.61	91.09	84.76

(₹ in lakh)

Asset-I(B)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Gross loan opening	524.72	978.99	1165.92	1206.33
Cumulative Repayment upto previous year	0.00	43.59	125.37	215.73
Net Loan-Opening	524.72	935.41	1040.54	990.60
Additions during the year	454.28	186.92	40.42	0.00
Repayment during the year	43.59	81.79	90.36	91.89
Net Loan-Closing	935.41	1040.54	990.60	898.71
Average Loan	730.06	987.97	1015.57	944.66
Rate of Interest (%)	8.9608	8.9593	8.9565	8.9622
Interest	49.51	88.52	90.96	84.66

Return on Equity("ROE")

33. Clause (1)& (2) of Regulation 24 and Clause (2) of Regulation 25(2) of the 2014 Tariff Regulations specify as under:-



“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

xxx

xxx”

“25. Tax on Return on Equity:

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

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

Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

34. The petitioner has claimed ROE at the rate of 20.961% after grossing up the ROE of 15.50% with MAT rate as per the above said Regulation. The petitioner has further submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.



35. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.

36. It is observed that the petitioner affidavit dated 7.7.2015 has considered MAT rate for 2015-16 onwards as 21.34%. The grossed up of ROE as prescribed in Regulation 25 of the 2014 Tariff Regulations worked out as 19.705%.

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

(₹ in lakh)				
Asset-I(A)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Opening Equity	222.90	419.57	499.68	517.00
Additional Capitalization	196.67	80.11	17.32	0.00
Closing Equity	419.57	499.68	517.00	517.00
Average Equity	321.24	459.62	508.34	517.00



Asset-I(A)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50
Tax rate for the year (%)	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax)(%)	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	51.29	90.13	99.69	101.38

(₹ in lakh)

Asset-I(B)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Opening Equity	224.88	419.57	499.68	517.00
Additional Capitalization	194.69	80.11	17.32	0.00
Closing Equity	419.57	499.68	517.00	517.00
Average Equity	322.22	459.62	508.34	517.00
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50
Tax rate for the year (%)	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax)(%)	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	47.82	90.13	99.69	101.38

Depreciation

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

"27. Depreciation:

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis"

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

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



(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.”

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

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

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

40. The petitioner has claimed depreciation considering capital expenditure of ₹775.07lakh and ₹781.66 lakh (after adjustment of IDC/IEDC) as on COD for Asset-I(A) and Asset-I(B) respectively with additional capitalization of ₹980.33 lakh and ₹973.74 lakh for Asset-I(A) and Asset-I(B) respectively for the 2014-19 tariff period.

41. We have computed depreciation considering weighted average useful life of the asset as 25 years in accordance with the above regulation. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)

Asset-I(A)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Opening Gross block	743.00	1398.56	1665.59	1723.33
Additional Capitalization	655.56	267.03	57.74	0.00
Closing Gross block	1398.56	1665.59	1723.33	1723.33
Average Gross block	1070.78	1532.08	1694.46	1723.33



Asset-I(A)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Rate of Depreciation (%)	5.329	5.315	5.312	5.311
Depreciable Value	963.71	1378.87	1525.02	1551.00
Elapsed Life of the assets at beginning of the year	0	1	2	3
Weighted Balance Useful life of the assets	25	24	23	22
Remaining Depreciable Value	963.71	1332.41	1397.12	1333.09
Depreciation	46.46	81.44	90.01	91.53

(₹ in lakh)

Asset-I(B)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Opening Gross block	749.59	1398.56	1665.59	1723.33
Additional Capitalization	648.97	267.03	57.74	0.00
Closing Gross block	1398.56	1665.59	1723.33	1723.33
Average Gross block	1074.08	1532.08	1694.46	1723.33
Rate of Depreciation (%)	5.362	5.338	5.333	5.332
Depreciable Value	966.67	1378.87	1525.02	1551.00
Elapsed Life of the assets at beginning of the year	0	1	2	3
Weighted Balance Useful life of the assets	25	24	23	22
Remaining Depreciable Value	966.67	1335.28	1399.64	1335.27
Depreciation	43.59	81.79	90.36	91.89

Operation & Maintenance Expenses ("O&M Expenses")

42. Regulation 29(4)(a) of the 2014 Tariff Regulations specifies the following norms for O&M Expenses:-

Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
(Norms) 400 kV GIS sub-station (₹ lakh/bay)	53.25	55.02	56.84	58.73
No of bays	1	1	1	1
Asset-I(A) (₹ lakh/bay)	43.36	55.02	56.84	58.73
Asset-I(B) (₹ lakh/bay)	40.30	55.02	56.84	58.73



43. The petitioner has claimed O&M Expenses as specified in sub-clause (a) of clause (4) of Regulation 29 of the 2014 Tariff Regulations.

44. The details of O&M Expenses allowed are given hereunder:-

(₹ in lakh)				
O&M Expenses	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Asset-I(A)	43.36	55.02	56.84	58.73
Asset-I(B)	40.30	55.02	56.84	58.73

45. The petitioner has submitted that norms for O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner is due during the 2014-19 tariff period and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

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



Interest on Working Capital ("IWC")

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

(i) Receivables

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

(ii) Maintenance Spares

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

(iii) O & M Expenses

Regulation 28 (1) (c) (iii) of the 2014 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O & M Expenses for the



instant asset and value of O & M Expenses has accordingly been worked out by considering 1 month O&M Expenses.

(iv) Rate of interest on working capital

Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later. Further, the Bank Rate' means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points).

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

(₹ in lakh)				
Asset-I(A)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Maintenance Spares	6.50	8.25	8.53	8.81
O & M expenses	3.61	4.59	4.74	4.89
Receivables	33.36	54.04	57.87	57.67
Total	43.48	66.88	71.13	71.38
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest	5.87	9.03	9.60	9.64

(₹ in lakh)				
Asset-I(B)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Maintenance Spares	6.05	8.25	8.53	8.81
O & M expenses	3.36	4.59	4.74	4.89



Asset-I(B)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Receivables	31.12	54.08	57.91	57.72
Total	40.52	66.92	71.17	71.42
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest	5.47	9.03	9.61	9.64

Annual Transmission Charges

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

(₹ in lakh)				
Asset-I(A)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Gross Block				
Opening Gross Block	743.00	1398.56	1665.59	1723.33
Additional Capitalization	655.56	267.03	57.74	0.00
Closing Gross Block	1398.56	1665.59	1723.33	1723.33
Average Gross Block	1070.78	1532.08	1694.46	1723.33
Rate of Depreciation	5.329	5.315	5.312	5.311
Depreciable Value	963.71	1378.87	1525.02	1551.00
Elapsed Life of the assets at beginning of the year	0	1	2	3
Weighted Balance Useful life of the assets	25	24	23	22
Remaining Depreciable Value	963.71	1332.41	1397.12	1333.09
Depreciation	46.46	81.44	90.01	91.53
Interest on Loan				
Gross Normative Loan	520.10	978.99	1165.92	1206.33
Cumulative Repayment upto Previous Year	0.00	46.46	127.90	217.91
Net Loan-Opening	520.10	932.53	1038.02	988.43
Additions	458.89	186.92	40.42	0.00
Repayment during the year	46.46	81.44	90.01	91.53



Asset-I(A)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Net Loan-Closing	932.53	1038.02	988.43	896.89
Average Loan	726.32	985.28	1013.22	942.66
Weighted Average Rate of Interest on Loan (%)	8.9946	8.9930	8.9899	8.9914
Interest	53.19	88.61	91.09	84.76
Return on Equity				
Opening Equity	222.90	419.57	499.68	517.00
Additions	196.67	80.11	17.32	0.00
Closing Equity	419.57	499.68	517.00	517.00
Average Equity	321.24	459.62	508.34	517.00
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	51.29	90.13	99.69	101.38
Interest on Working Capital				
Maintenance Spares	6.50	8.25	8.53	8.81
O & M expenses	3.61	4.59	4.74	4.89
Receivables	33.36	54.04	57.87	57.67
Total	43.48	66.88	71.13	71.38
Interest	5.87	9.03	9.60	9.64
Annual Transmission Charges				
Depreciation	46.46	81.44	90.01	91.53
Interest on Loan	53.19	88.61	91.09	84.76
Return on Equity	51.29	90.13	99.69	101.38
Interest on Working Capital	5.87	9.03	9.60	9.64
O & M Expenses	43.36	55.02	56.84	58.73
Total	200.17	324.22	347.23	346.04



(₹ in lakh)

Asset-I(B)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Gross Block				
Opening Gross Block	749.59	1398.56	1665.59	1723.33
Additional Capitalisation	648.97	267.03	57.74	0.00
Closing Gross Block	1398.56	1665.59	1723.33	1723.33
Average Gross Block	1074.08	1532.08	1694.46	1723.33
Rate of Depreciation	5.362	5.338	5.333	5.332
Depreciable Value	966.67	1378.87	1525.02	1551.00
Elapsed Life of the assets at beginning of the year	0	1	2	3
Weighted Balance Useful life of the assets	25	24	23	22
Remaining Depreciable Value	966.67	1335.28	1399.64	1335.27
Depreciation	43.59	81.79	90.36	91.89
Interest on Loan				
Gross Normative Loan	524.72	978.99	1165.92	1206.33
Cumulative Repayment upto Previous Year	0.00	43.59	125.37	215.73
Net Loan-Opening	524.72	935.41	1040.54	990.60
Additions	454.28	186.92	40.42	0.00
Repayment during the year	43.59	81.79	90.36	91.89
Net Loan-Closing	935.41	1040.54	990.60	898.71
Average Loan	730.06	987.97	1015.57	944.66
Weighted Average Rate of Interest on Loan (%)	8.9608	8.9593	8.9565	8.9622
Interest	49.51	88.52	90.96	84.66
Return on Equity				
Opening Equity	224.88	419.57	499.68	517.00
Additions	194.69	80.11	17.32	0.00
Closing Equity	419.57	499.68	517.00	517.00
Average Equity	322.22	459.62	508.34	517.00
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50



Asset-I(B)	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	47.82	90.13	99.69	101.38
Interest on Working Capital				
Maintenance Spares	6.05	8.25	8.53	8.81
O & M expenses	3.36	4.59	4.74	4.89
Receivables	31.12	54.08	57.91	57.72
Total	40.52	66.92	71.17	71.42
Interest	5.47	9.03	9.61	9.64
Annual Transmission Charges				
Depreciation	43.59	81.79	90.36	91.89
Interest on Loan	49.51	88.52	90.96	84.66
Return on Equity	47.82	90.13	99.69	101.38
Interest on Working Capital	5.47	9.03	9.61	9.64
O & M Expenses	40.30	55.02	56.84	58.73
Total	186.69	324.49	347.45	346.30

Filing Fee and Publication Expenses

50. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.



Licence Fee and RLDC Fees and Charges

51. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2) (b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

Service Tax

52. The petitioner has sought to recover Service Tax on Transmission Charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list in future. We are of the view that the petitioner's prayer of Service Tax is premature.

Sharing of Transmission Charges

53. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time, as provided in Regulation 43 of the 2014 Tariff Regulations.

54. This order disposes of Petition No. 139/TT/2015.

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

Sd/-
(A.S. Bakshi)
Member



ANNEXURE-I**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2014-19****(₹ in lakh)**

Asset-I(A)	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
SBI (21.03.2012)-Loan 6 -	9.95	30.00	0.00	30.00
BOND - XLI-Loan 1-	8.85	40.00	0.00	40.00
BOND - XLII-Loan 2-	8.80	100.00	0.00	100.00
BOND - XLIII-Loan 3-	7.93	13.00	0.00	13.00
BOND - XLIV-Loan 4-	8.70	30.00	0.00	30.00
SBI (2014-15)-Loan 5-	9.95	50.00	0.00	50.00
BOND XLVI -Loan 7-	9.30	50.00	0.00	50.00
Bond XLVII-Loan 8-	8.93	175.18	0.00	175.18
Proposed Loan 2015-2016 (8.40%)-Loan 9-	8.40	54.37	0.00	54.37
Total		542.55	0.00	542.55

(₹ in lakh)

Asset-I(B)	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
SBI (21.03.2012)-Loan 4-	9.95	21	0	21.00
BOND - XLI-Loan 1-	8.85	42	0	42.00
BOND - XLII-Loan 2-	8.80	119	0	119.00
BOND - XLIV-Loan 3-	8.70	105	0	105.00
SBI (2014-15)-Loan 5-	9.95	50	0	50.00
BOND XLVI -Loan 6 -	9.30	50	0	50.00
Bond XLVII-Loan 7-	8.93	101.18	0	101.18
Proposed Loan 2015-2016 (8.40%)-Loan 8-	8.40	58.98	0	58.98
Total		547.16	0.00	547.16



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

(₹ in lakh)

Asset-I(A)	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	542.55	542.55	542.55	542.55
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	6.06	13.20
Net Loans Opening	542.55	542.55	536.49	529.35
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	0.00	6.06	7.14	31.74
Net Closing Loan	542.55	536.49	529.35	497.61
Average Net Loan	542.55	539.53	532.93	513.49
Rate of Interest on Loan (%)	8.9946	8.9930	8.9899	8.9914
Interest on Loan	48.80	48.52	47.91	46.17

(₹ in lakh)

Asset-I(B)	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	547.16	547.16	547.16	547.16
Cumulative Repayments of Loans upto Previous Year	0	0	5.41	10.82
Net Loans Opening	547.16	547.16	541.75	536.34
Add: Drawl(s) during the year	0	0	0	0
Less: Repayment(s) of Loan during the year	0	5.41	5.41	48.84
Net Closing Loan	547.16	541.75	536.34	487.5
Average Net Loan	547.16	544.46	539.05	511.93
Rate of Interest on Loan (%)	8.9608	8.9593	8.9565	8.9622
Interest on Loan	49.03	48.78	48.28	45.88

